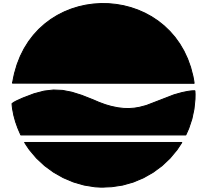


**New York State Department of Environmental Conservation
Division of Air Resources**



Alexander B. Grannis
Commissioner

**New York State
Program Evaluation Report**

**Enhanced Inspection/Maintenance (I/M) Programs:
NYTEST and NYVIP**

Period of June 30, 2006 - June 30, 2008

March 2009

**New York State Enhanced Inspection/Maintenance Programs
Program Evaluation Report for the Period of 6/30/06 - 6/30/08**

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A. EXECUTIVE SUMMARY

Biennial long-term program evaluations are required for enhanced I/M programs under 40 CFR Part 51.353(c)(1) of the federal Inspection/Maintenance (I/M) rule. Program evaluation provides a mechanism for I/M jurisdictions to evaluate the effectiveness of their programs, and if appropriate, to make enhancements to operating programs. The New York State Department of Environmental Conservation (DEC) has submitted four biennial program evaluations to the United States Environmental Protection Agency (EPA) in January 2001, November 2002, December 2004 and February 2007. This document retains a similar reporting format to these past submissions.

New York State has implemented two enhanced I/M programs, New York Transient Emissions Short Test (NYTEST) and New York Vehicle Inspection Program (NYVIP), to comply with federal I/M requirements. These programs effectively reduce the hydrocarbon, carbon monoxide, and nitrogen oxide emissions from applicable motor vehicles. This report details the overall progression of these enhanced I/M programs. The Department cites the following components that have led to the effectiveness of NYVIP and NYTEST programs:

1. New York implemented mandatory statewide (62 counties) I/M inspection requirements. The 53-county “Upstate I/M Area” complies with the Ozone Transport Region (OTR) low enhanced I/M performance standard noted under §51.351(h). The 9-county New York Metropolitan Area (NYMA) complies with the high enhanced performance standard noted under §51.351(f);
2. New York State requires motorists to perform mandatory I/M inspections on an annual basis and upon change of ownership;
3. Since May 2005, mandatory on-board diagnostic (OBD II) inspections have been required statewide. New York’s on-board diagnostics testing was developed in accordance with EPA’s final OBD implementation guidance and 40 CFR Parts 51 and 86. New York outlined the components of the OBD II-based NYVIP program in its March 2006 State Implementation Plan revision;
4. EPA approved the NYTEST transient test relative to the model transient I/M test, the “IM240.” NYTEST received 95% of the available credit for hydrocarbon emissions, 99% of the available credit for carbon monoxide emissions, and 99% of the available credit for nitrogen oxide emissions.
5. The NYTEST I/M program has operated at “final” cutpoints since April 1, 2003;
6. New York State developed a comprehensive diagnostic and repair procedure to be utilized in conjunction with the NYTEST transient test to insure that failed vehicles receive effective, long term repairs;
7. I/M program data confirms that vehicles failing an I/M inspection receive repairs that last more than two years;
8. Through the combination of sticker-based and registration-based denial enforcement (RBE), New York’s motorist compliance rate exceeds the minimum performance standard requirements for enhanced I/M programs. RBE was implemented in the 53-county Upstate I/M area in July 2007 (see Appendix A);

9. Administrative, sticker compliance, and NYTEST equipment audits are completed to ensure that New York's I/M programs maximize emission reductions; and
10. The New York City Taxi and Limousine Commission (TLC) operates an approved centralized, test-only OBD II inspection program. Applicable yellow medallion taxi cabs receive inspections three times a year at the City operated facility located in Queens, NY.

B. BACKGROUND

The Departments of Motor Vehicles (DMV) and DEC jointly administer the State's two enhanced I/M programs. Two programs are currently required within NYMA to reflect revisions to the federal I/M regulations. While onboard diagnostics inspections were contemplated in EPA's initial I/M regulations (1992), they were not required. The NYTEST tailpipe testing program was designed and implemented without OBD II testing capabilities. OBD II inspections were subsequently required for both the OTR low enhanced and high enhanced I/M performance standards and are now completed statewide in New York through the NYVIP equipment.

The NYTEST I/M program is limited to the 9-County NYMA, which geographically includes New York City, Long Island, and Rockland and Westchester Counties. The NYTEST program (1998) represented an enhancement to an existing idle testing program in place since 1981. The NYVIP I/M program features OBD II inspections and was phased into a statewide (62 Counties) program during the period of September 2004-May 2005.

There are presently approximately 3,500 and 6,400 licensed inspection stations operating within NYMA and the Upstate I/M areas, respectively. An overview of each I/M program is included in Table 1 below.

TABLE 1 : I/M Program Summaries

COMPONENT	NYTEST	NYVIP
Network Type	Decentralized Test-and-Repair	Decentralized Test-and-Repair
Geographic Distribution	9-County NYMA	Statewide (62 Counties)
Start Date	May 1998	53 Upstate Counties - December 2004 NYMA - May 2005
Test Frequency	Annual / Change of Ownership	Annual / Change of Ownership
Fuel Type	All non-diesel and non-electric fuels	All non-diesel and non-electric fuels
Vehicle Type Coverage	Light Duty Vehicles; All Weight Trucks	Light Duty Vehicles & Trucks up to 8,500 lbs
Model Year Coverage for Emissions Testing	<u>NYMA</u> a. 25 MYs old to MY 1995 (if <8,500 lbs) b. 25 MYs old to 2 MYs old (if >8,500 lbs)	<u>NYMA</u> MY 1996 to 2 MYs old (<8,500 lbs) <u>UPSTATE</u> 25 MYs old to 2 MYs old (Weight Codes 1, 2, and 3)
Evaporative Emissions	Vehicles subject to NYTEST also receive a gas cap integrity (pressure) test.	OBD II
Emissions Test Types	NYTEST (transient, idle)	OBD II, Low Enhanced

C. NEW YORK TRANSIENT EMISSION SHORT TEST (NYTEST)

Comparison of Registered Vehicles and Vehicles Emission Tested - Appendix B contains the statewide vehicle population numbers derived from the DMV registration database in March 2007.

The Departments are evaluating the past practice of estimating the number of required emissions tests based on registration data, and then completing a comparison to the actual number of completed I/M emissions inspections (as reported through the data manager). Several factors add uncertainty to this comparison:

1. The analysis must screen the registration file to exclude registrations that are exempt from emissions testing by regulation (i.e., exempt registration codes, vehicle age, vehicle weight, vehicle fuel type, or county of registration);
2. The annual inspection frequency differs from the biennial registration renewal cycle. The comparison must include a “look back” period exceeding 12 months to match inspections with a “fixed” registration file date;
3. The registration file represents NY’s vehicle population on the day that the database query was completed. Some vehicles may have been retired from service since their last completed I/M inspection; and

4. By design, the NYVIP inspection software does not determine emission test applicability in the same manner as the older NYTEST requirements. The more recent NYVIP software determines a vehicle's model year and weight (actually light-duty determination) based on a detailed VIN validation sequence. The NYVIP decoded information is deemed more appropriate/accurate than similar fields contained within the DMV registration file.

The Departments will continue to review the registration file and I/M data for annual reporting purposes. Quarterly sticker compliance surveys will continue to provide for an independent assessment of motorist I/M compliance based on real world monitoring.

NYMA Sticker Compliance - DMV conducts quarterly sticker compliance surveys statewide. Appendix C contains the results of these surveys for calendar years 2006 and 2007. DMV's sticker compliance surveys show that the compliance rate for the combined NYTEST/NYVIP programs in NYMA exceeds 96%.

NYTEST Quality Assurance/Quality Control Checks:

NYTEST Analyzer Drift - New York State requires a seven day calibration period on its NYTEST analyzers. The adequacy of this time period was confirmed during a DEC NYTEST analyzer drift study completed in 2002.

NYTEST Equipment Audit Results - The DEC commenced limited equipment audits at NYTEST stations on March 21, 2001. This preliminary audit consisted of several analyzer sampling system checks (including the "S-tube," flex probe tip, filters, and sampling hose), an examination of on-board calibration gases (to insure they were BAR97 certified and within the labeled expiration dates), a gas cap pressure tester functionality check, and a check for the current approved version of software. The main purpose of these limited audits was to insure the overall reliability of sampling systems.

DEC subsequently required a NYTEST software update to allow for a more comprehensive equipment audit. This update mandated changes to include a gas injection audit and the transmission of calibration and audit data through the NYTEST equipment. DEC audit staff commenced the expanded equipment audits on August 1, 2001. The upgraded audit consists of:

1. a leak check;
2. a check of the sample system flow;
3. a gas analyzer audit with the ability to inject both audit gases and the on-board gases through the sampling system or through the calibration port;
4. a VMAS flow rate audit using a smooth approach orifice;
5. on-board calibration gas check (to insure they are BAR97 certified and not expired); and
6. a gas cap tester functional check.

Upon completion of a NYTEST equipment audit, the DEC auditor provides the station manager with a copy of the equipment audit form. This form lists the audit results and any supporting information. When the NYTEST equipment fails an equipment audit, the station manager is given a written notice. This notice states that the inspection station can no longer perform inspections until all necessary repairs are completed. Written documentation of such repairs must be submitted to DEC. If the inspection station fails to document repairs, DEC contacts the station. If proper repairs were not made, DEC requests DMV to place an administrative stop on the inspection station. This prevents the station from conducting further inspections.

DEC equipment audit results for 2006-2008 are presented below in the Table 2. Equipment audit criteria and additional data can be found in Appendix D. As a result of the subject NYTEST software update, DEC is capable of completing a desk audit of a station's weekly calibration without a station visit.

TABLE 2 : DEC Equipment Audit Results

Category	2006		2007		1st/2nd Qtr. 2008	
	Audits (Jan - Dec)		Audits (Jan - Dec)		Audits (Jan - Jun)	
	Count	%	Count	%	Count	%
Total Inspection Stations	3,765		3,680		3,621	
Total # of Audits	1,056		1,189		840	
# of Stations Passed the Audit	358	33.90	498	41.88	521	62.02
# of Stations Failed the Audit	698	66.10	691	58.12	319	37.98
Reason for Audit failure						
a. Failed Gas Audit	129	18.48	130	18.81	41	12.85
b. Failed Vmas Flow Check	50	7.16	48	6.95	26	8.15
c. Failed Gas Cap Tester	68	9.74	53	7.67	26	8.15
d. Failed On-Board Gas	118	16.91	58	8.39	33	10.34
e. Failed System Flow Check	24	3.44	40	5.79	16	5.02
f. Failed Leak Check	477	68.34	491	71.06	205	64.26

Repair Effectiveness

NYTEST Diagnostic and Repair Procedure - An essential component of any I/M program is to complete effective repairs on those vehicles that fail the required emissions test. In 1996, New York obtained funding under the Congestion Mitigation and Air Quality Control (CMAQ) program to conduct a repair effectiveness study for the NYTEST program. The main objective was to develop a comprehensive diagnostic and repair procedure for vehicles that fail the official NYTEST inspection.

The study design required that vehicles failing EPA's model IM240 transient test be repaired by qualified technicians using two diagnostic and repair procedures. The results from both procedures were evaluated and a single NYTEST diagnostic and repair procedure was finalized. The final procedure was printed on a laminated 2-sheet handout and mailed to all NYTEST inspection stations. A copy of this procedure can be found in Appendix E. Additional information related to the CMAQ repair effectiveness study can be found in the 2002-2004 biennial program evaluation report.

NYTEST Emissions Inspection Data

EPA Mobile Model Credit Determination - Appendix F contains the letter from the United States Environmental Protection Agency providing New York State with the following credit for the NYTEST emissions test:

- 95 percent of IM240 credit for hydrocarbon emissions
- 99 percent of IM240 credit for carbon monoxide emissions
- 99 percent of IM240 credit for nitrogen oxide emissions

Software Updates Based Upon Data Analysis - Program issues can be identified through station/inspector complaints, DEC/DMV audit findings, or through data analysis of emission test results. To correct issues or to enhance program components, DEC/DMV periodically requires the NYTEST equipment providers to upgrade the inspection software. Software modifications were outlined to the NYTEST equipment providers in November 1999. With the implementation of this software update, New York was able to conduct and record full equipment audits, capture and transmit detailed calibration records, and incorporate measures to prevent improper testing by placing functional limits on the analyzer and Vmas unit.

An optional NYTEST OBD II software upgrade was offered by two of the NYTEST equipment providers (ESP, SPX) prior to the NYMA roll-out of NYVIP. While NYTEST stations were not required to participate in this program, the OBD II pass/fail results of upgraded equipment were official. Approximately 570 NYTEST stations purchased the OBD II upgrade, and these stations performed approximately 187,000 OBD II inspections. The optional NYTEST OBD II was effective from July 2004 to May 2005.

Cutpoint Analysis and Implementation - Over time, DEC increased the stringency of the NYTEST cutpoints (transient and idle) as technicians became familiar with repair procedures. Final NYTEST cutpoints were implemented on April 1, 2003.

Effectiveness of NYTEST Repairs - To evaluate the duration of repairs, DEC queried the 2005 NYTEST database for vehicles meeting each of the following conditions:

1. Vehicles failed their initial NYTEST inspection;
2. Vehicles were repaired and repair costs were documented within the inspection record; and
3. Vehicles were re-inspected, and subsequently found to pass the NYTEST inspection.

This query yielded 35,938 vehicles. The VINs of these vehicles were then matched to the following year's database (2006) which resulted in 18,526 matches (i.e., inspection records for 18,526 of the initial 35,938 vehicles were found again). Similarly, the 2007 database was queried to identify vehicles that failed in 2005 that were again tested in 2007. The results are presented in the Table 3 which indicate that the majority of NYTEST repairs are still effective after two years.

TABLE 3: NYTEST I/M Repair Effectiveness

Year	# of Vehicles	Passed HC	Passed CO	Passed NOx
2005	35,938	35,938 (100%)	35,938 (100%)	35,938 (100%)
2006	18,526	16,268 (88%)	17,441 (94%)	15,962 (86%)
2007	10,721	9,600 (90%)	10,177 (95%)	9,530 (89%)

NYTEST Emission Reductions

Emissions from Initial Test - DEC queried the NYTEST I/M database to calculate program-wide average emissions from the NYTEST transient (dynamometer) inspection for each calendar year using initial inspections as shown in Table 4 below.

Note that mandatory OBD II inspections through NYVIP commenced in NYMA in May 2005. So in calendar year 2005, many vehicles (light-duty, non-diesel/non-electric, model years 1996 to 2002) that were inspected by NYTEST in calendar year 2004 were instead inspected through NYVIP. This subset of vehicles represented the newest, generally cleanest, component of the previous year's (2004) NYTEST population. As such, the declining emissions trend observed for NYTEST transient testing from 1999-2004 was affected by the model year applicability of NYVIP OBD II inspections. Also, with each new calendar year, fewer vehicles will be subject to NYTEST inspection requirements due to the rolling 25 model year exemption and normal vehicle turn-over.

TABLE 4 : NYTEST Average Emissions

Year	# of Tests	Average HC	Average CO	Average NOx
1999	1,931,064	.544 gm/mi	8.56 gm/mi	1.76 gm/mi
2000	2,969,943	.388 gm/mi	8.13 gm/mi	1.34 gm/mi
2001	3,153,284	.340 gm/mi	7.21 gm/mi	1.20 gm/mi
2002	3,274,376	.350 gm/mi	6.57 gm/mi	1.11 gm/mi
2003	3,291,294	.340 gm/mi	4.40 gm/mi	0.80 gm/mi
2004	3,015,292	.290 gm/mi	3.53 gm/mi	0.68 gm/mi
2005	1,330,065	.360 gm/mi	4.31 gm/mi	0.80 gm/mi
2006	759,521	.440 gm/mi	5.06 gm/mi	0.87 gm/mi
2007	618,280	.430 gm/mi	4.87 gm/mi	0.82 gm/mi

NYTEST Shared Network

As noted above, the demand for NYTEST tailpipe emissions inspections will decrease each year. The consequence of a declining NYTEST population is a corresponding decreased need for NYTEST equipment. Actual and estimated NYTEST volumes are displayed below in Table 5.

TABLE 5 : 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

During the 2006-2008 reporting period, the Departments, the three NYTEST equipment providers, and several inspection station associations developed a concept to allow for the controlled reduction in the number of NYTEST-equipped stations in NYMA until the official end of the NYTEST program. The principle design feature of this “NYTEST Shared Network” is that participating NYTEST stations would enter into approved agreements for the orderly referral of motorists between nearby stations. The NYTEST shared network approach would allow some existing NYTEST stations to discontinue use of their NYTEST equipment provided that all regulatory requirements were met.

The NYTEST Shared Network is not mandated by the Departments, rather the licensed NYMA inspection stations would 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.

Revisions to the New York State motor vehicle regulations under 15 NYCRR Part 79 to provide for the NYTEST Shared Network were effective on September 24, 2008. The Part 79 revisions will be included within a NYMA SIP revision currently under development. The DMV press release and station informational packet associated with the NYTEST Shared Network are included under Appendix G.

D. NEW YORK VEHICLE INSPECTION PROGRAM (NYVIP)

NYVIP OBD II Implementation - New York State initiated statewide on-board diagnostic testing (OBD II) through NYVIP in 2004/2005. New York based its OBD II technical specifications in part on final federal guidance, "Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection and Maintenance Program" (EPA420-R-01-015, June 2001). The NYVIP inspection software establishes five possible OBD failure criteria:

1. The vehicle's Malfunction Indicator Light (MIL) does not illuminate when the ignition is in the key on/engine off (KO/EO) position;
2. The vehicle's MIL remains illuminated when the ignition is in the key on/engine running (KO/ER) position;
3. Inability to communicate with the vehicle;
4. The vehicle has commanded the MIL On and diagnostic trouble code(s) are reported; and
5. The vehicle fails the monitor readiness evaluation.

Combinations of these failure criteria are possible which requires close scrutiny when evaluating failure rate statistics. For example, a common OBD II failure would include both the "MIL on during KO/ER" visual inspection and the presence of a "diagnostic trouble code (DTC) with the MIL commanded on" criteria.

Upstate Sticker Compliance - DMV conducts quarterly sticker compliance surveys statewide. Appendix C contains the results of these surveys. DMV's sticker compliance surveys show that the compliance rate for the NYVIP program in the Upstate I/M area exceeds 96%. Registration-based enforcement for the 53-County Upstate I/M area was fully implemented during the reporting period (2007). A related press release is included as Appendix A.

NYVIP "Data Trigger" Audits - During the development of NYVIP, the Departments defined the contents (i.e., data fields) and reporting rules of the official electronic inspection record, the INSPREC.DAT file. This record is transmitted electronically from the NYVIP workstations to the NYVIP Program Manager and then made available to DEC and DMV. These records are the basis of New York's annual and biennial reports to EPA, and are utilized by DMV to insure motorist compliance with the annual inspection requirement via registration denial. The Departments also reserved portions of the INSPREC.DAT to capture vehicle and inspection specific information for inspector and station enforcement (auditing) purposes. A series of queries has been developed to identify possible fraudulent testing. These queries are periodically revised, most often to include additional screening criteria for a specific application. These queries were, in part, supported by an independent policy report completed by dKC-de la Torre Klausmeier Consulting, Inc. under contract to SGS TESTCOM in 2005.

The reporting of vehicle-specific OBD II data may vary according to vehicle make, model, model year, transmission type, engine size, etc. This data is reported to the NYVIP inspection workstations in response to standardized OBD II requests. The vehicle specific data is recorded along with inspection data (pass/fail criteria) for each NYVIP OBD II inspection. Under this design, certain data fields can be later used by the Departments to identify potentially fraudulent practices without requiring a station visit. The use of these "clean scan" queries have proven highly effective in targeting NYVIP stations and are frequently used as evidence in DMV enforcement hearings.

For EPA reporting purposes, the "Summary of OBD Inspections" query is completed according to any given time period. The NYVIP failure rates, waiver rates, and other statistics are reported based on the requirements within Section 51.366. The Departments continue to monitor the overall initial failure and waiver rate on a monthly basis.

NYVIP statewide trends related to the initial OBD II failure rate and waiver rate were completed using this query, and are presented in Charts 1 and 2, respectively.

Chart 1 tracks the NYVIP OBD II failure rate (for initial inspections) during the reporting period. The average OBD II failure rate has been fairly stable at approximately 6.4 % during the 2006-2008 reporting period.

Chart 2 shows an increasing statewide waiver rate beginning in December 2006. The Departments observed this trend. Through inspector education and increased enforcement, the waiver rate began to decline in the fall of 2007.

The waiver rate for NYMA and Upstate were 1.74% and 2.06%, respectively, in calendar year 2008. The NYMA waiver rate reflects waivers from both the NYTEST and NYVIP programs.

CHART 1 : NYVIP Statewide OBD II Failure Rate (Initial Inspections)

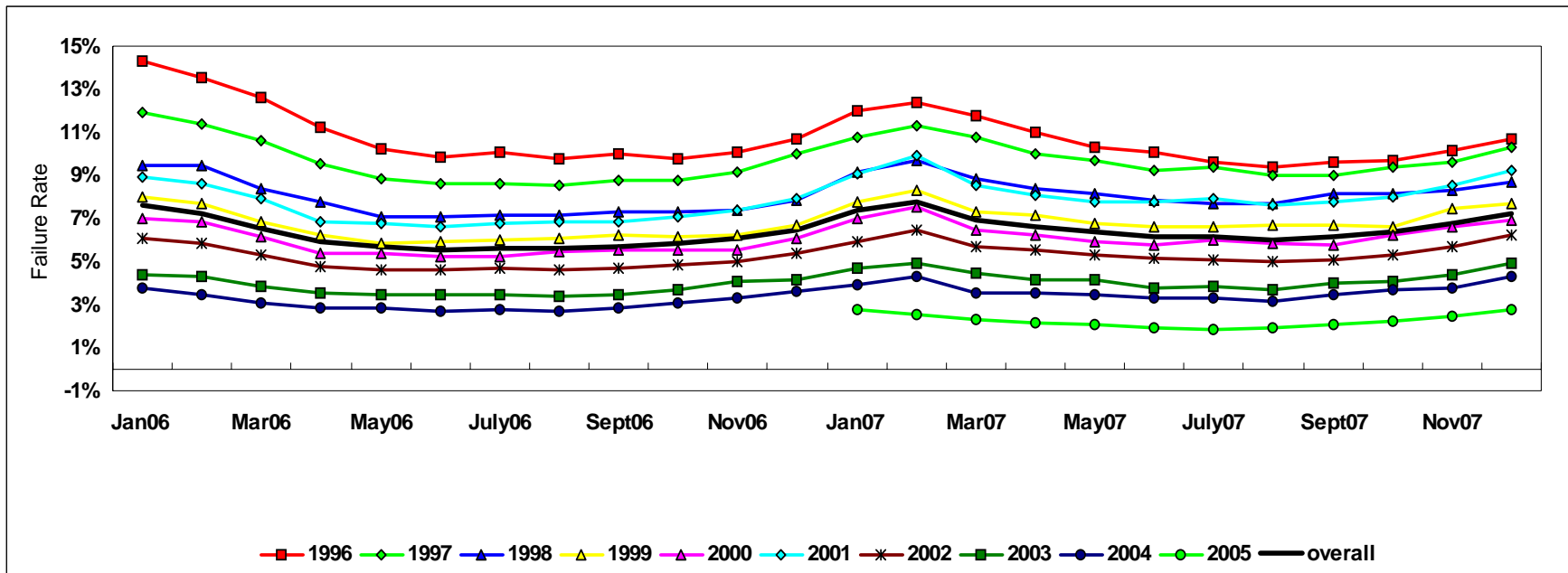
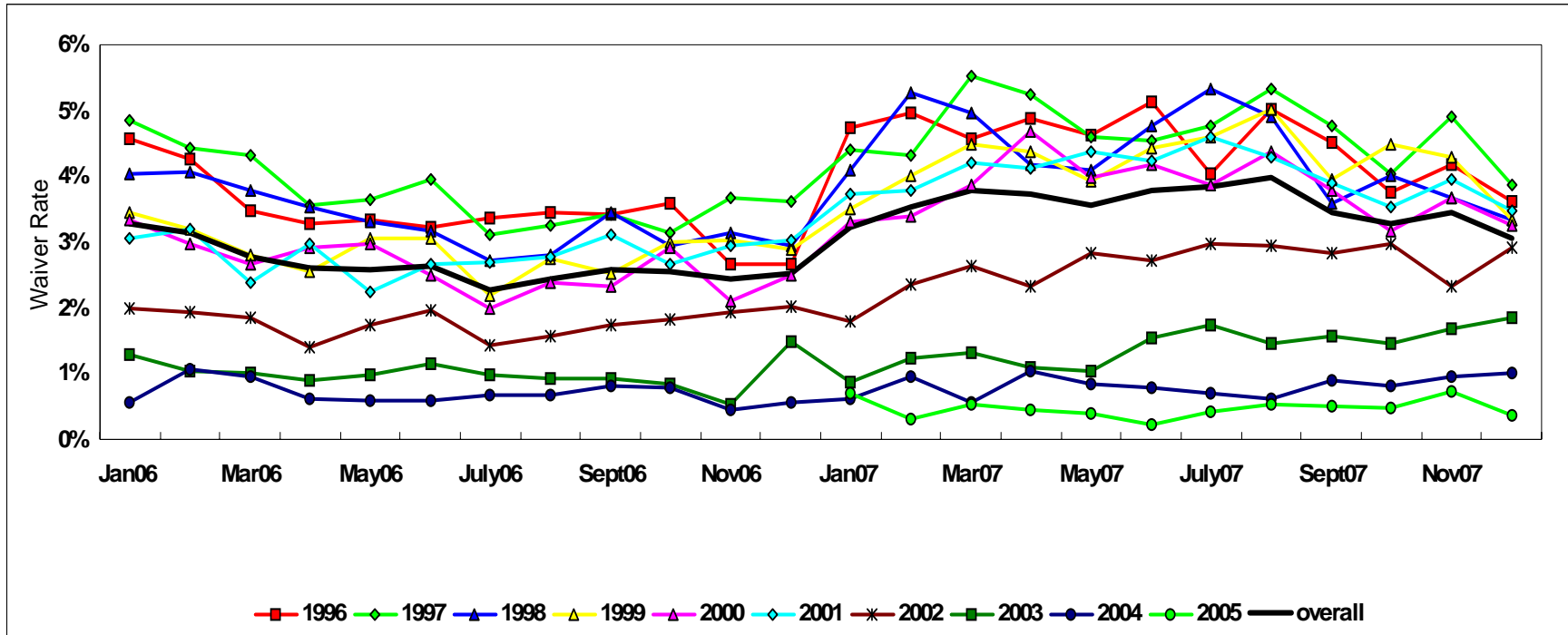


CHART 2 : NYVIP Statewide OBD II Waiver Rate



NYVIP Data Entry Sequence - VIN Validation and GVWR Determination - The NYVIP inspection begins with requests to obtain vehicle information. Required vehicle information includes the Vehicle Identification Number (VIN), make, model, model year, fuel type, weight, and area of registration. Based on this information, the NYVIP inspection software determines the appropriate inspection type. This information is also used in registration-based enforcement (RBE).

There are four possible methods of entering vehicle information: DMV's 2D registration bar code, DMV's 1D registration bar code, the vehicle's VIN plate located on the door jamb or window plate, and (least preferred) inspector manual entry using the NYVIP workstation's keyboard.

The NYVIP data entry sequence was revised during the reporting period to improve the quality of vehicle information used in the determination of inspection test type. The revised test sequence includes VIN validation and the relative determination of "light-duty" based on Gross Vehicle Weight Rating (GVWR). Upon entry of the VIN, the NYVIP software completes a validation based on 4 criteria. The VIN must be 17 digits in length, the last four digits must be numeric, "I", "O", or "Q" cannot be contained with the VIN, and the 9th character must pass a standardized VIN digit check. Should a given VIN pass validation, the model year is decoded from the VIN, and the inspector will not be allowed to make a model year change.

If a given VIN "fails" the validation, the inspection must be conducted online, and the subject (invalid) VIN is matched against the DMV registration database. If there is not a match, the inspection will be stopped, and the inspector will be required to enter a valid VIN.

Validated VINs are also compared to look-up table to potentially determine a vehicle's status as "light duty" or less than 8,500 lbs. GVWR. The NYVIP determination avoids the use of registered weight, which may or not be actual GVWR. The look-up table was developed by the Departments and consists of numerous VIN strings identifying vehicles with a GVWR of less than 8,500 lbs. Similarly, an inspector cannot make a weight change if a match is made to the look-up table. If a VIN validates, but cannot be matched to the GVWR look-up table, the NYVIP software instructs the inspector to enter the vehicle weight (GVWR) listed on the vehicle's door jamb.

The VIN Validation Flow Chart and a related NYVIP station message can be found in Appendix H. A sample of the GVWR table can be found in Appendix I. The Departments continue to evaluate the potential of additional VIN decoding checks to NYVIP inspection software to further improve the quality of vehicle information.

The structure of the 17-digit VIN is regulated by National Highway Traffic Safety Administration and the United States Department of Transportation under 49 CFR Part 565. The Departments provided comments on a Notice of Proposed Rulemaking to these regulations in November 2007. These comments can be found in Appendix J.

OBD II Communication - The Departments and the NYVIP Program Manager monitor the communication success rate for vehicles types (make/model/model year) subject to OBD II inspections. The NYVIP Program Manager is contractually required to report non-communication rates on a model name basis on a monthly frequency. Those vehicles identified as having high non-communication rates are flagged, and are subsequently investigated by the NYVIP Program Manager. These investigations are crafted to determine if non-communication is related to the functionality of the NYVIP scan tool or the design/operation of the vehicle's onboard diagnostics.

Most “non-comms” are identified during the first few months of mandatory testing. For example, MY 2006 vehicles were first OBD II inspected beginning on January 1, 2008. Most of the communication issues related to MY 2006 vehicles were identified by March 2008. Through this process, NYVIP identified communication problems with certain BMW, Saturn, Morgan, and Chevrolet vehicles. In several cases, the Departments have assisted vehicle manufacturers in their efforts to resolve vehicle specific issues.

Readiness Evaluation - Appendix D to EPA’s final OBD II Inspection Guidance maintains a list of “Manufacturers Known to Have Readiness Issues.” This guidance provides I/M jurisdictions with recommendations for vehicles with confirmed readiness related issues. New York was one of six I/M states that provided OBD inspection data to EPA to support continuing efforts to update Appendix D. As part of this workgroup, NYVIP inspection data supported several recommendations that additional vehicles be included within a revised Appendix D, while other vehicles require further evaluation. The Departments also provided technical assistance to several vehicle manufacturers in their evaluation of vehicles identified as having “high” initial readiness failure/rejection rates.

EPA’s “I/M Transitioning” FACA WorkGroup - DEC participated in the FACA WorkGroup tasked to identify options available to states as tailpipe testing ends, and many I/M programs transition to OBD-only testing. The Departments collaborated in preparing final comments to the Work Group which are included as Appendix K.

E. NEW YORK CITY TAXI AND LIMOUSINE COMMISSION (OBD II)

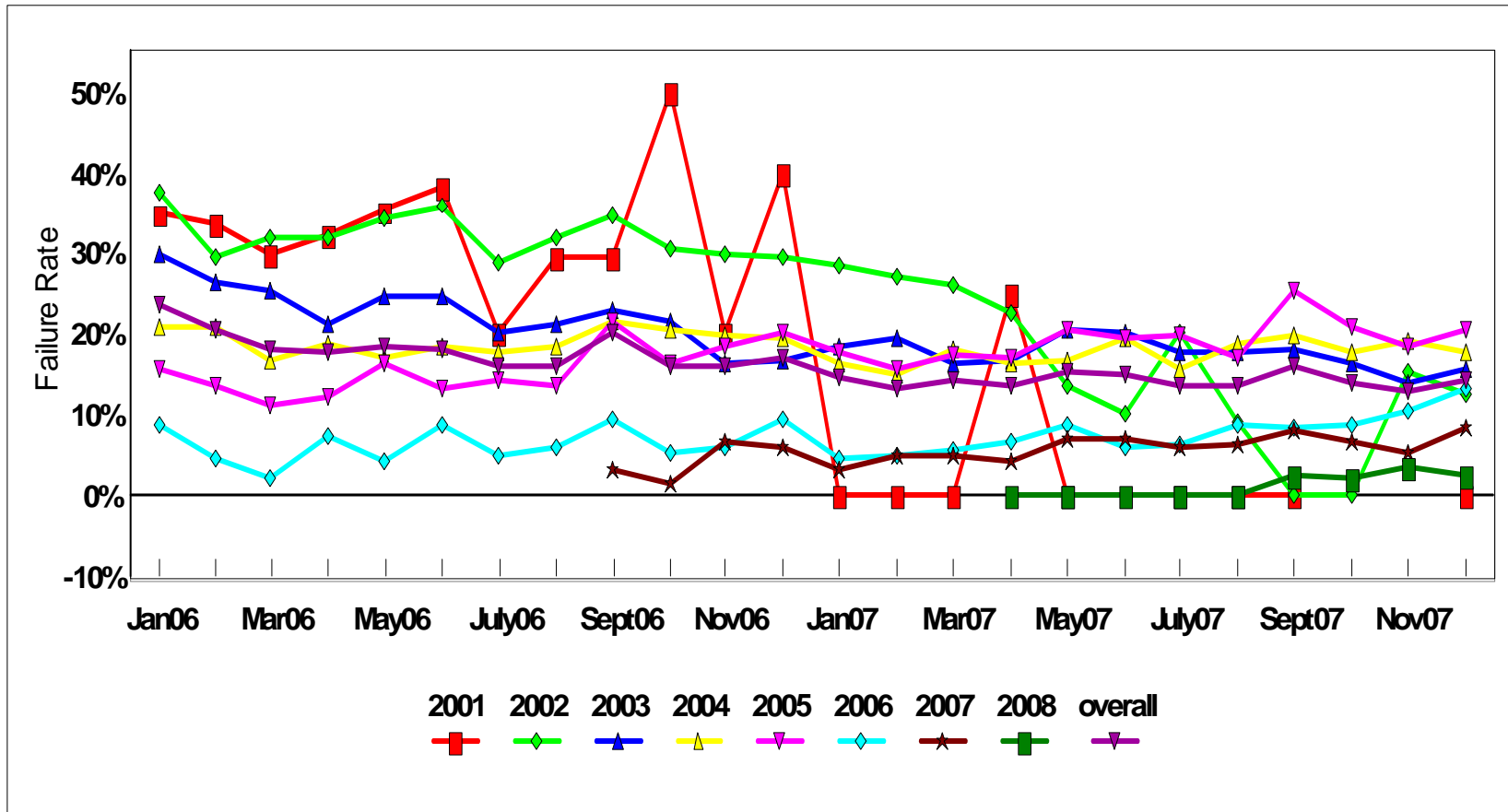
Since 1977, yellow medallion taxi cabs operating within New York City have been subject to emissions testing at a frequency of three times per year. The New York City Taxi and Limousine Commission (T&LC) upgraded their Woodside (Queens) testing facility, and required OBD II inspections for applicable medallion cabs beginning on December 8, 2003. DEC and DMV completed acceptance testing of the test equipment and software at the TLC facility from August 2004 to June 2006. The Departments approved the TLC inspection program, which includes OBD II, emission control device (ECD), and safety component checks, as being equivalent to the New York State requirements. The joint DEC/DMV approval of the T&LC inspection dated October 4, 2006 is contained within Appendix L. The T&LC provides emission test results to DEC through the NYVIP Program Manager on a monthly basis.

The TLC OBD Summary Table for calendar years 2006/2007 is included under Table 6. The T&LC OBD II failure rate (initial inspections) for calendar years 2006/2007 is included as Chart 3. Due to mandatory TLC retirement requirements, some model years have very few vehicles in service. Note that some monthly “by model year” values are accurately reported as “0” counts.

TABLE 6 : New York City Taxi and Limousine Commission (TLC) OBD II Summary

Calendar Year	Model Year	Sample Count	Average Odometer	Passed OBD Count	FAILED OBD Inspection									
					Average			Fail Communication		Failed KOEO		Failed KOER		
					Count	Odometer	Failed	Count	%	Count	%	Count	%	
2006	1997	1	472,717	0	1	472,717	100.00%	0		0		1	100.00%	
	1998	3	289,968	3	0		0.00%	0		0		0		
	1999	4	277,380	3	1	257,907	25.00%	1	25.00%	0		0		
	2000	19	320,380	17	2	422,120	10.53%	2	10.53%	0		0		
	2001	1,103	288,412	744	359	298,291	32.55%	46	4.17%	13	1.18%	45	4.08%	
	2002	1,648	255,770	1,115	533	272,534	32.34%	65	3.94%	20	1.21%	66	4.00%	
	2003	8,178	207,597	6,306	1,872	228,633	22.89%	168	2.05%	68	0.83%	299	3.66%	
	2004	8,846	154,702	7,152	1,694	167,306	19.15%	100	1.13%	51	0.58%	267	3.02%	
	2005	11,248	83,167	9,507	1,741	101,135	15.48%	383	3.41%	34	0.30%	227	2.02%	
	2006	4,459	33,614	4,155	304	40,324	6.82%	166	3.72%	5	0.11%	25	0.56%	
	2007	263	6,550	251	12	7,274	4.56%	10	3.80%	0		0		
	TOTAL	35,772		29,253	6,519		18.22%	941	2.63%	191	0.53%	930	2.60%	
2007	2001	22	270,636	20	2	346,391	9.09%	0				1	4.55%	
	2002	359	267,296	277	82	297,128	22.84%	10	2.79%	6	1.67%	8	2.23%	
	2003	5,751	254,066	4,735	1,016	276,653	17.67%	118	2.05%	31	0.54%	131	2.28%	
	2004	6,578	213,802	5,439	1,139	226,891	17.32%	84	1.28%	26	0.40%	142	2.16%	
	2005	11,122	151,416	8,998	2,124	167,719	19.10%	223	2.01%	45	0.40%	230	2.07%	
	2006	7,672	83,909	7,084	588	101,829	7.66%	139	1.81%	11	0.14%	62	0.81%	
	2007	5,106	40,242	4,779	327	43,797	6.40%	210	4.11%	5	0.10%	32	0.63%	
	2008	832	19,929	812	20	23,969	2.40%	13	1.56%	1	0.12%	3	0.36%	
		TOTAL	37,442		32,144	5,298		14.15%	797	2.13%	125	0.33%	609	1.63%

CHART 3 : New York City Taxi and Limousine Commission (TLC) OBD II Failure Rate
(2006, 2007)



APPENDIX A

FOR IMMEDIATE RELEASE:
Wednesday, July 18, 2007

CONTACT: 473-7000

**DMV IMPLEMENTS REGISTRATION-BASED ENFORCEMENT OF EMISSIONS
INSPECTION UPSTATE**

Requirement Ensures Vehicle Emissions Inspection and Federal Compliance

Department of Motor Vehicles Commissioner David J. Swarts today announced the implementation of registration-based enforcement of emissions inspection for all upstate motorists. The new requirement ensures that all vehicles statewide have a current emissions inspection on file in order to renew their vehicle registrations.

State-wide compliance with the federally mandated Registration Based Enforcement program, which has been operating downstate for several years, will ensure that all of New York's motorists are following current law and having their vehicle emissions checked annually.

"This enforcement effort will have no effect on the vast majority of motorists who keep their vehicle inspections current," Commissioner Swarts said. "It will force those who have neglected to get safety and emissions inspections to abide by the law, resulting in cleaner air and safer highways for New York State."

The RBE program does not impose any new mandate on motorists. DMV, under an agreement with the Federal Environmental Protection Agency, will be enforcing through the registration renewal process the existing requirement that motor vehicles get annual safety and emissions inspections.

The Federal Clean Air Act Amendments (CAAA) of 1990 required New York State to establish the Enhanced Vehicle Inspection/Maintenance Program to ensure regular testing of vehicle emissions. Under that program, a vehicle undergoes emissions testing in conjunction with the annual safety inspection or when the vehicle changes ownership. Federal law also requires the State to enforce the emissions inspections through its registration process.

Annual emissions inspections have been mandatory in the New York City Metropolitan Area for many years, and Registration Based Enforcement began downstate in November 2001. Since December 2004, emissions inspections have been required in the 53 counties north of the New York City Metropolitan Area. Under an agreement with the EPA, which ensures that New York State will continue to receive millions of dollars in Federal highway funding, DMV will be enforcing the emissions inspection requirement upstate through its registration renewal process.

By collecting the data and implementing the program upstate according to Federal guidelines, the DMV ensured the public and industry were completely familiar with the emissions testing processes and regulations. Indeed, over the last few years, DMV has been able to evaluate the procedures and ensure the public and inspection stations would not be adversely affected by the implementation of the Federal mandate. The next step in compliance is for the DMV to make registration based enforcement upstate an integral part of the program.

There are no new penalties or fines associated with this enforcement effort, although motorists with expired inspections will still be subject to a fine if ticketed by law enforcement.

Beginning this month, registration renewal notices that DMV mails to motorists will include a notice if there is no emissions inspection report on file for that vehicle. Renewal notices are usually mailed six to eight weeks before the current registration expires.

In the event that a motorist's vehicle has already passed an emissions inspection but the record of that inspection does not appear in DMV's database, the motorist will be able to correct the omission by writing the inspection sticker number on the renewal form and enclosing a copy of the inspection receipt. A copy of the inspection facility's Daily Inspection Report, or Detail Report, obtainable from the inspecting facility, will also be accepted as proof of inspection if the motorist no longer has the inspection receipt.

Motorists with questions about the program can call 1-877-486-6438 or visit the DMV website at www.nysdmv.com.

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APPENDIX B

Registered Vehicles in the State of New York
 (Based on 1/1/2006 to 12/31/2006 NYMA and Upstate Data)

New York Metropolitan Area (9 Counties)

Vehicle Model Year	Total Vehicles	% of Total	--- Gasoline Fueled -- Hybrids			--- Diesel Fueled ---		----- Electric -----		--- Flex Fueled ---		--- CNG Fueled		----- Propane Fueled -	
			Light Duty	Heavy Duty	Light Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty
Pre-81	87,996	1.79%	66,383	13,538	0	5,091	2,900	31	28	23	1	1	0	0	0
1981	6,615	0.14%	4,257	782	0	932	631	13	0	0	0	0	0	0	0
1982	6,446	0.13%	4,325	717	0	772	631	1	0	0	0	0	0	0	0
1983	8,000	0.16%	5,697	769	0	962	571	0	0	0	0	0	1	0	0
1984	12,566	0.26%	9,624	1,127	0	930	884	0	0	0	0	0	0	0	0
1985	18,170	0.37%	14,004	1,688	0	1,179	1,293	0	2	1	0	3	0	0	0
1986	24,584	0.50%	20,169	2,021	0	670	1,723	1	0	0	0	0	0	0	0
1987	34,417	0.70%	29,611	2,142	0	656	2,005	0	0	1	0	0	0	1	1
1988	42,099	0.86%	36,854	2,651	0	397	2,193	0	0	4	0	0	0	0	0
1989	54,749	1.11%	49,767	2,418	0	309	2,247	0	1	6	0	0	0	1	0
1990	70,003	1.42%	64,637	2,217	0	666	2,478	0	0	4	0	1	0	0	0
1991	78,248	1.59%	73,892	1,744	0	426	2,168	5	1	9	1	1	1	0	0
1992	98,817	2.01%	94,262	2,197	0	339	2,001	2	0	15	0	0	0	1	0
1993	129,616	2.64%	123,557	2,557	0	959	2,524	0	1	11	1	4	0	2	0
1994	153,543	3.12%	146,202	3,261	0	609	3,433	9	1	20	1	6	0	1	0
1995	202,869	4.13%	192,857	4,164	0	1,055	4,738	12	1	32	0	6	0	3	1
1996	198,250	4.03%	190,221	3,065	0	1,425	3,510	5	0	17	1	1	1	4	0
1997	242,025	4.92%	232,098	4,097	0	1,210	4,568	10	1	24	1	7	3	5	1
1998	268,688	5.47%	259,724	3,428	0	1,191	4,200	14	1	55	5	52	12	2	4
1999	298,281	6.07%	284,288	4,834	0	2,171	6,638	25	2	44	4	178	5	0	3
2000	339,690	6.91%	324,620	5,579	1	900	8,301	57	0	54	2	168	0	3	5
2001	320,381	6.52%	306,848	5,090	469	1,203	6,658	34	0	63	1	9	4	0	2
2002	350,487	7.13%	336,755	4,651	871	1,486	6,493	103	0	61	2	54	8	3	0
2003	371,733	7.56%	356,724	5,850	960	1,352	6,348	36	0	110	0	168	31	3	0
2004	419,607	8.54%	404,982	4,768	1,410	1,034	7,028	13	2	0	4	243	8	2	0
2005	440,546	8.96%	423,224	4,812	3,802	1,441	7,025	101	0	42	4	92	0	3	0
2006	449,786	9.15%	430,197	5,759	3,906	1,818	7,859	198	0	32	0	4	10	3	0
2007	186,607	3.80%	179,106	943	2,482	535	3,458	30	0	22	0	21	7	0	3
Total	4,914,819	100.00%	4,664,885	96,869	13,901	31,718	104,506	700	41	650	28	1,019	91	37	20
% of Total			94.92%	1.97%	0.28%	0.65%	2.13%	0.01%	0.00%	0.01%	0.00%	0.02%	0.00%	0.00%	0.00%

Registered Vehicles in the State of New York

(Based on 1/1/2006 to 12/31/2006 NYMA and Upstate Data)

Upstate New York (53 Counties)

Vehicle Model Year	Total Vehicles	% of Total	--- Gasoline Fueled ---		Hybrids	--- Diesel Fueled ---		----- Electric -----		--- Flex Fueled ---		--- CNG Fueled ---		--- Propane Fueled ---	
			Light Duty	Heavy Duty	Light Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty
Pre-81	121,213	2.27%	88,398	21,810	0	1,855	9,126	8	5	8	2	0	0	1	0
1981	7,593	0.14%	4,893	1,369	0	322	1,007	2	0	0	0	0	0	0	0
1982	7,948	0.15%	5,239	1,164	0	542	1,003	0	0	0	0	0	0	0	0
1983	10,148	0.19%	6,750	1,495	0	728	1,173	0	0	0	0	0	0	0	2
1984	16,534	0.31%	11,842	2,101	0	793	1,797	1	0	0	0	0	0	0	0
1985	21,193	0.40%	15,683	2,412	0	756	2,341	0	0	0	0	0	0	0	1
1986	27,508	0.52%	21,250	2,698	0	720	2,840	0	0	0	0	0	0	0	0
1987	35,825	0.67%	28,723	3,146	0	621	3,334	0	1	0	0	0	0	0	0
1988	49,113	0.92%	40,291	4,750	0	389	3,680	1	0	1	1	0	0	0	0
1989	59,018	1.10%	50,926	3,813	0	555	3,723	0	0	1	0	0	0	0	0
1990	68,310	1.28%	60,529	3,130	0	651	3,990	1	0	5	1	0	0	2	1
1991	79,338	1.48%	72,700	2,594	0	711	3,325	2	0	3	0	0	0	0	3
1992	105,211	1.97%	98,451	3,172	0	739	2,835	1	0	6	0	0	0	5	2
1993	142,131	2.66%	134,145	3,241	0	1,077	3,656	2	0	6	1	2	0	0	1
1994	183,106	3.43%	173,863	4,082	0	1,112	4,020	6	0	13	2	1	1	2	4
1995	240,880	4.51%	228,336	5,382	0	1,457	5,675	2	2	19	1		1	3	2
1996	228,537	4.28%	217,906	4,224	0	1,507	4,875	2	0	14	0	3	0	5	1
1997	284,182	5.32%	270,784	5,484	0	1,764	6,071	4	1	43	0	20	0	2	9
1998	312,504	5.85%	302,000	3,758	0	1,673	4,877	17	1	68	18	65	17	0	10
1999	345,982	6.47%	329,131	5,733	0	2,421	8,395	47	0	78	1	157	8	2	9
2000	393,464	7.36%	375,763	6,708	0	2,127	8,502	114	0	90	3	137	7	4	9
2001	360,676	6.75%	343,776	5,912	314	2,689	7,679	48	1	119	2	121	10	3	2
2002	400,829	7.50%	383,716	4,871	738	3,412	7,709	38	0	163	2	113	19	8	40
2003	411,900	7.71%	393,779	5,636	1,164	3,807	7,245	27	0	81	3	71	6	6	70
2004	424,010	7.93%	405,798	5,360	1,505	3,649	7,450	10	1	79	2	74	18	6	58
2005	453,140	8.48%	432,145	5,194	3,569	4,045	8,063	9	0	76	1	24	0	8	6
2006	400,699	7.50%	379,100	5,014	2,636	4,658	9,027	42	1	177	0	18	1	1	24
2007	154,216	2.89%	144,491	977	1,797	2,359	4,405	0	0	183	0	3	0	0	1
Total	5,345,208	100.00%	5,020,408	125,230	11,723	47,139	137,823	384	13	1,233	40	809	88	58	255
% of Total			93.92%	2.34%	0.22%	0.88%	2.58%	0.01%	0.00%	0.02%	0.00%	0.02%	0.00%	0.00%	0.01%

APPENDIX C

Sticker Compliance Survey

NYMA Area

NYMA County	Vehicles Surveyed Per Qtr	No Sticker		Improper Sticker		Sticker Expired 60 days or Less		Sticker Expired Over 60 days		Total compliance		Percent compliance	
		2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
Nassau	235	0	1	0	0	14	9	2	3	16	13	1.70	1.38
Suffolk	286	4	3	0	0	33	31	18	29	55	63	4.81	5.51
Bronx	59	1	0	0	0	4	5	2	2	7	7	2.97	2.97
New York	100	4	1	0	1	4	5	3	2	11	9	2.75	2.25
Richmond	62	1	0	0	0	1	6	0	1	2	7	0.81	2.82
Westchester	158	5	4	1	0	7	9	6	9	19	22	3.01	3.48
Rockland	51	7	8	0	0	4	5	10	4	21	17	10.29	8.33
Kings	100	1	0	0	0	10	5	2	5	13	10	3.25	2.50
Queens	178	0	0	0	0	12	4	3	4	15	8	2.11	1.12
NYMA TOTAL	1229	23	17	1	1	89	79	46	59	159	156	3.23	3.17

Upstate Area

53 Counties	Vehicles Surveyed Per Qtr	No Sticker		Improper Sticker		Sticker Expired 60 days or Less		Sticker Expired Over 60 days		Total compliance		Percent compliance	
		2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
TOTAL	1307	29	8	3	0	91	121	68	43	191	172	3.65	3.29

APPENDIX D

Appendix D - NYTEST Equipment Audit Criteria

Criteria for Equipment Audit Failures

Gas Audit - The audit gases are flowed through the sample system. If the failure criteria is met on the first run, a second run is made through the sample system. If the failure criteria is met on the second run, a run is made through the calibration port with the on-board gases. If the failure criteria is still met the system fails.

Failure Criteria - If any of the concentration readings for the high and low gases exceed 10% of the bottle value or the zero gas values exceed 10 ppm for any gas, the result is a failure.

Vmas Flow Check - The Vmas flow displayed on the equipment is compared to the flow measure by the use of a smooth approach orifice (SAO). The flow is also recorded.

Failure Criteria - If the flow displayed varies by more than 10% of the flow measured using the SAO or if the flow displayed is less than 200 scfm, the system fails.

Gas Cap Tester - The gas cap tester is supplied with a pass master, fail master, and nine adapters for testing. The auditor checks for the presence of all equipment and then performs a gas cap tester calibration.

Failure Criteria - All equipment must be present (tester, pass and fail master caps, nine adapters) and the tester must pass calibration.

On-board Calibration Gas - The calibration gas is required to be BAR97 certified. New York has approved the use of Systech's zero air generator which can be substituted for zero gas. There must be zero, high, and low gas present.

Failure Criteria - All gases must be present (unless zero air is replaced by an approved zero air generator). All gases must be BAR97 approved and the gases must not have expired.

System Flow Check - A flow meter is attached to the end of the sample probe and the flow is measured.

Failure Criterion - The system flow measured must be more than 5 liters/minute.

System Leak Check - A system leak check is performed.

Failure Criterion - The system must pass the leak check.

APPENDIX E

1 Diagnostic Procedure for Vehicles Failing a Transient Emissions Test

Helpful Hints:

In the event of a multiple failure, there may be a common problem:

- **High HC and CO:** Possible misfire or vehicle not at proper operating temperature. Correct HC failure first.
- **High HC and NOx:** Possible lean condition
- **High HC, CO, and NOx:** If condition **only** appears in the first phase of the drive trace, a possible cause could be that the converter was not at proper operating temperature.

Step 1: Visual Inspection

- Check for technical service bulletins related to the emission failure.
- Vapor recovery system
- Air filter
- Vacuum leaks, vacuum lines (disconnected, cracked or missing). The use of a vacuum leak detector is recommended.
- Obvious misfire or rough running engine
- Air management system operation
- Converter (damaged, empty or overheated). Correct cause of overheating before replacing converter.

Step 2: Check Oil Level and Quality

Step 3: Check Cooling System Level, Operation and Condition

Step 4: Check MIL Light

- Does MIL or service engine light illuminate with the key on and engine off?
- Is MIL or service engine light on during emissions test? If yes, diagnose code(s) related to failure.

Step 5: O₂ Sensor Verification

- Is vehicle in fuel-control-at-idle and at time of excessive exhaust emissions? Use lab scope to check O₂ sensor time and voltage.
- When diagnosing a **NOx only failure, do not replace an oxygen sensor that can read full rich and full lean (its complete voltage range) or has a lean bias during idle and cruise speeds.** Repairing this condition (i.e. operating at approx. 350ms) can increase NOx readings. **Correct cause of high NOx first.**

NYS Department of Environmental Conservation/TESTCOM Inc.

2 Diagnostic Procedure for Vehicles Failing a Transient Emissions Test

Step 6: If O₂ Sensor Was Replaced, Verify Operation of New O₂ Sensor.

Step 7: Check Catalytic Converter

- Perform catalytic converter efficiency test.
- If converter tests good, proceed to exhaust gas specific chart.
If converter tests bad, check for any catalyst damaging condition before replacing catalytic converter.

NOx FAILURE PROCEDURE

NOx Only Failure: Replacing an oxygen sensor that is allowing the engine to operate rich will not reduce NOx readings.

Check Causes of High Combustion Temperature

- Check operation/function of the EGR system (including passages).
- Check operation/function of ignition timing and advance. Correct the condition before continuing.
- Verify correct operation of emission control systems. Note: Emission systems may have interrelated problems.
- Is the vehicle in fuel control? Correct lean condition only. Correcting a rich condition may increase NOx readings.
- Check for carbon deposits. Perform complete decarbonization as needed.

When a decarbonization process is performed, driving the vehicle at cruise speeds will help remove carbon deposits that have been loosened during that process.

Check Cooling System

- Coolant level
- Operation of cooling fan
- Operating temperature (limits 185F to 225F)

This Diagnostic/Repair Sequence is generic in nature and may assist technicians in the diagnosis and repair of certain vehicles exhibiting particular excess emissions problems. No warranty of any kind as to the accuracy and effectiveness of this Sequence is made or implied, as its effectiveness will relate in part to the skill level of the using technician, the type of vehicle, and the nature of the problem(s) causing excess emissions.

NYS Department of Environmental Conservation/TESTCOM Inc.

3 Diagnostic Procedure for Vehicles Failing a Transient Emissions Test

HC FAILURE PROCEDURE

Where in the drive trace does HC appear high?

- Near Idle** **Cruise** **Acceleration** **Deceleration**

Perform engine diagnostics on a dynamometer at the same time that the drive trace information shows excessive HC.

- Does engine run rough or miss? Correct condition before continuing.
- Perform engine diagnostics and check for vacuum leaks and proper timing. Over advanced timing can increase HC.
- Run car on dynamometer to detect misfire under load. Perform misfire diagnostics, if possible, at same speed and load that excessive gases show on drive trace.
- Monitor O₂ sensor waveform (using lab scope) during drive cycle to help detect misfire.
- Verify correct operation of related emission control systems. Note: Emission systems may have interrelated problems.
- Does engine run smooth? If not, repeat engine diagnostics including accurate testing for vacuum leaks.

The use of a vacuum leak detector (one that injects smoke into the engine) may be the most effective method to locate vacuum leaks.

4 Diagnostic Procedure for Vehicles Failing a Transient Emissions Test

CO FAILURE PROCEDURE

Where in the drive trace does CO appear high?

- Near Idle** **Cruise** **Acceleration** **Deceleration**

Perform engine diagnostics on a dynamometer at the same time that the drive trace information shows excessive CO. Some components may operate properly at idle and malfunction at cruise speed or under load.

Check Causes of Rich Mixture

- Air filter
- Cooling system: Can engine reach proper operating temperature?
- Check operation/function of the vapor recovery system, which could add unmeasured fuel to the engine. Correct the condition before continuing.
- Check operation/function of the fuel delivery system (fuel pressure, float level, etc.).
- Verify correct operation of emission control systems (i.e. proper vacuum to control components such as MAP sensor).
- Is the vehicle in fuel control? Can the oxygen sensor read full rich at idle and at the time of excessive CO emissions? If yes, can O2 sensor be driven lean? **If yes, correct cause of rich mixture.**

If HC is also excessive, check for misfire.

This procedure was developed mainly for vehicles with feedback systems and is designed to assist the technician in locating the cause of excessive exhaust gases in a cost-effective manner. The procedure focuses on the systems and/or components that are related to the failed gas. The success in repairing failed vehicles will depend greatly on the technician's knowledge, access to diagnostic information, vehicle manufacturers' specifications and technical service bulletins, as does any other diagnostic procedure. This procedure does not replace the need for technician training or performing accurate diagnostics but instead helps the technician to determine when to apply that knowledge and eliminates steps not related to the failed gas.

This Diagnostic/Repair Sequence is generic in nature and may assist technicians in the diagnosis and repair of certain vehicles exhibiting particular excess emissions problems. No warranty of any kind as to the accuracy and effectiveness of this Sequence is made or implied, as its effectiveness will relate in part to the skill level of the using technician, the type of vehicle, and the nature of the problem(s) causing excess emissions.

NYS Department of Environmental Conservation/TESTCOM Inc.

APPENDIX G



DAVID J. SWARTS
Commissioner

STATE OF NEW YORK DEPARTMENT OF MOTOR VEHICLES

6 EMPIRE STATE PLAZA, ALBANY, NY 12228

Albany, New York

September 18, 2008

TO: Inspection Stations - Attention: Station Owner/Manager

SUBJECT: NYTEST Shared Network Program

On September 24, 2008, emissions inspection facilities in the New York Metropolitan Area (NYMA) will have new options for fulfilling their NYTEST inspection requirements under a newly adopted amendment to Part 79 of the Commissioner's Regulations. We are calling this program the NYTEST Shared Network. The amendment to the Regulations provides relief for stations that are no longer inspecting an adequate number of vehicles model year 1995 and older to warrant maintaining the NYTEST equipment. Stations that no longer service or inspect these vehicles may refer customers to another licensed facility that can inspect these vehicles. Stations who service these model year vehicles may choose to keep their equipment and accept vehicle referrals from neighboring facilities. We have included a summary of the information you need to make an informed business decision for your station.

The NYTEST Shared Network is voluntary. If you choose not to participate, your obligation remains the same; you must continue to inspect all vehicles presented and keep your emissions inspection equipment in proper working order.

If you wish to become a Shared Network Station and you meet the eligibility requirements, you can become a Sending Station or a Receiving Station. A Sending Station can fulfill its NYTEST inspection responsibilities by entering into an agreement with a neighboring licensed inspection station (Receiving Station) to inspect 1995 and older vehicles. The Receiving Station must be within 5 miles and 15 minutes driving time of the Sending Station. Sending Stations will be obligated to keep an agreement with at least one Receiving Station in place at all times and either bring vehicles for inspection or refer their customers to the Receiving Station. The Receiving Station must keep all equipment in proper working order and maintain a service agreement with its NYTEST equipment vendor. Stations may still only charge customers the regulated emissions inspection fee of a maximum of \$37 for a safety/dynamometer or idle test. No additional service fee may be charged if you choose to use this program. Two stations cannot charge the same customer for the same inspection.

While this program is just beginning, we will accept applications at any time. There is no end date for entrance into the NYTEST Shared Network program. However, we will establish a waiting list if we reach the maximum number of Sending Stations allowable per county in order to ensure that vehicle owners do not have difficulty finding a NYTEST-capable station. As the number of vehicles requiring a NYTEST inspection goes down, we will approve additional Sending Stations from the waiting list, if one has been established.

We have attached information and instructions if you wish to apply to become a Shared Network Station, the minimum requirements to be in the Shared Network Program, as well as a sample application form. The Regulation outlines the eligibility criteria and procedures necessary for approval. You may read the complete text of the Regulation changes on the DMV web site at: www.nysdmv.com/forms/cr79up2 . We are revising the CR-79 Motor Vehicle Inspection Regulations manual, and it will be available when the update is completed.

David J. Swarts
Commissioner

Attachments

How to Become a Shared Network Inspection Station

Sending Station Requirements and Process

- Must have a valid official high enhanced emissions public inspection station license, and must have held the license for at least twelve (12) months prior to the date of application.
- Must enter into a Shared Network Agreement in the manner prescribed in Section 79.16(d) of the Regulations. The Agreement must:
 - be a written contract or agreement
 - be legible and in English
 - be signed by an authorized representative of the Sending and Receiving Station
 - be within five (5) driving miles and fifteen (15) driving minutes of the Receiving Station.
 - ensure that the Shared Network Agreement contains provisions for the Receiving Station to inspect all vehicles referred or presented by the Sending Station, the period of time that the Receiving Station is obligated to perform this service, and the payment(s) provided to the Receiving Station (if applicable).
- Must maintain at least one valid Shared Network Agreement; otherwise, all inspection activities (including safety inspections and NYVIP OBD II inspections) will be prohibited. A Sending Station may have up to three Shared Network Agreements.
- Must submit a separate Shared Network Application, in the manner prescribed, for each Shared Network Agreement initiated.
- Must include with each Shared Network Application: (1) a copy of the Shared Network Agreement; (2) a copy of the valid Receiving Station NYTEST service contract(s); and (3) a copy of the results of a computer search for directions, utilizing mapping software, that indicates the driving distance and the driving time between the Sending Station and the Receiving Station.

Receiving Station Requirements and Process

- Must have a valid official high enhanced emissions inspection station license.
- Must maintain a valid service contract with a NYTEST vendor, covering each NYTEST CVIS that the Receiving Station operates.
- Must enter into Shared Network Agreements in the manner prescribed in Section 79.16(d) of the Regulations. (See Sending Station Requirements for details)
- Must have the capability of performing the projected number of inspections that would be reasonably anticipated, based upon the Shared Network Agreements entered into with all Sending Stations.
- Is responsible for completing the entire inspection.

Shared Network Application Process

Facilities wishing to become Sending Stations should complete an **Application for Shared NYTEST Equipment Facility, form MV-253SN**. A copy is included with this package of information. You may photocopy this form or obtain additional copies on DMV's web site //WWW.NYS DMV.COM or by calling 518 - 474-0919.

Send the completed application to: NYS Department of Motor Vehicles, Bureau of Consumer and Facility Services, Application Unit, PO Box 2700, Albany, NY 12220-0700.

Along with the completed application, you must provide:

1. a copy of the Receiving Station service contract,
2. a copy of the written Shared Network Agreement between the Sending Station and your Receiving Station,
3. a printout from a mapping software package indicating the distance between the Sending Station and your Receiving Station.

Please Note: Until DMV approves your application, you must continue to maintain your NYTEST equipment and perform inspections on vehicles needing a NYTEST emissions inspection.

Shared Network Questions and Answers

Q: How do I enter into a Shared Network Agreement?

A: A Sending Station can enter into a Shared Network Agreement with a Receiving Station by filling out **Application for Shared NYTEST Equipment Facility, Form MV-253SN and developing their own separate agreement form to be used by the stations** . The Shared Network Application Form (MV253SN) requires the information and signatures of both the Sending and Receiving Station. You must submit a separate application (MV-253SN) for each agreement you have with each receiving station.

Q: How long must I have performed high-enhanced emissions inspections prior to becoming a Sending Station?

A: In order to become a Sending Station, an inspection station must have held an inspection license for at least twelve months prior to the application date. In addition, the station must provide a history of all the high-enhanced emissions inspections performed twelve months prior to application.

Q: When I become a Sending Station, what do I do with my high-enhanced inspection certificates (stickers)?

A: After becoming a Sending Station, you must surrender all high-enhanced inspection certificates to the Department of Motor Vehicles within thirty days of the Shared Network approval letter. You will get credit for unused stickers as you normally do.

Q: Do I receive payments from Sending Stations for entering into a Shared Network Agreement?

A: Payment is not a requirement of a Shared Network Agreement, but can be negotiated between Sending and Receiving Stations.

Q: How long do I have to perform an inspection for a referral?

A: There is no change from current regulations. Appointments must be within eight business days of the request from the Sending Station.

Q: Who pays the re-inspection fees if a vehicle fails inspection?

A: You cannot charge the consumer any additional fees for re-inspection unless the consumer has removed the vehicle from the inspection facility. If the vehicle requires re-inspection at the Receiving Station prior to delivering to the customer, the customer cannot be charged.

Q: Can I end an Agreement with a Receiving Station?

A: Yes, you can end a Shared Network Agreement with a Receiving Station at any time. You may end a Shared Network Agreement using the same form, an **Application for Shared NYTEST Equipment Facility, Form MV-253SN**. However, to remain a public inspection station, you must either remain a Sending Station by maintaining a Shared Network Agreement with at least one Receiving Station, or re-commissioning your equipment. If you fail to maintain a Shared Network Agreement with at least one Receiving Station, all inspection activity, including NYVIP, will be stopped.

Q: Can I stop being a Receiving Station?

A: Yes, you may withdraw as a Receiving Station. You must immediately notify any Sending Stations who send their inspections to you. In order to withdraw this designation, you must send a written request to the DMV Vehicle Safety Application Processing Unit which includes: the facility name, facility number and facility address, as well as the reason for the request. The owner, partner, or officer of the business must sign the request.

Q: Can I remove my designation as a Sending Station?

A: You may remove your designation as a Sending Station if you demonstrate that your NYTEST CVIS is fully functional and submit a separate application to drop each of your Receiving Stations.

Q: If I am a Sending Station and my Receiving Station can no longer perform NYTEST inspections, what will happen to me?

A: If you do not have any other active Agreements with another Receiving Station, all inspection activities will be stopped until you obtain another valid Shared Network Agreement or re-commission your NYTEST equipment. If one of your Receiving Stations can no longer perform inspections, you must have at least one other Shared Network Agreement.

Q: Can an inspector from my station perform an inspection at a Receiving Station?

A: This is not prohibited by regulation and is something that can be considered in the Shared Network Agreement.

Q: What do I charge customers for the process?

A: You may charge customers up to the prescribed fee for an inspection and may not charge any additional fees. The customer can only be charged for one inspection; both (sending and receiving) stations may not charge the customer.

Q: How will I know if one of my Receiving Stations is unable to perform high-enhanced emissions inspections?

A: Whenever a Receiving Station is prohibited from performing high-enhanced emissions inspections for any reason, they must immediately inform all of their Sending Stations in writing.

Q: Am I required to make payments to Receiving Stations after entering into a Shared Network Agreement?

A: Sending Stations are not required to make payments to Receiving Stations unless they have negotiated this with the Receiving Station as part of their Shared Network Agreement.

Q: Can I perform a safety inspection prior to bringing it to the Receiving Station for an emissions test?

A: No, a Sending Station is not permitted to perform only the safety portion of an inspection. The inspector certifying the inspection must perform the entire inspection.

Q: Am I required to take possession of vehicles presented to me for an emissions inspection?

A: No. You may choose to refer the customer to your Receiving Station by providing them with the location in writing or you may bring the vehicle to a Receiving Station, with an owner's consent. If you accept responsibility for a vehicle's emissions inspection, you are required to provide the vehicle owner with the name of the inspection station that performed the inspection.



APPLICATION FOR SHARED NYTEST EQUIPMENT FACILITY

INSTRUCTIONS

This form is used to add and/or drop agreements for inspection stations participating in the Shared Network program. A “sending” station must complete an application form MV-253SN for each “receiving” station with which it wants to have an agreement. The sending station must also provide verification of the respective locations of the sending and receiving stations (see the “Location Verification” section below), and a copy of the receiving station’s service agreement. Both the sending and receiving stations must complete and SIGN their respective certification blocks on page 2 of this form.

Note: Complete this form as accurately and legibly as possible. Failure to do so may slow down the application approval process.

ACTION THE SENDING STATION IS TAKING WITH THIS FORM

- Adding an agreement with a receiving station Dropping a receiving station

SENDING STATION INFORMATION

Your Facility Number 	Your Facility Name	Facility Phone Number ()	
Your Facility Address - Number and Street			County
City		State	Zip Code

NYTEST History

Became a NYTEST station on: Month Day Year Number of NYTEST inspections performed in the past 12 months: _____

Location Verification

The sending station is _____ miles from the receiving station on this form, and is _____ minutes’ drive from the receiving station.
 I have attached a copy of one or more maps that verify the LOCATIONS of the sending and receiving stations and their DISTANCE from each other, such as printouts from an internet search or map website.

RECEIVING STATION INFORMATION FOR INITIAL AGREEMENT OR NEW RECEIVING STATION

Facility Number 	Facility Name	Facility Phone Number ()	
Facility Address - Number and Street			County
City		State	Zip Code

Provide the manufacturer’s name and the model number of the testing equipment used by your station.

Manufacturer’s Name: _____ Model Number: _____

NOTE: *The receiving station above MUST provide the sending station with a copy of the receiving station’s service agreement to submit with this application if the sending station is INITIATING a relationship with this receiving station.*

I have attached the service agreement.

FOR OFFICE USE ONLY

Facility Number		3 of Name		ISP Emission Number	
-----------------	--	-----------	--	---------------------	--

RECEIVING STATION CERTIFICATION FOR INITIAL OR NEW RECEIVING STATION

I certify that I am the owner, partner or officer of the receiving station named on page 1 of this application form, and that the information provided by me on this form is true.

Name (Please PRINT FULL name)

Signature (FULL name)

Title

Date

RECEIVING STATION INFORMATION FOR STATION BEING DROPPED

The sending station is: Replacing this receiving station. Dropping this receiving station and NOT adding a new one.

Facility Number

Facility Name

SENDING STATION CERTIFICATION

I certify that I am the owner, partner or officer of the sending station named on page 1 of this application form, and that all of the information provided by me on this form is true.

Name (Please PRINT FULL name)

Signature (FULL name)

Title

Date

CHECKLIST

1. Please indicate whether you are adding or dropping a Shared Network agreement (both can be done on a single application).
2. Completely fill in your facility's information and information regarding your history as a NYTEST station. You must have been a fully operational NYTEST inspection station for one full year BEFORE you can apply to be a sending station. Include the number of NYTEST inspections conducted in your facility over that one-year period.
3. Attach a computer printout of the distance between your station and your receiving station using mapping software such as GoogleTM maps or MapQuest[®] maps. (*Note: The travel distance cannot exceed 5 miles OR 15 minutes' driving time.*)
4. Attach a copy of the receiving station's current NYTEST service agreement.
5. Attach a copy of the written agreement between sending and receiving stations.
6. You can include only one receiving station per application.
7. Fill in the receiving station's information (including NYTEST equipment information), and obtain the signature of the owner, partner or officer.
8. If you are ending an agreement with a receiving station, you only need to include the station's name and facility number.
9. Include the name and signature of the sending station's owner, partner or officer at the end of the agreement.
10. **Reminder: In order to perform inspections, you must maintain a Shared Network agreement with at least one (1) receiving station, or recommission your equipment. Sending stations will not be displayed as NYTEST stations on the DMV Internet Facility Look-up web page.**

RETURN THIS COMPLETED REQUEST, AND ANY REQUIRED DOCUMENTATION, TO:

NYS Department of Motor Vehicles, Bureau of Consumer and Facility Services, Application Unit, PO Box 2700, Albany NY 12220-0700
OR send it by FedEx[®] to: NYS Department of Motor Vehicles, Vehicle Safety Applications Unit, Swan Street Building, Room 110, Core 1, Floor 1, Albany, NY 12228.

You will be notified by mail of the determination regarding this application.

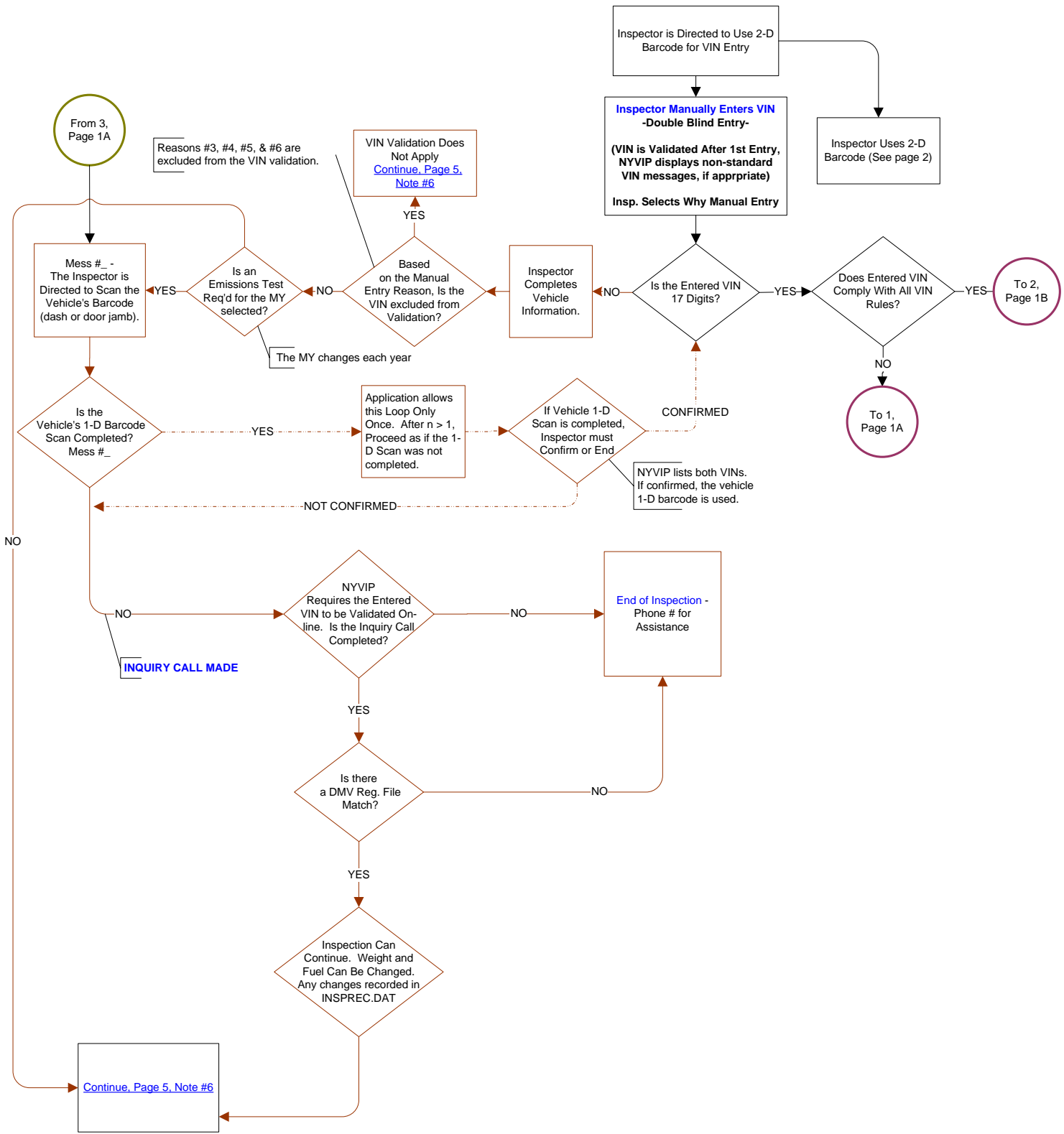
You are required to maintain your NYTEST equipment until you receive official notification that you may decommission it.

APPENDIX H

VIN Validation Flow Chart

Page 1

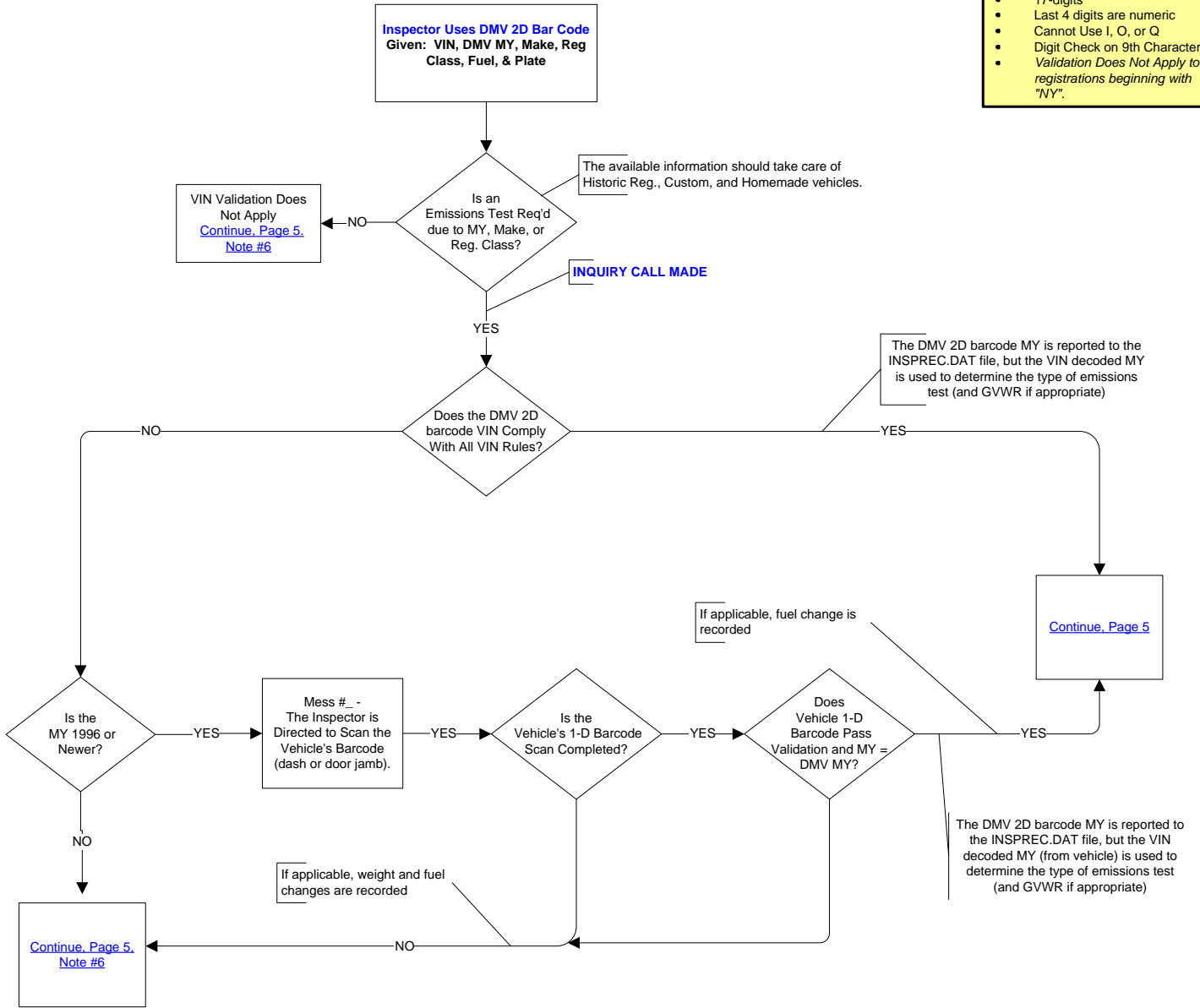
- VIN Validation "Rules"**
- 17-digits
 - Last 4 digits are numeric
 - Cannot Use I, O, or Q
 - Digit Check on 9th Character
 - Validation Does Not Apply to registrations beginning with "NY".



VIN Validation Flow Chart

Page 2

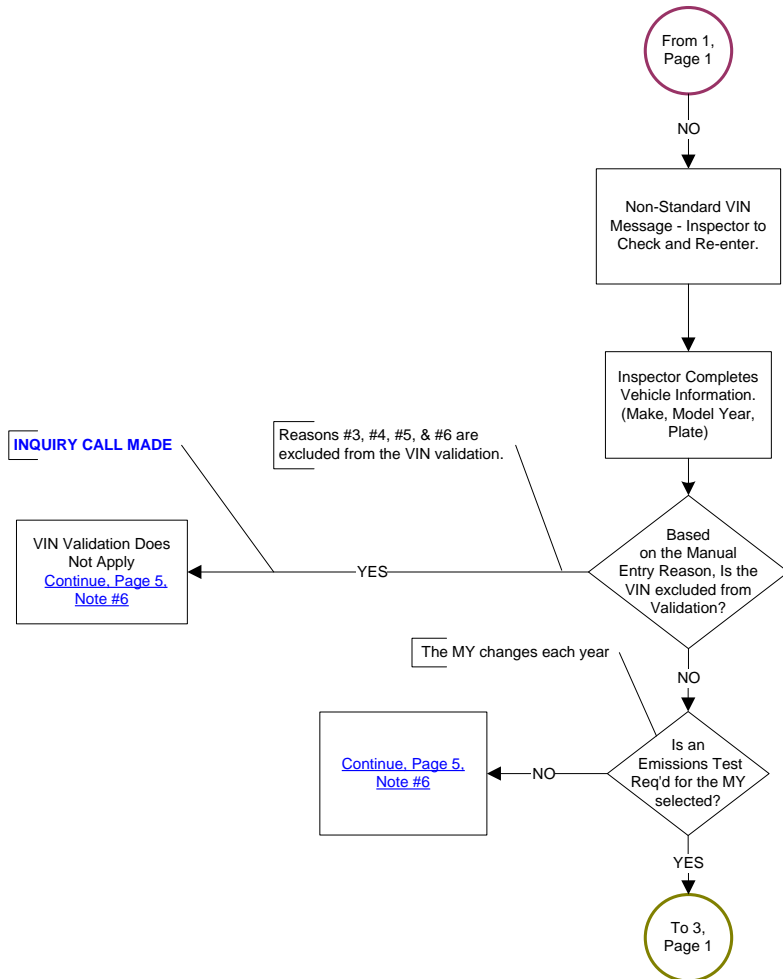
- VIN Validation "Rules"**
- 17-digits
 - Last 4 digits are numeric
 - Cannot Use I, O, or Q
 - Digit Check on 9th Character
 - Validation Does Not Apply to registrations beginning with "NY".



VIN Validation Flow Chart

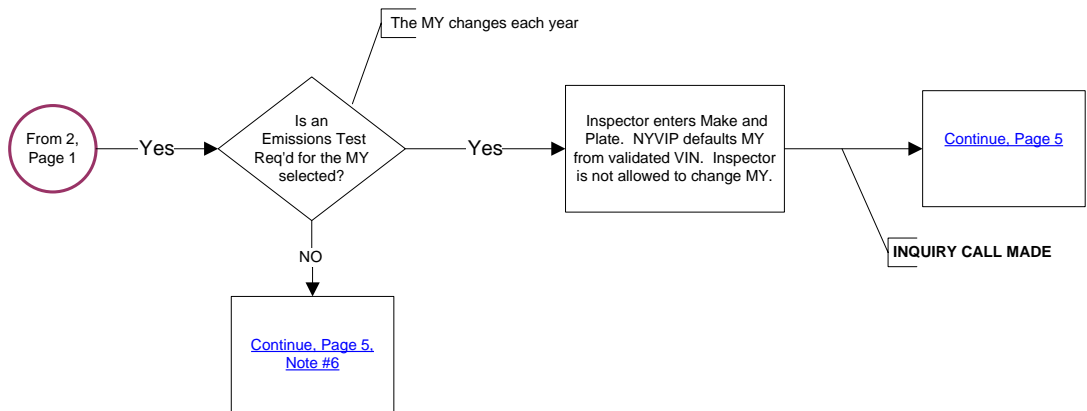
Page 1A

- VIN Validation "Rules"**
- 17-digits
 - Last 4 digits are numeric
 - **Cannot use I, O, or Q**
 - Digit Check on 9th Character



VIN Validation Flow Chart

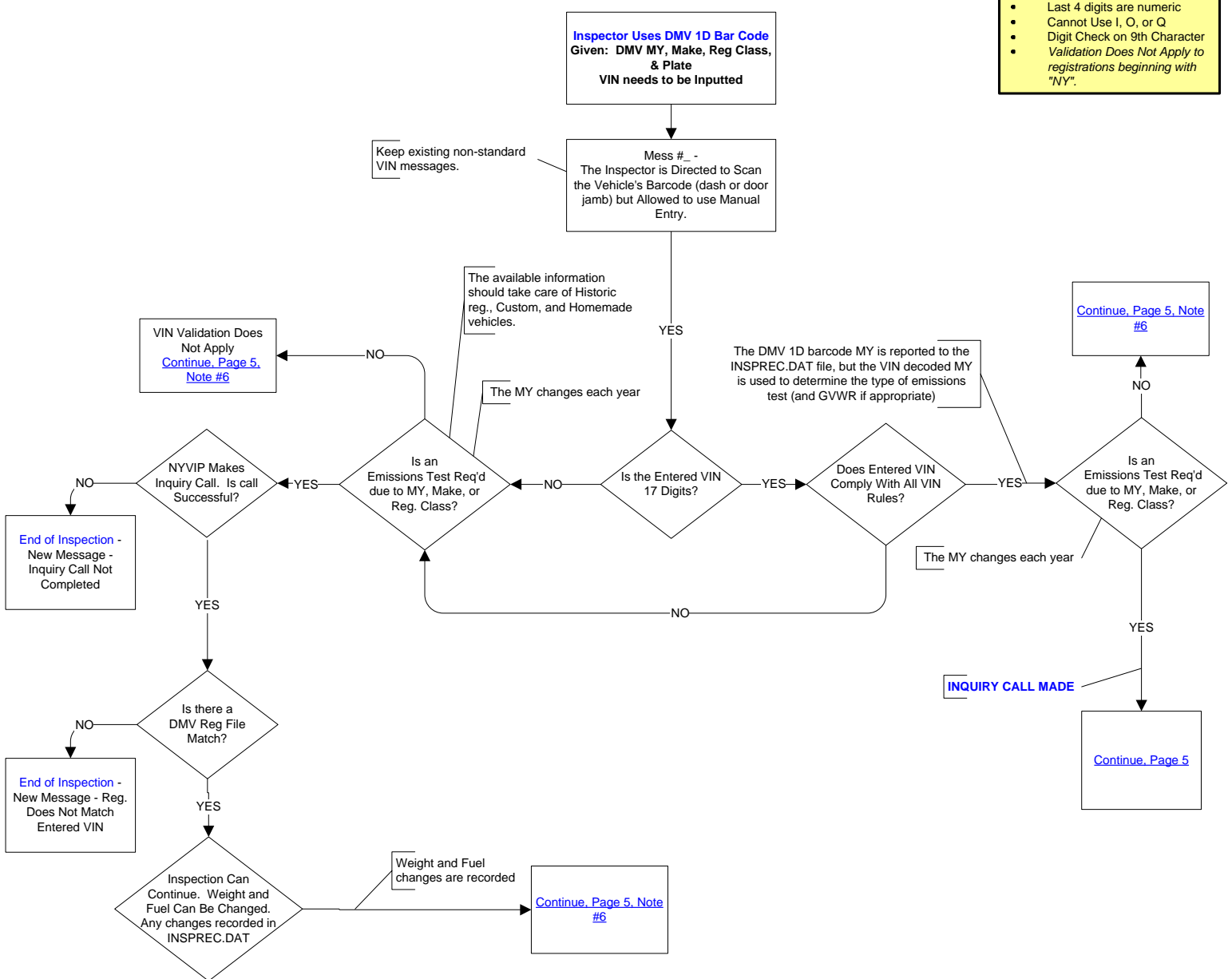
Page 1B



VIN Validation Flow Chart

Page 3

- VIN Validation "Rules"**
- 17-digits
 - Last 4 digits are numeric
 - Cannot Use I, O, or Q
 - Digit Check on 9th Character
 - Validation Does Not Apply to registrations beginning with "NY".

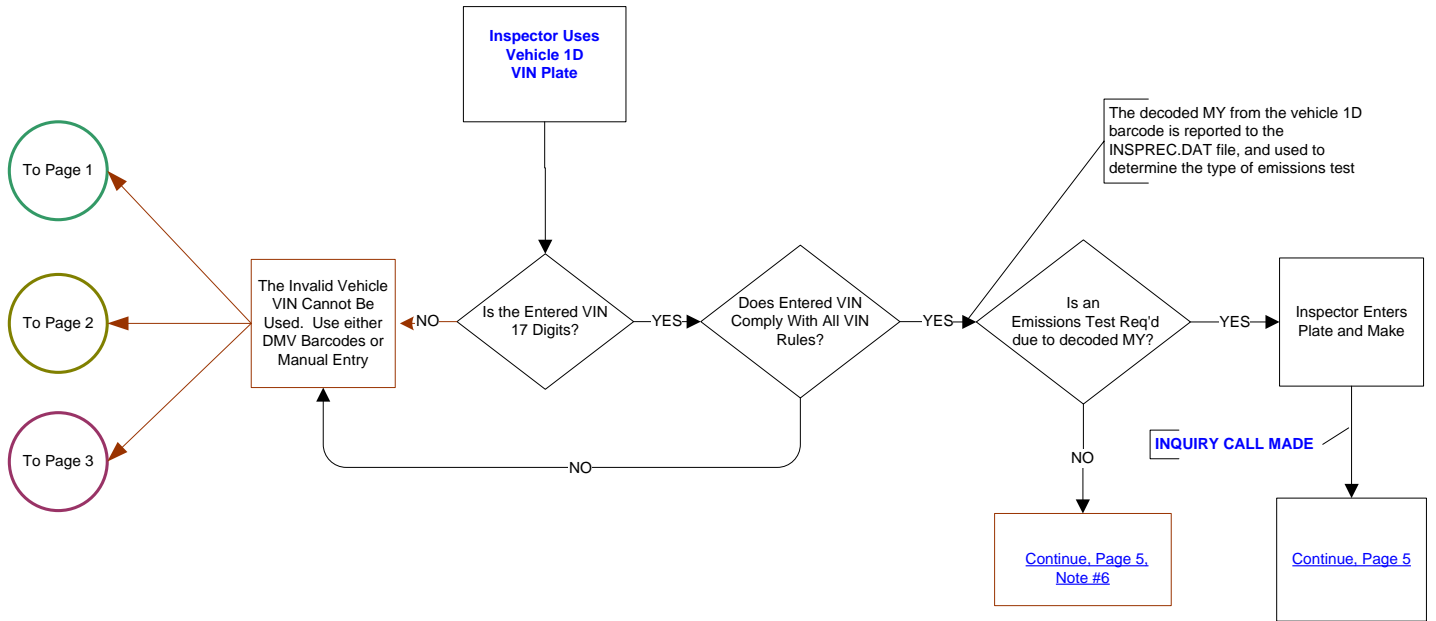


NOTE: For a DMV 1-D barcode scan, the INSPREC.DAT file should be able to record whether the VIN was entered by manual keyboard entry or vehicle barcode scan.

VIN Validation Flow Chart

Page 4

- VIN Validation "Rules"**
- 17-digits
 - Last 4 digits are numeric
 - Cannot Use I, O, or Q
 - Digit Check on 9th Character
 - Validation Does Not Apply to registrations beginning with "NY".



VIN Validation
Flow Chart
Page 5

GENERAL - Unless directed to "Continue, Page 5, Note #6," use the GVWR reference file for validated VINs with **MY 1996 and newer**.

NOTE #1 - Whenever a DMV 1D barcode is used, NYVIP should record how the VIN was entered: manual entry or vehicle VIN plate. The MY from the DMV 1D barcode will be reported to the INSPREC.DAT file, but the decoded MY (from a compliant VIN) will be used to determine GVWR file applicability. (See below.)

NOTE #2 - If a DMV 2-D barcode is scanned but deemed non-complaint, NYVIP should record that the vehicle's VIN plate was used to determine GVWR. The MY from the DMV 2D barcode will be reported to the INSPREC.DAT file, but the decoded MY (from a compliant VIN - VIN plate) will be used to determine GVWR file applicability. (See below.)

NOTE #3 - Values and definitions of the "Data Entry Method" field of the INSPREC.DAT file are:

- 0 = Keyboard Entry
- 1 = DMV 1D Barcode / Manual VIN Entry
- 2 = DMV 2D Barcode
- 3 = Vehicle VIN Plate
- 4 = Non-complaint Manual Entry
- 5 = DMV 1D Barcode / VIN by Vehicle Plate
- 6 = Non-compliant DMV 2D Barcode / Vehicle VIN Used for GVWR
- 7 = Trailer
- 8 = Motorcycle
- 9 = Non-compliant DMV 2D Barcode / Vehicle VIN Not Used for GVWR

NOTE #4 - Whenever the Make, "Other," is chosen by the Inspector, NYVIP will display the message, "Selection of "OTHER" as the vehicle Make may result in the vehicle's registration renewal being denied. Please review the Make selections and select the appropriate Make for the vehicle being inspected, if available". NYVIP will require a second selection of Make, and will record the 2nd selection within the INSPREC.DAT file. (The use of "Other" is an acceptable 2nd selection.) The VIR will also note that, "Other has been chosen as the vehicle Make. Check the vehicle registration document to see if "Other" is the listed Make."

NOTE #5 - The use of the GVWR reference small file is limited to emissions inspections for MY 1996 and newer vehicles, as follows:

Condition #1 (the 17-digit VIN from any entry method passes all of the VIN Validation Rules + the GVWR table has a match indicating the vehicle is less than 8,500 lbs GVWR) - NYVIP completes the weight code field as Weight Code #1; Weight changes are NOT allowed, and the existing weight change warning messages are no longer applicable.

Condition #2a (the 17-digit VIN from any entry method passes all of the VIN Validation Rules + the GVWR table does not find a match) - a) If a DMV weight code is available (from the DMV 1D or 2D barcodes) and the DMV WC is 2, 3, or 4, then NYVIP fills the Weight Code field of the Inspection Screen with the DMV information. Weight changes to the "filled" values are allowed, but the existing weight change warning messages are no longer applicable.

Condition #2b (the 17-digit VIN from any entry method passes all of the VIN Validation Rules + the GVWR table does not find a match) - b) if the DMV weight is WC1 (obtained from the DMV1D or 2D barcodes) or if DMV weight information is not available (i.e., offline & manual entry), then NYVIP leaves the Weight Code field of the Inspection Screen blank. A new message appears, "Review the vehicle's door jamb for the listed GVWR and enter the weight code. [NYVIP displays the weight ranges for each weight code. NYVIP will not proceed unless a valid weight code is entered. The entry of a GVWR value is not acceptable.] The existing weight change warning messages are no longer applicable.

NOTE #6 - Compliance with VIN validation (and GVWR reference file) is not required in this scenario. The inspection is allowed to continue.

NOTE #7 - A match with the Inspection file has no application with VIN validation or GVWR reference file.

NOTE #8 - A reg. file match is generally based on VIN, model year, and make. If the vehicle make is "Other," the reg. file match will be based on only VIN and model year.

NYVIP MESSAGE No.13 (2006)

Date: 11/20/2006

TO: ALL INSPECTION STATIONS

FROM: NYS DEPT. OF MOTOR VEHICLES

SUBJECT: NYVIP SOFTWARE UPDATE

The Department of Motor Vehicles, The Department of Environmental Conservation and SGS Testcom have made enhancements to the New York Vehicle Inspection Program (NYVIP) software. Many of these enhancements were suggested by individual inspectors or stations and from other feedback we have received since the beginning of the program. In a few days, you will receive a CD in the mail from SGS Testcom containing the NYVIP Software Update. When you receive the CD you should follow the instructions enclosed for updating your NYVIP unit.

The following is a summary of most of the changes incorporated into the Software Update.

- Most Motorcycle, Trailer and Truck makes are now listed. Motorcycle and Trailer makes will only appear when that type of inspection is selected.**
- When the inspector scans a DMV 1D bar code on the registration sticker of the vehicle, he will be prompted to scan the 1D bar code on the vehicle's dashboard or door jamb or enter the VIN manually to ensure that the inspection is credited to the proper vehicle.**
- NYVIP will now validate the VIN and compare it to a gross vehicle weight rating table (GVWR). If the vehicle is on the table, NYVIP will conduct an OBDII inspection. If the vehicle is not on the table, the inspector will be allowed to select the appropriate weight code for the vehicle's inspection. This will eliminate warning messages on most inspection receipts and save the inspector time.**
- The inspector will only be able to enter vehicle emission repairs on a re-inspection to reduce confusion and accidentally entering the same repairs more than once.**
- There will be a confirmation screen when entering the amount of emission repairs to allow the inspector to correct an incorrect entry.**

- **The selection “Unable to remove a wheel” has been added to the screen “Wheel removed to inspect brakes”. If the inspector makes that selection and has previously indicated that the Service Brake system passed, a confirmation screen will appear. Confirming the selection will fail the vehicle for Service Brakes, not confirming the selection will allow the inspector to make another wheel selection.**
- **During some OBDII inspections where the NYVIP and vehicle fail to communicate, inspectors have made the selection that the failure is based on the NYVIP connector being broken or missing. This has caused the NYVIP unit to lock out and the inspector to call to get instructions on un-locking the unit. A confirmation screen has been added to assist the inspector in making the correct selection.**
- **When a vehicle is eligible for an inspection waiver, the inspector will be able to answer the question by pressing the “Y” or “N” on the Scan Tool Interface.**
- **When issuing an inspection certificate to a trailer or to a vehicle receiving an inspection waiver, NYVIP will display new messages informing the inspector of the correct boxes that need to be punched or checked.**
- **NYVIP will now print the Daily Report automatically.**
- **When a message is sent to the station, the Mailbox icon will flash, the inspector will be able to use the mouse and left click on the mailbox and this will open the State Message Menu for the inspector to select the message or messages to view.**
- **Safety and Emission Control Device inspection criteria has been added to the Inspection Menu.**
- **There will be a confirmation when the inspector enters inspection stickers into inventory. The inspector will select the stickers to be entered, and NYVIP will request the first sticker in each book be scanned to confirm the correct stickers are being entered. If the book being scanned matches the selection made by the inspector, NYVIP will display a message indicating the stickers were entered into inventory. Please be careful to only check/select books of stickers that are actually on hand.**
- **When reprinting an inspection receipt for a vehicle that was issued an inspection waiver, NYVIP will print both the receipt and the waiver. Both documents will indicate that they are duplicates. Reprinting a receipt will print the last inspection of the vehicle only.**

- **There will be an End of Year Sticker Inventory Report indicating all inspection stickers that were not used during the year. It will list all stickers that were noted as damaged or stolen and what stickers are eligible to return to DMV for credit.**
- **Please pay attention during the OBDII test sequence to screens and messages, as some of them have been changed to save time.**

As always we value your feedback. Questions or comments regarding the new upgrade or changes for future upgrades may be made from the Main Menu by selecting option #3, Contractor's Add On Menu, and then selecting option #1, Send Feedback. Of course you may still contact Clean Air at 518-473-0597.

It is important that all stations load the CD update in a timely manner. NYVIP units not using the new version of the software by January 31, 2007 will be locked out. If you need assistance in loading the update or you haven't received the update by December 15, 2006, contact the SGS Testcom Help Desk at 1-866-469-8477.

APPENDIX I

GVWR Table

VIN Position								Make	Model	Application Weight
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>			
9	U							Acura		< 8,500 GVWR
A	E							Acura		< 8,500 GVWR
H	4							Acura		< 8,500 GVWR
H	N							Acura		< 8,500 GVWR
J	8	T	B	1	8			Acura	RDX	< 8,500 GVWR
C	F	A	A					Aston Martin	DB7	< 8,500 GVWR
C	F	A	B					Aston Martin	Vantage	< 8,500 GVWR
C	F	A	C					Aston Martin	Vanquish	< 8,500 GVWR
C	F	A	D					Aston Martin	DB9	< 8,500 GVWR
C	F	B	B					Aston Martin	Vantage	< 8,500 GVWR
A	1	A						Audi	Q7	< 8,500 GVWR
A	1	B						Audi	Q7	< 8,500 GVWR
A	1	C						Audi	Q7	< 8,500 GVWR
A	1	E						Audi	Q7	< 8,500 GVWR
A	1	Y						Audi	All Road 4-Dr. Wagon	< 8,500 GVWR
A	U							Audi		< 8,500 GVWR
R	U							Audi		< 8,500 GVWR
U	A							Audi		< 8,500 GVWR
C	B	B	R	5	3			Bentley	Flying Spur	< 8,500 GVWR
C	B	B	R	9	3			Bentley	Saloon	< 8,500 GVWR
C	B	D	R	3	3			Bentley	Saloon	< 8,500 GVWR
C	B	L	B					Bentley	Arnage, Green	< 8,500 GVWR
C	B	L	C					Bentley	Arnage, Red	< 8,500 GVWR
C	B	Z	K					Bentley	Azure	< 8,500 GVWR
B	A	A	M	3	3			BMW	328I	< 8,500 GVWR
B	A	A	M	5	3			BMW	328I	< 8,500 GVWR
B	A	A	N	3	3			BMW	323I	< 8,500 GVWR
B	A	A	N	3	7			BMW	325I	< 8,500 GVWR
B	A	A	R	3	3			BMW	323I	< 8,500 GVWR
B	A	A	V	3	3			BMW	325I	< 8,500 GVWR
B	A	A	V	5	3			BMW	330I	< 8,500 GVWR
B	A	A	W	3	3			BMW	325I	< 8,500 GVWR
B	A	A	X	1	3			BMW	325I	< 8,500 GVWR
B	A	A	Z	3	3			BMW	325I	< 8,500 GVWR
B	A	B	D	3	3			BMW	325CI	< 8,500 GVWR
B	A	B	D	5	3			BMW	330CI	< 8,500 GVWR
B	A	B	E	7	3			BMW	318IS	< 8,500 GVWR
B	A	B	E	8	3			BMW	318IS	< 8,500 GVWR
B	A	B	F	7	3			BMW	323IS	< 8,500 GVWR
B	A	B	F	8	3			BMW	323IS	< 8,500 GVWR
B	A	B	G	1	3			BMW	328IS	< 8,500 GVWR
B	A	B	G	2	3			BMW	328IS	< 8,500 GVWR

APPENDIX J

New York State Department of Environmental Conservation

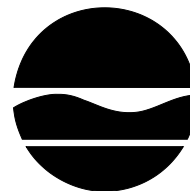
Division of Air Resources

Bureau of Mobile Sources and Technology Development, 2nd Floor

625 Broadway, Albany, New York 12233-3255

Phone: (518) 402-8292 • FAX: (518) 402-9035

Website: www.dec.ny.gov



Alexander B. Grannis
Commissioner

November 15, 2007

By E Mail

Attn: Docket No. NHTSA-2007-27830
Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Avenue, SE.
West Building, Ground Floor, Room W12-140
Washington, D.C. 20590-001

Docket ID No. NHTSA-2007-27830 Vehicle Identification Number Requirements

Dear Docket Administrator:

These comments relate to the National Highway Traffic Safety Administration (NHTSA) and Department of Transportation's (DOT) proposed amendments to 49 CFR Part 565 governing the configuration of the vehicle identification number (VIN).

The New York State Department of Environmental Conservation (Department) supports NHTSA and DOT's efforts to ensure that there will be a sufficient number of unique manufacturer identifiers and VINs for the current 17-character VIN system for at least another 30 years. The Department wishes to offer the following comments based on the preamble discussion and proposed changes to 49 CFR Part 565:

1. Absent from the Notice of Proposed Rule Making (NPRM) Background discussion is the fact that many motor vehicle Inspection and Maintenance (I/M) programs utilize VIN decoding software to determine emissions testing requirements. Since NHTSA/DOT is amending the VIN regulation, the rulemaking offers an opportunity to seek clarification from vehicle manufacturers concerning issues that presently affect VIN decoding. Vehicle information including age (model year is defined within digit 10), fuel type, weight (gross vehicle weight rating) and make are used to determine emissions testing applicability (i.e., exemptions, exceptions) and the appropriate type of emissions tests (i.e., tailpipe, onboard diagnostic). While this information is currently included within the VIN, fuel type and weight are not treated consistently across all manufacturers and vehicle types.

Trends indicate an increase in the manufacture of light-duty diesels, dedicated alternative fuels, and hybrid vehicle technology in the future. It would be very useful for I/M programs to have dedicated fuel type or type of hybrid technology clearly identified within the VIN. If NHTSA/DOT regulations cannot specifically define fuel type within the 17-digit VIN structure, another alternative could be to have the

manufacturers annually report to NHSTA as to how fuel type is defined within their VINs (i.e., define VIN strings for each fuel type manufactured), and for NHTSA to make this information available for use in state I/M programs.

2. The NPRM proposes to move the location of information conveying vehicle make to the second section of the VIN. It is unclear if vehicle make would become more difficult to obtain if this proposal is finalized as written. Vehicle Make must be readily available to state regulatory programs from the VIN.

3. New vehicles may be certified by the manufacturers to various emission standards (i.e., CARB, 50 state, federal) and levels. It would be useful to states if the 17-digit VIN structure include an identifier noting the certification type and, if possible, the level of certification (i.e., ULEV, SULEV, Tier 2). This information would be beneficial to state efforts in the enforcement of vehicle sale regulations, and would also enable states to more accurately determine the emissions characteristics of their respective fleets for air quality planning purposes.

The Department appreciates this opportunity to comment on the proposed amendments to 49 CFR Part 565.

Sincerely,

Steven E. Flint

Steven E. Flint, P.E.
Director, Bureau of Mobile Sources and Technology
Development
Division of Air Resources

New York State Department of Motor Vehicles
Response to National Highway Safety Administration
49 CFR Part 565 Docket No NHTSA-2007-27830

We do not anticipate any substantial problems with the proposal. We offer the following suggestions:

1. RE: Section 565.4(f) General Requirements (pg 8, column 3 of the Oct 2, 2007 Federal Register): We recommend that this section be amended to include the passage "The VIN must face the front of the vehicle." We have encountered some grey market vehicles with the public VIN tag facing the driver. While the VIN is readable from the outside, it is very hard to read "upside down" especially on SUV vehicles because of the height of the vehicle and the difficult viewing angle that it creates.
2. Bulleted Proposal (un-numbered) #7 regarding the check digit (pg 4, column 2): Effective Jan. 1, 2005 VIN numbers were no longer acceptable for off-road vehicles, such as ATV's, snowmobiles, and dirt bikes. Instead, off-road vehicles now receive a 17 character Product Identification Number (PIN) from SAE (the authorized agency that issues both VINs and PINs to manufacturers). These PIN's will come back as "non-conforming" when using a VIN checking program. The PIN can be easily distinguished from a VIN by the 9th character--the check character. All VINs use a numeric indicator + X. All PINs use an alpha character in the 9th place, except an "X." I recommend that a passage be included in the proposal, as follows: "The changes to the VIN (under the current NHTSA proposal) will not duplicate Product Identification Numbers for Off-Road Vehicles."
3. We anticipate an increase in both dedicated alternative fuels and hybrid vehicle technology. Since I/M programs use the VIN to determine emissions testing requirements it would be very useful to have the dedicated fuel or various types of hybrid engines identified within the VIN.

APPENDIX K

Submitted by e-mail:

NYSDEC would like to offer the following comments on the draft report:

1. The draft report does not mention the significance of mandated safety inspections on some I/M programs. In affected states, motorists will/are required to make periodic station visits to obtain their safety inspection. Should these states transition into alternative OBD programs, such as remote OBD, the "convenience costs" cited would still exist (as long as the safety inspection requirement remains).

2. A few remarks on the cost analysis:

a. The draft report estimates the cost associated with data processing, reporting, and oversight for "remote OBD" at \$2 dollars per vehicle per year. This estimate is, however, based on a quote from an existing "periodic" I/M program. With existing OBD inspections, most vehicles will have only 1 data record/transmission per test cycle (i.e., >90% of the vehicles pass the initial OBD inspection). With remote OBD, there could be many data records/transmissions for each vehicle. The assumption that traditional I/M and remote OBD data manager costs are comparable may not be true. Are actual remote OBD costs available from the pilot programs?

b. The draft report doesn't appear to include any state administration costs with a remote OBD program. Appendix 2 lists state-specific fees for traditional I/M (which should include state oversight costs within the test fees), but similar costs are not listed for remote OBD.

c. A "typical test cycle" for periodic OBD was estimated at 2 hours per inspection cycle. We would expect test cycle durations for periodic OBD to vary considerably from state to state. Several readily apparent variables include network design (i.e., centralized test-only, decentralized test-and-repair), number of inspection stations, and whether or not the official inspection includes a safety component. DEC estimates that the annual "test cycle" time in New York is about 1 hour, including both travel time and the completion of a safety inspection. Please realize that motorists, especially in the NYMA area, don't wait for an inspection. Rather, they make an appointment; drop their vehicle off and go to work; and return later in the day. We suggest this estimate be reconsidered, and possibly an average or range of values be used in the cost analysis.

d. Table 1 and Appendix 2 seem to be based on a comparison of periodic OBD and a 100% mandatory remote OBD program. There would be additional costs associated with voluntary options including kiosk construction/maintenance or the need for referee locations, if required by the I/M agency.

3. The report proposes additional Mobile 6 credit for incorporating remote OBD inspections into an I/M program.

a. EPA's current performance standards contain emission control device checks. How does removing these checks from I/M affect Mobile 6 (or future MOVES) credits?

b. Can modeling (Mobile 6 or future MOVES) quantify credit differences between mandatory and voluntary remote OBD programs? For example, how would credits be awarded for a voluntary program if only 25 percent of the OBD population opts into the program? Also, how would a State ensure motorist compliance at more frequent intervals than registration renewal under remote OBD? Couldn't a motorist simply ignore the State Agency's reminder letters until registration renewal is due? This last series of questions is probably beyond the scope of the report, but should be considered when designing an alternative program.

4. Concerning Appendix 2, New York State has separate emissions fee structures for our two I/M areas: Upstate (53 counties) and the New York Metropolitan Area (9 counties):

New York (Upstate) - (2007) light-duty registrations: 6,000,000, (annual) fee - \$11

New York (NYMA) - (2007) light-duty registrations: 4,700,000, (annual) fee - \$27

These NY inspection costs do not include the statewide safety inspection fee (i.e., an additional \$10)

but do include the state administration fees.

APPENDIX L



Department of Motor Vehicles

STATE OF NEW YORK



Department of Environmental
Conservation

August 22, 2006

Commissioner Matthew W. Daus
New York City Taxi and Limousine Commission
40 Rector Street
New York, New York 10006

RE: Approval of the New York City Taxi and Limousine Commission (T&LC) On-board Diagnostic (OBD II) Inspection Program

Dear Commissioner Daus:

The New York State Departments of Environmental Conservation (DEC) and Motor Vehicles (DMV) have concluded our evaluation of the on-board diagnostic inspection equipment installed at the T&LC Woodside facility. The T&LC inspection software conducts OBD II inspections of all gasoline and alternative fuel-powered yellow medallion taxicabs that are model year 1996 or newer. The Departments find the T&LC OBD program, as designed by SysTech International, to be functionally equivalent to New York State's on-board diagnostic testing specifications.

DEC and DMV conducted acceptance testing on each of the six T&LC OBD-equipped lanes (lanes 3-8) on June 8, 2006, and have evaluated the resulting inspection records transmitted to both Departments. The TLC OBD equipment was identified as having software version #6.04, OBD II software version #7.21.4, and OBDII hardware interface #OBD2NetHEX57. This configuration complies with state and federal OBD requirements in that a vehicle will fail the OBD inspection if one or more of the following conditions are encountered:

- The malfunction indicator light (MIL) does not light during when the ignition is in the Key On/ Engine Off (KO/EO) position;
- The MIL stays lit when the ignition is in the Key On/Engine Running (KO/ER) position;
- The OBD inspection equipment cannot communicate with the vehicle being tested;
- The MIL is commanded on by the vehicle's power train control module (PCM) and applicable diagnostic trouble code(s) are stored; and
- The vehicle does not meet federal readiness guidance ("Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection Program, June 2001.")

Unauthorized modifications to either the OBD software or the hardware interface will invalidate this approval.

The following conditions apply to this approval:

1. T&LC staff and SysTech International have agreed to forward "Release Plan Notes" for any proposed software change for DEC's review prior to implementation. For any proposed change that will affect the OBD inspection, the T&LC and its agents must provide written clarification of the proposed change at least 30 days in advance of implementation. The DEC will determine whether the TLC OBD inspection process will require another round of certification testing during this 30 day period.
2. The T&LC will transmit all current OBD inspections to DEC through the established FTP site on monthly intervals, no later than the 15th of any month.
3. Data transmission to DMV through the State data manager, SGS TESTCOM, is anticipated on quarterly intervals. The DMV will complete its registration enforcement based only on the inspection data submitted through the data manager. As with all inspection facilities, the T&LC must remain in good standing with the data manager.
4. The Departments may periodically audit the T&LC Woodside facility pursuant to our regulations and federal requirements.

If you have any questions concerning the conditions explained above, please contact Mr. James Clyne, P.E. of DEC at (518) 402-8292 or Mr. Steven Baker of DMV at (518) 474-5227 prior to September 7, 2006. If we do not hear from you by that time, DMV will issue the "P memo" (draft attached) to local law enforcement agencies informing them of this approval. A copy of the final "P memo" will be supplied to you as notice of implementation.

Sincerely,

Jean Rosenthal
Director, Office of Driver & Vehicle
Safety & Clean Air
NYS Department of Motor Vehicles

Sincerely,

David J. Shaw
Director, Division of Air Resources
NYS Department of Environmental
Conservation

Attachment

cc w/attachment:
P. Schenkman, T&LC
R. Allen, T&LC



NANCY A. NAPLES
Commissioner

STATE OF NEW YORK DEPARTMENT OF MOTOR VEHICLES

6 EMPIRE STATE PLAZA, ALBANY, NY 12228

"P" 20 (2006)

"M" 10 (2006)

Albany, New York

September 12, 2006

TO: All Enforcement Agencies and Magistrates

SUBJECT: New York City Taxi and Limousine Commission (TLC) Inspection
Stickers

The New York City Taxi and Limousine Commission (TLC) inspection equipment has been certified to conduct emissions and safety inspections of medallion taxis registered with the TLC. DMV regulations under 15 NYCRR Section 174.3(c) permit the display of inspection stickers issued by the T&LC in the lower left hand corner of the windshield in lieu of the New York State inspection sticker. This inspection sticker will be considered equivalent to a NYS inspection sticker issued by a DMV licensed inspection station.

Medallion (Yellow) taxis should not be ticketed for lack of proper inspection if the vehicle displays a valid TLC sticker.

Any questions on the procedures can be directed to OBD/Clean Air staff in the Department of Motor Vehicles by calling (518) 473-0597.

Nancy A. Naples
Commissioner

IMPORTANT: If you are currently on our mailing list and have internet access, you can sign up with DMV to view these memos electronically. If you work for a court, contact DMV by e-mail at TSLEDSupport@dmv.state.ny.us. If you do not work for a court, contact DMV by e-mail at eSeriesMemos@dmv.state.ny.us.