

Appendix Q - IM Audit Procedures

DMV Inspection Lanes Equipment QA/QC Auditing Procedures:

- Tailpipe Emissions Testing Equipment Audit
 - Log-in to ESP computerized analyzer system at DMV inspection lanes using User ID and Password
 - Click on 'Maintenance'
 - Click on 'Troubleshoot'
 - Click on 'Emissions'
 - Scroll to 'Purge' box and click on 'Set Mode'
 - Scroll to 'Miscellaneous' tab and click on 'Zero Calibration'
 - Read and record PEF #
 - Insert ESP analyzer system tailpipe probe into exhaust manifold simulator
 - Initiate flow of high-level calibration gas through regulator to manifold simulator with delivery pressure set at 20 psig
 - Click on 'Sample'
 - Allow CO and HC (C₃H₈) readings to stabilize, then record values on audit log
 - Discontinue high-level cal gas flow and initiate low-level cal gas flow to tailpipe simulator
 - Allow CO and HC (C₃H₈) readings to stabilize, then record values on audit log
 - Scroll to 'Default' and click on 'Set Mode'
 - Continue to click on 'Exit' until arriving at 'Stand-by' page
 - Click on 'Stand-by'
 - Obtain and record LMR from lane manager's computer system

- Pressure Testing Equipment Audit (for cap and tank pressure tests)
 - Connect manometer plumbing to ESP gas cap simulator
 - Initiate ESP system pressure test
 - Record the manometer reading and the ESP system reading
 - Calculate and record the PSI difference and the % difference(If ambient temperature is 60-78 degrees Fahrenheit, maximum allowable pressure difference is 0.3 psi. If temperature is outside this window, maximum allowable pressure difference is +/- 1.5% of manometer reading)

DMV Motor Vehicle Technician Performance Audits include monitoring and verification of proper MV Tech performance of emissions testing procedures. Primary difference between overt and covert audit procedures is that during overt audits, the MV Tech is aware that he/she is being observed, and during covert MV Tech audits, the MV Tech is not aware that he/she is being observed during the performance of the emissions testing and inspection procedure. Covert audits are routinely performed from clandestine locations using distance vision-enhancement technology, or by viewing live webcam feed from lane cameras using a remotely-

located computer and monitor. During both types of MV Tech audits, the same criteria are monitored and recorded.

The MV Tech performance audit evaluates the performance of the following:

- Verification of paperwork and VIN
- Verification of emissions testing required
- Proper emissions testing performed, as indicated
 - OBD Test
 - Analyzer Probe Tailpipe Test
 - Curb Idle Test (Sussex County registered vehicles only)
 - Two-Speed Idle Test (TSI) (New Castle and Kent County registered vehicles)
 - Paddle Test
 - Clip Test
- Catalytic converter visual inspection performed, as indicated
- Evaporative Emissions testing performed, as indicated
 - Fuel Tank Pressure testing performed, as indicated
 - Fuel Cap Pressure testing performed, as indicated
- If testing is done as a 'recheck', retest number (1, 2, 3) shall be recorded
- If retest #3 is being performed, repair documentation shall be verified prior to waiver issuance