

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER II: ENVIRONMENTAL PROTECTION AGENCY

PART 276
PROCEDURES TO BE FOLLOWED IN THE PERFORMANCE
OF INSPECTIONS OF MOTOR VEHICLE EMISSIONS

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AUTHORITY: Implementing the Vehicle Emissions Inspection Law of 2005 [625 ILCS 5/13C] and authorized by Sections 13C-10 and 13C-20 of the Vehicle Emissions Inspection Law of 2005 [625 ILCS 5/13C-10 and 13C-20].

SOURCE: Adopted at 10 Ill. Reg. 13954, effective August 13, 1986; amended at 16 Ill. Reg. 10230, effective June 15, 1992; amended at 20 Ill. Reg. 8456, effective June 14, 1996; amended at 22 Ill. Reg. 18867, effective September 28, 1998; amended at 26 Ill. Reg. 8113, effective May 17, 2002; amended at 35 Ill. Reg. 11268, effective June 28, 2011; amended at 36 Ill. Reg. 2257, effective January 30, 2012.

SUBPART A: GENERAL PROVISIONS

Section 276.101 Purpose and Applicability

- a) Purpose
This Part establishes specific requirements and procedures to be followed in complying with the motor vehicle emissions inspection requirement and specific requirements and procedures to be followed in the performance of inspections of motor vehicle emissions.
- b) Applicability
The provisions of this Part apply to implementation of the Vehicle Emissions Inspection Law of 2005.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.102 Definitions

- a) Except as hereinafter stated and unless a different meaning of a term is clear from its context, the definitions of terms used in this Part shall be the same as those used in the Environmental Protection Act [415 ILCS 5] and the Vehicle Emissions Inspection Law of 2005 [625 ILCS 5/13C].
- b) The following definitions apply to this Part:
 - "Accuracy" means the combination of bias and precision errors, technically defined as uncertainty, that quantifies the differences between a measured and true value.
 - "Affected county" means any county or portion thereof, as defined in Section 13C-5 of the Vehicle Emissions Inspection Law of 2005.
 - "Agency" means the Illinois Environmental Protection Agency or its designee.
 - "Calibration gas" means a gas of known concentration used to establish the response curve of the exhaust gas analyzer.
 - "Diagnostic trouble code" or "DTC" means an alphanumeric code that is set in a vehicle's onboard computer when a monitor detects a condition likely to indicate the existence of an emission related malfunction of the vehicle.
 - "Drift" means the amount of change in analyzer reading over a period of time. Zero drift refers to the change of zero reading. Span drift refers to a

change in the reading at a specified span gas calibration point.

"Economic hardship extension" means a one year extension to the test-by date that may be granted to the owners of a vehicle in order for the owners to comply with the requirements of the Vehicle Emissions Inspection Law of 2005.

"Emissions compliance certificate" means a certificate issued to an owner of a vehicle registered in an affected county who successfully complies with the Vehicle Emissions Inspection Law of 2005 and the requirements of this Part. As required by the context, this means an emissions compliance certificate, annual exemption certificate or emissions inspection certificate.

"Emission control devices" means those components of a vehicle that were designed and are used to control vehicle exhaust and evaporative system emissions. For the purpose of this Part, this term refers to components with which the vehicle was originally equipped or direct replacements.

"Evaporative system integrity test" means a test of the fuel cap portion of a vehicle's evaporative system, which consists of either a fuel cap leak flow test, a fuel cap pressure decay test, or a fuel cap visual functional test, as applicable.

"Exhaust gas analyzer" means a device that has the capability to identify unknown concentrations of particular constituents in motor vehicle exhaust gases by comparison with known concentrations of analytical gases.

"Fleet inspection permit" means a permit issued to fleet self-testers in accordance with Subpart G.

"Fleet inventory" means those vehicles that have been registered with the Agency for the purpose of fleet self-testing and that have been assigned a test eligibility date.

"Fleet vehicle" means any non-exempt vehicle registered with the Agency for the purpose of fleet self-testing.

"Fuel cap" means a device used to seal a vehicle's fuel inlet.

"Fuel cap leak flow test" means a test performed in accordance with this Part on a vehicle's fuel cap using a fuel cap leak flow tester to determine whether the vehicle complies with the evaporative system emission standards of 35 Ill. Adm. Code 240.

"Fuel cap leak flow tester" or "fuel cap tester" means a device used to determine the leak flow integrity of a vehicle's fuel cap by comparing the measured leak flow of the fuel cap with an established fuel cap leak flow standard.

"Fuel cap pressure decay test" means the test performed in accordance with this Part on a vehicle's fuel cap using a fuel cap pressure decay tester to determine whether the vehicle complies with the evaporative system emission standards of 35 Ill. Adm. Code 240.

"Fuel cap pressure decay tester" means a device used to determine the pressure decay integrity of a vehicle's fuel cap by monitoring the pressure behind the fuel cap for a 10 second period and comparing the measured pressure decay of the fuel cap to an established fuel cap pressure decay standard.

"Fuel cap visual functional test" means the test performed in accordance with this Part on a vehicle's fuel cap using visual analysis to determine whether the vehicle complies with the evaporative system emission standards of 35 Ill. Adm. Code 240.

"Full-service official inspection station" means an inspection station that offers the full range of emissions inspection services and customer service functions, including waiver inspections.

"HC hangup" means hydrocarbons that cling to the surface of the analyzer gas sampling stream causing errors in hydrocarbon readings.

"High idle" means a vehicle operating condition with engine disconnected from an external load (placed in either neutral or park) and operating at a speed of 2500 ± 300 RPM.

"Household income" means the gross income of all household members, except wage or salary income earned by dependent minors under 18 years of age. A head of household and his or her spouse are not considered as minors. Gross income includes wages, interest, annuities, pensions, social security, retirement, disability, public aid, alimony, child support, unemployment benefits, workers' compensation, and any other indirect income such as utility allowances.

"Idle mode" means that portion of a vehicle emission test procedure conducted with the engine disconnected from an external load and operating at minimum throttle.

"Initial idle mode" means the first of up to two idle mode sampling

periods during a steady-state idle mode test, during which exhaust emission measurements are made with the vehicle in "as-received" condition.

"Low income" means the household income during the preceding 12 month period was not more than 150 percent of the latest available poverty guidelines established by the U.S. Department of Health and Human Services for the contiguous United States and the District of Columbia.

"Malfunction indicator light" or "MIL" means the light found on the dashboard of OBD-equipped vehicles that is required to be illuminated when the OBD system detects malfunctions likely to result in emissions exceeding applicable emission standards. The MIL must display the phrase "Check Engine" or "Service Engine Soon". The word "Powertrain" may be substituted for "Engine". Alternatively, the ISO engine symbol may be substituted.

"National Institute of Standards and Technology gas" or "NIST gas" means a standard gas maintained or made available by the National Institute of Standards and Technology for the purpose of determining the accuracy of calibration gases.

"Non-exempt vehicle" means any vehicle subject to emission inspections, regardless of whether the vehicle is in a certified configuration, under the Vehicle Emissions Inspection Law of 2005.

"Non-fleet vehicle" means any non-exempt vehicle except for vehicles registered with the Agency for the purpose of fleet self-testing.

"Official inspection station" means a vehicle emission inspection facility operated by the Agency or the Agency's Contractor for the purpose of conducting emission inspections on non-fleet vehicles.

"On-board diagnostic readiness code" means a status flag stored by a vehicle's onboard computer that indicates whether a given monitor has been run (i.e., whether the component or system in question has been checked to determine if it is functioning properly).

"On-board diagnostic test" means the electronic retrieval of stored readiness status, diagnostic trouble codes, and MIL illumination status from a vehicle's OBD system to determine if any emission related trouble codes are present and if the MIL is commanded to be on, which would indicate the existence of an emission related malfunction with the vehicle.

"On-road remote sensing test" means the observation, measurement, and

recording of vehicle exhaust emission concentrations of hydrocarbons (HC), carbon monoxide (CO), and carbon dioxide (CO₂) present in each in-use vehicle while traveling on roadways or in specified areas by equipment that is not connected to the vehicle.

"Preconditioning mode" means a period of steady-state high-idle operation conducted to ensure that the engine and emissions control system components are operating at normal operating temperatures, thus minimizing false failure caused by improper or insufficient warm-up.

"Private official inspection station" means a vehicle emission inspection facility operated by a registered owner or lessee of 15 or more non-exempt fleet vehicles.

"Recognized repair technician" means a person professionally engaged in vehicle repair, employed by a going concern whose purpose is vehicle repair, or possessing nationally recognized certification for emission related diagnosis and repair.

"Second-chance idle mode" means the second of two idle mode sampling periods during a steady-state idle mode test, preceded by a preconditioning mode and utilized as a second chance to pass idle exhaust emission standards immediately following an initial idle mode failure.

"Span gas" means a gas of known concentrations that is used to check or adjust the analyzer response characteristics to those determined by the calibration gases.

"Steady-state idle test" means a vehicle emission test procedure consisting of an initial idle mode measurement of exhaust emissions followed, if necessary, by a high idle preconditioning mode and a second-chance idle mode.

"Test-by date" or "TBD" means the date by which the vehicle is due to have an emissions inspection and corresponds to the date the vehicle's registration will expire. For non-expiring vehicle registrations, the TBD is the date of the vehicle's purchase anniversary month or, if not available, the month the vehicle was added to the Illinois Secretary of State's registration database.

"Test cycle" means the two-year period between a vehicle's test eligibility dates.

"Test eligibility date" or "TED" means the first day of the third month prior to the vehicle's TBD.

"Vehicle emissions test notice" means a notice sent by the Agency to the owners of a vehicle informing the owners of the need to comply with the requirements of the Vehicle Emissions Inspection Law of 2005.

"Vehicle inspection report" means a report issued to the motorist indicating the results of an emission inspection or waiver determination.

"Visual functional test" means a visual examination of a vehicle's fuel cap for any readily apparent wear, tampering, or defects that would prevent the fuel cap from operating properly.

"Visual inspection test" means a visual examination of a vehicle's MIL consisting of verifying the status of the MIL in key on/engine off position followed by verifying the status of the MIL in the key on/engine on position to determine the status of the MIL and existence of an emission related malfunction with the vehicle.

"Waiver" means a suspension of the requirement that a non-exempt vehicle comply with test standards after two or more attempts to do so, as provided for in this Part.

"Waiver inspection" means an inspection conducted by a waiver inspector to determine waiver eligibility.

"Waiver inspector" means a person authorized by the Agency to conduct waiver inspections and to approve or disapprove applications for a waiver.

(Source: Amended at 36 Ill. Reg. 2257, effective January 30, 2012)

Section 276.103 Abbreviations

Abbreviations used in this Part include the following:

cc/min	cubic centimeters per minute
CO	carbon monoxide
CO ₂	carbon dioxide
DTC	diagnostic trouble code
HC	hydrocarbons, as hexane
I/M	inspection and maintenance
MIL	malfunction indicator light

NIST	National Institute for Standards and Technology
NO	nitrogen oxide
NO _x	oxides of nitrogen
OBD	on-board diagnostics
ppm	parts per million by volume
RPM	revolutions per minute
SDM	source detector module
TBD	test-by date
TED	test eligibility date
VIN	vehicle identification number

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.104 Incorporations by Reference

The following materials are incorporated by reference and include no later editions or amendments:

- a) 40 CFR 85.2225 (July 1, 1994).
- b) 40 CFR 85.2222, 85.2223, and 85.2231 (July 1, 2001).

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.105 Sunset Provisions

Sections 276.203, 276.204, 276.205, 276.502, 276.503, 276.504, 276.601, 276.602 and 276.603 of this Part shall not apply after January 31, 2012.

(Source: Added at 36 Ill. Reg. 2257, effective January 30, 2012)

SUBPART B: VEHICLE EMISSIONS INSPECTION PROCEDURES

Section 276.201 General Description of Vehicle Emissions Inspection Procedures

Compliance with steady-state idle, evaporative system integrity, OBD, visual inspection, and on-road sensing test standards contained in 35 Ill. Adm. Code 240 shall be determined by use of test procedures and other requirements as applicable, as set forth in this Part, and shall be performed to the extent practicable. The test procedure applicable to each non-exempt vehicle shall be based on the model year and vehicle type as supplied by the manufacturer. If this information is not available from the manufacturer, the model year and vehicle type shall be based on registration information as supplied by the Illinois Secretary of State.

(Source: Amended at 36 Ill. Reg. 2257, effective January 30, 2012)

Section 276.202 Pollutants to be Tested – Exhaust Test

Vehicle exhaust emission inspections shall consist of sampling vehicle tailpipe emissions of HC, CO, CO₂, and NO_x (if applicable).

(Source: Amended at 22 Ill. Reg. 18867, effective September 28, 1998)

Section 276.203 Dilution – Steady-State Idle Exhaust Test

To prevent excess dilution in a steady-state idle exhaust emissions test described in Section 276.204, the sample probe shall be inserted a minimum of 10 inches into the vehicle's tailpipe. Extension boots shall be utilized if it is impossible to insert the sample probe at least 10 inches into the tailpipe. A vehicle emission test shall be invalid if the applicable emission standards contained in 35 Ill. Adm. Code 240 are met but the sum of the CO and CO₂ concentrations in the exhaust gas does not exceed 6 percent during the sample averaging period(s).

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.204 Steady-State Idle Exhaust Emissions Test Procedures

- a) **Steady-State Idle Test**

The steady-state idle test may be substituted for the OBD test for those vehicles identified in Section 13C-25(d) of the Vehicle Emissions Inspection Law of 2005. The steady-state idle test consists of a first-chance idle mode test followed, if necessary, by a second-chance test. The second-chance test consists of a high idle preconditioned mode while in neutral or park, followed immediately by an idle mode.
- b) **General Requirements**
 - 1) Initial tests (i.e., those occurring for the first time in a vehicle's scheduled test cycle) shall be performed without repair or adjustment at the inspection facility prior to the test.
 - 2) Tests shall be performed with Agency-approved equipment that has been calibrated according to the quality procedures contained in Section 276.602 of this Part.
 - 3) Vehicles with apparent leaks of fuel, oil, coolant, or exhaust shall not be tested.
 - 4) Vehicles with missing tail pipe sections that would prohibit full insertion of an analyzer probe shall not be tested.

- 5) Vehicles shall be tested with their engines and emissions control systems at normal operating temperatures and not overheating (as indicated by gauge, temperature lamp, touch test on the radiator hose, and/or boiling radiator).
 - 6) Vehicles shall be tested without any accessories in operation.
 - 7) Vehicles must be operated during each mode of the test with the gear selector in neutral or park for the idle mode test and the high idle preconditioning mode.
 - 8) For vehicles with multiple tailpipes, separate test results from each tailpipe shall be numerically averaged for each pollutant sampled unless equipment capable of simultaneously sampling multiple tailpipes is utilized.
- c) Procedures
- 1) The analysis of exhaust gas concentrations must begin 10 seconds after the applicable test mode begins.
 - 2) Exhaust gas concentrations must be analyzed at a minimum rate of once every 0.75 second.
 - 3) The measured value for the pass/fail determination shall be a simple running average of the measurements taken over 5 seconds.
 - 4) With the exception of those vehicles specified in subsection (c)(5) of this Section, the tachometer must be attached to the vehicle in accordance with the analyzer manufacturer's instructions.
 - 5) Vehicles that cannot continuously meet the engine speed requirements of subsection (e)(1)(B) of this Section within 30 seconds after initiation of the first-chance test shall be rejected upon verification of the proper operation and placement of the tachometer. If it is determined that the operation or placement of the tachometer is faulty, immediate corrective action shall be taken and the vehicle shall be retested in accordance with subsection (e) of this Section.
 - 6) If the engine speed falls outside the limits specified in subsection (e)(1)(B), (e)(2)(B) or (e)(2)(C) of this Section, as applicable, for more than 5 seconds in any one excursion, or 15 seconds over all excursions within a test mode, the mode timer shall be reset to zero and the mode restarted.
 - 7) For vehicles whose design prevents the monitoring of the engine rpm rate

with a tachometer, the engine speed requirements of subsections (e)(1)(B), (e)(2)(B), and (e)(2)(C) of this Section shall not apply. The preconditioning mode of a second-chance idle test shall consist of accelerating the vehicle's engine to an estimated rate of 2500 rpm for a period of 30 seconds prior to initiating a second-chance idle mode test.

- 8) The sample probe must be inserted into the vehicle's tailpipe to a minimum depth of 10 inches. If the vehicle's exhaust system prevents insertion to this depth, a tailpipe extension must be used.
- 9) The measured concentration of CO plus CO₂ must be greater than or equal to 6 percent or the vehicle will be rejected.
- 10) If a vehicle's engine stalls at any time during the test sequence, the test shall be aborted and restarted. If after 3 attempts the test cannot be completed, the vehicle shall be rejected.

d) Pass/Fail Determination

A pass or fail determination is made for each applicable test mode based on a comparison of the test standards contained in 35 Ill. Adm. Code 240.152 with the measured value for HC and CO as described in subsection (c) of this Section. A vehicle passes the test mode if any pair of simultaneous measured values for HC and CO are below or equal to the applicable test standards. A vehicle fails the test mode if the values for either HC or CO, or both, in all simultaneous pairs of values are above applicable standards.

e) Test Sequence

The steady-state idle test consists of a first-chance test and a second-chance test. The first-chance test consists only of an idle mode. The second-chance test consists of a preconditioning mode followed immediately by an idle mode, and is performed only if the vehicle fails the first-chance test.

1) First-Chance Test

- A) The test starts when the conditions specified in subsections (e)(1)(B) and (e)(1)(C) of this Section are met.
- B) The mode starts when the vehicle engine speed is between 350 and 1300 rpm. The minimum mode length is determined as described under subsection (e)(1)(C) of this Section.
- C) The pass/fail analysis begins after an elapsed time of 10 seconds. A pass or fail determination is made for the vehicle and the mode is terminated in accordance with subsections (e)(1)(C)(i) through (e)(1)(C)(iv) of this Section.

- i) The vehicle passes the idle mode and the test terminates on or before an elapsed time of 30 seconds, if the measured values are less than or equal to the applicable test standards as described in subsection (d) of this Section.
- ii) The pass/fail analysis shall continue beyond 30 seconds as long as emission readings are declining based upon comparison of the last 5 consecutive measured values. The vehicle passes the idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds and 90 seconds, the measured values are less than or equal to the applicable test standards described in subsection (d) of this Section.
- iii) The vehicle fails the first-chance test if the provisions of subsection (e)(1)(A), (e)(1)(C)(i), or (e)(1)(C)(ii) of this Section are not met.
- iv) The vehicle shall fail the first-chance test and the second-chance test shall be omitted if no measured values less than 1800 ppm HC are found by an elapsed time of 30 seconds.

2) Second-Chance Test

A) If the vehicle fails the first-chance test, a second-chance test is performed except as described in subsection (e)(1)(C)(iv) of this Section.

B) Preconditioning Mode

The high idle preconditioning mode starts when the engine speed is between 2200 and 2800 rpm, or between 1650 and 1950 rpm on specified vehicles equipped with ZF 4-speed Automatic Transmissions. The mode continues for an elapsed time of 30 seconds.

C) Idle Mode

The mode starts 5 seconds after the vehicle engine speed returns to between 350 and 1300 rpm after high idle preconditioning. The minimum idle mode length is determined as described in subsection (e)(2)(D) of this Section.

D) The pass/fail analysis begins after an elapsed time of 10 seconds. A pass or fail determination is made for the vehicle and the idle mode is terminated in accordance with the following:

- i) The vehicle passes the idle test and the test terminates on or before an elapsed time of 60 seconds if the measured values are less than or equal to the applicable test standards as determined by the procedure described in subsection (d) of this Section;
- ii) The vehicle fails the idle test and the test terminates if the provisions of subsection (e)(2)(D)(i) are not met within an elapsed time of 60 seconds.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.205 Evaporative System Integrity Test Procedures

- a) **Applicability**
The evaporative system integrity test shall be performed in accordance with the fuel cap leak flow test procedures or fuel cap pressure decay test procedures, and fuel cap visual functional test procedures specified in subsections (b) and (c) of this Section.
- b) **Test Procedures**
 - 1) **Fuel Cap Leak Flow Test**
The fuel cap shall be removed from the vehicle's fuel inlet and installed on the fuel cap leak flow tester, using an adapter if necessary. All fuel caps that require a key for removal from the vehicle's fuel inlet shall be tested with the key removed from the lock. The workstation shall provide the inspector with information as to whether the fuel cap tester can be used to test the vehicle's fuel cap and which adapter, if any, is required, based on one or more of the following items: vehicle identification number (VIN), make, model, and model year. If the fuel cap can be tested, then the following task shall be performed:
 - A) The fuel cap leak flow tester shall be pressurized to 30 ± 1 inches of water. The inspector shall initiate the test. The fuel cap leak flow tester shall measure the fuel cap leak flow rate and simultaneously compare this flow rate with the flow rate through the calibrated orifice;
 - B) Within 15 seconds after the depression of the start-test button, the fuel cap leak flow tester shall make a pass/fail determination. Pass/fail analysis shall be determined according to the procedures in subsection (c) of this Section;
 - C) Fuel caps that have failed an initial integrity test under subsection

(c)(4) of this Section shall immediately receive a second-chance fuel cap leak flow test after first ensuring that the fuel cap has been installed on the fuel cap leak flow tester correctly. The procedure contained in subsections (b)(1)(A) and (b)(1)(B) of this Section shall be repeated; and

D) At the conclusion of all fuel cap leak flow tests, the fuel cap shall be removed from the fuel cap leak flow tester and replaced on the filler neck, ensuring that it is properly tightened.

2) Fuel Cap Pressure Decay Test

The fuel cap shall be removed from the vehicle's fuel inlet and installed on the fuel cap pressure decay tester, using an adapter if necessary. All fuel caps that require a key for removal from the vehicle's fuel inlet shall be tested with the key removed from the lock. The workstation shall provide the inspector with information as to whether the pressure decay tester can be used to test the vehicle's fuel cap and which adapter, if any, is required, based on one or more of the following items: VIN, make, model, and model year. If the fuel cap can be tested, then the following task shall be performed:

A) The pressure decay tester shall be pressurized to 28 ± 1 inches of water. The inspector shall initiate the test. The pressure decay tester shall monitor the pressure behind the fuel cap and look for pressure decay;

B) The pressure decay shall be monitored for 10 seconds after stability is achieved for 10 seconds. Pass/fail analysis shall be determined according to the procedures in subsection (c) of this Section;

C) Fuel caps that have failed an initial integrity test under subsection (c)(4) of this Section shall immediately receive a second-chance fuel cap pressure decay test after first ensuring that the fuel cap has been installed on the pressure decay tester correctly. The procedure contained in subsections (b)(2)(A) and (b)(2)(B) of this Section shall be repeated; and

D) At the conclusion of all fuel cap pressure decay tests, the fuel cap shall be removed from the pressure decay tester and replaced on the filler neck, ensuring that it is properly tightened.

3) Visual Functional Test

If the vehicle has a fuel cap, but the fuel cap cannot be tested using the leak flow or pressure decay test procedures, then a visual functional test of

the fuel cap shall be performed.

c) Pass/Fail Determination

- 1) Vehicles which are presented for testing with missing, inaccessible, incorrect, non-removable, illegal, or otherwise non-testable fuel caps shall fail the evaporative system integrity test.
- 2) If the vehicle's fuel cap is present and can be tested using either the fuel cap leak flow test or the fuel cap pressure decay test under subsection (b)(1) or (b)(2) of this Section and, if tested, the test result does not exceed either the fuel cap leak flow rate standard contained in 35 Ill. Adm. Code 240.172(b) or the fuel cap pressure decay standard contained in 35 Ill. Adm. Code 240.172(a), then the vehicle shall pass the evaporative system integrity test.
- 3) If the vehicle's fuel cap is present and is tested under the provisions of subsection (b)(3) of this Section, and the test result does not exceed the visual functional test standard contained in 35 Ill. Adm. Code 240.172(c), then the vehicle shall pass the evaporative system integrity test.
- 4) If the vehicle's fuel cap is tested using either the fuel cap leak flow test or the fuel cap pressure decay test under the provisions of subsection (b)(1) or (b)(2) of this Section, and does not meet the applicable standards contained in 35 Ill. Adm. Code 240.172, the vehicle shall fail the evaporative system integrity test.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.206 Engine and Fuel Type Modifications

In the inspection process, vehicles that have been altered from their original certified configuration are to be tested in the same manner as other subject vehicles. Specific procedures to be used are as follows:

- a) Vehicles with engines other than the engine originally installed by the manufacturer or an identical replacement of such engine shall be subject to the test procedures and standards for the chassis type and model year of the vehicle.
- b) Vehicles that have been switched from an engine of one fuel type to another fuel type that is subject to the program shall be subject to the test procedures and standards for the current fuel type, and to the requirements of subsection (a) of this Section.
- c) Vehicles that are switched to a fuel type for which there is no certified configuration shall be tested according to the most stringent emission standards established for that vehicle type and model year.

(Source: Section repealed, new Section added at 20 Ill. Reg. 8456, effective June 14,

1996)

Section 276.207 Transient Loaded Mode Exhaust Emissions Test Procedures (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.208 On-Road Remote Sensing Test Procedures

- a) **Applicability**
On-road remote sensing tests shall be scheduled to occur at least once a year by the Agency or its designee in each affected county, distributed throughout the inspection areas in proportion to the number of subject vehicles registered in these areas, and performed in accordance with the procedures specified in subsections (b) through (e) of this Section.
- b) **On-Road Remote Sensing Test Procedure**
The on-road remote sensing test shall consist of measuring the concentration of HC, CO, and CO₂, and automatically recording the speed, acceleration, and license plate of each in-use vehicle. Compliance is determined by comparing the measured emission concentration of each pollutant to the on-road remote sensing emission standards contained in 35 Ill. Adm. Code 240.182.
- c) **Test Site Location Criteria**
Test locations for on-road remote sensing tests shall be sited such that:
 - 1) cold start vehicle operation conditions are avoided;
 - 2) areas where vehicles are generally accelerating or driving at a steady speed uphill are favored;
 - 3) areas where vehicles are generally decelerating are avoided;
 - 4) areas that could produce high load conditions are avoided;
 - 5) traffic is contained to a single lane;
 - 6) traffic is high in volume;
 - 7) test equipment is unobtrusive to vehicle operation; and
 - 8) adequate median space is provided for safe operation of test equipment.
- d) **Data Collection**
 - 1) The following items shall be collected for each vehicle receiving an on-road remote sensing test:
 - A) vehicle license plate number;
 - B) date and time of test;
 - C) test site reference number;
 - D) emission levels for HC, CO, and CO₂; and
 - E) speed and acceleration of vehicle.
 - 2) The following items shall be collected for each on-road remote sensing test site:
 - A) test site reference number;
 - B) description of test site location; and
 - C) slope of test site in degrees.
- e) **Pass/Fail Determination**

The owner of any non-exempt vehicle that has previously been through an in-cycle emissions test and passed the final retest, or is determined to be out of compliance, which is found with an exceedance of the on-road remote sensing emission standards, shall be notified of such exceedance. If a second exceedance occurs prior to the next scheduled in-cycle emissions test, the Agency will reassign the vehicle and notify the owner of a required out-of-cycle exhaust emissions test.

(Source: Added at 22 Ill. Reg. 18867, effective September 28, 1998)

Section 276.209 On-Board Diagnostic Test Procedures

- a) **Test Procedures**
The OBD test procedure shall be conducted according to the method specified in 40 CFR 85.2222(a), (b), and (c), incorporated by reference in Section 276.104(b) of this Part. However, once initiated, the OBD test shall be conducted as completely as possible, regardless of intermediate reject or fail results.
- b) **Pass/Fail Determination**
The pass/fail determination for OBD testing shall be conducted according to the method specified in 40 CFR 85.2222(d), incorporated by reference in Section 276.104(b) of this Part.
- c) **Reject Determination**
The reject determination for OBD testing shall be conducted according to the method specified in 40 CFR 85.2222(c), incorporated by reference in Section 276.104(b) of this Part, with the following modifications, according to which a vehicle shall be rejected from testing:
 - 1) The vehicle is presented for testing and passes the OBD inspection, but the number of unset non-continuous OBD readiness codes exceeds the following:
 - A) 2 monitors "not ready" for MY 1996 to MY 2000 vehicles; and
 - B) 1 monitor "not ready" for MY 2001 and newer vehicles; or
 - 2) The vehicle is presented for retesting after an OBD failure involving catalytic converter DTCs P0420 through P0439, and the catalyst monitor is "not ready" at the time of retest.
- d) **OBD Test Report**
The OBD test report shall be prepared according to the method specified in 40 CFR 85.2223, incorporated by reference in Section 276.104(b) of this Part.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.210 Visual Inspection Test Procedures

- a) **Applicability**
Beginning February 1, 2012, the visual inspection test may be substituted for the OBD test for those vehicles identified in Section 13C-25(h) of the Vehicle Emissions Inspection Law of 2005. The visual inspection test consists of a two-part test. The first part of the visual inspection test consists of a visual examination of the MIL in the key-on/engine off position. The second part of the visual inspection test consists of a visual examination of the MIL in the key on/engine on position. The visual inspection test shall be performed in accordance with subsections (b) and (c) of this Section.
- b) **Test Procedures**
 - 1) **Key on/engine off**
The key on/engine off test starts with the ignition in the key off/engine off position. The ignition shall then be turned to the key on/engine off position. The inspector shall observe whether the MIL is illuminated.
 - 2) **Key on/engine on**
The key on/engine on test starts with the ignition in the key on/engine off position. The ignition shall then be turned to the key on/engine on position. The inspector shall observe whether the MIL is continuously illuminated.
- c) **Pass/Fail Determination**
A pass or fail determination is made for each part of the visual inspection test identified in subsection (b) based on a comparison of the test results to the visual inspection test standards contained in 35 Ill. Adm. Code 240.202.

(Source: Added at 36 Ill. Reg. 2257, effective January 30, 2012)

SUBPART C: EMISSIONS COMPLIANCE CERTIFICATE

Section 276.301 General Requirements

- a) The owners of all vehicles subject to inspection shall obtain a valid emissions compliance certificate from the Agency.
- b) Failure to comply with applicable provisions of the Vehicle Emissions Inspection Law of 2005 [625 ILCS 5/13C] shall subject the owners of the vehicle to the enforcement provisions thereof.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.302 Determination of Affected Counties

- a) The Agency shall make its determination of the geographic extent of an affected county based upon the "UNITED STATES POSTAL SERVICE ZIP + 4 National Directory File".
- b) To the extent practicable, the Agency shall make its determination of residency in an affected county so as to assure that:
 - 1) irrespective of Zip Code, the affected counties correspond to the geographic areas prescribed in the Vehicle Emissions Inspection Law, and
 - 2) the affected counties are composed of contiguous geographic areas within each of the counties.

Section 276.303 Emissions Compliance Certificate Design and Content

All emissions compliance certificates required under this Section shall, at a minimum, include the following information in a clear and recognizable fashion:

- a) The statement "Registration Renewal Authorized";
- b) The TED (month and year) in which the vehicle is next scheduled for testing;
- c) A unique emissions compliance certificate number; and
- d) The following vehicle information:
 - 1) VIN;
 - 2) License plate number;
 - 3) Vehicle model year; and
 - 4) Vehicle make.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.304 Initial Emissions Inspection Stickers or Certificates (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.305 Exempt Emissions Inspection Stickers or Certificates (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.306 Renewal Emissions Inspection Stickers or Certificates (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.307 Temporary Emissions Inspection Stickers or Certificates (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.308 Corrected or Interim Emissions Inspection Stickers or Certificates (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.309 Waiver Emissions Inspection Stickers or Certificates (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.310 Emissions Inspection Sticker and Certificate Display and Possession (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.311 Change of Assigned Test Month (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.312 Economic Hardship Extension Stickers or Certificates (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

SUBPART D: WAIVER, ECONOMIC HARDSHIP EXTENSION, AND OUTSIDE OF AFFECTED COUNTIES ANNUAL EXEMPTION REQUIREMENTS

Section 276.401 Waiver Requirements

- a) All vehicles subject to inspection under the Vehicle Emissions Inspection Law of 2005 [625 ILCS 5/13C] shall be eligible for a waiver from meeting the applicable vehicle emission standards contained in 35 Ill. Adm. Code 240 upon submission of proof to a Waiver Inspector of compliance with all of the following:
 - 1) After failing a retest, the vehicle has failed to comply with the applicable vehicle emission standards;
 - 2) A minimum expenditure of at least \$450 in emission-related repairs exclusive of tampering-related repairs have been made;

- 3) The vehicle has received all repairs and adjustments for which it is eligible under any emission performance warranty provisions pursuant to Section 207 of the Clean Air Act (42 USC 7541);
 - 4) The Agency determines by normal inspection procedures that the emission control devices are present and appear to be properly connected and operating;
 - 5) Repairs are conducted by a recognized repair technician; and
 - 6) Evidence of repair is presented consisting of either of the following:
 - A) Signed and dated receipts identifying the vehicle and describing the diagnostic procedures that were utilized in determining the repairs, justification that the repairs performed were appropriate and necessary for the emissions test failure, and the amount charged for eligible emission-related repairs; or
 - B) An affidavit executed by the person performing the eligible emission related repairs.
- b) Emission-related repairs performed not more than 30 days prior to the current TED may be applied to the \$450 minimum expenditure if the repairs were appropriate for the DTCs present at the time of the initial failure.
 - c) Waivers shall not be issued if the MIL is inoperative.
 - d) Vehicles subject to a steady-state idle exhaust test shall not be eligible for waivers unless the vehicle passes a fuel cap test.
 - e) Waivers shall be issued to the vehicle owners. In the event the vehicle owner is not present, a waiver may be issued to the vehicle owner's designee if specific written authorization from the vehicle owner on a form prescribed by the Agency is presented at the time of waiver application.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.402 Low Emissions Tuneups (Repealed)

(Source: Repealed at 26 Ill. Reg. 8113, effective May 17, 2002)

Section 276.403 Denial or Issuance of Waiver

- a) If the Agency determines that an applicant for a waiver has not complied with all applicable waiver criteria set forth in Section 276.401 of this Part, the waiver request shall be denied. The Agency shall provide to the applicant a written

statement containing the reasons for the denial.

- b) If the Agency determines that an applicant for a waiver has complied with all waiver criteria set forth in Section 276.401 of this Part, the waiver shall be issued. The Agency shall provide to the applicant an emissions compliance certificate containing, at a minimum, the information described in Section 276.303.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.404 Economic Hardship Extension Requirements

The Agency shall issue a one year emissions compliance certificate to the owner of a vehicle that meets the requirements of subsection (a) of the Section.

- a) Requirements
 - 1) When tested, the subject vehicle failed to meet applicable emission standards contained in 35 Ill. Adm. Code 240, except that the economic hardship extension will not be granted if only the applicable fuel cap emissions test standard contained in 35 Ill. Adm. 240 is failed;
 - 2) The registered owner or owners of the subject vehicle certifies that his or her, or their, household income qualifies as "low income" as defined in this Part. In the case of multiple registered owners who are not part of the same household, the registered owners must certify that the sum of each registered owner's household income qualifies as "low income" as defined in Section 276.102 of this Part;
 - 3) The current or former owner of a subject vehicle has not previously received an emissions compliance certificate for economic hardship for the subject vehicle, or, if an emissions compliance certificate for economic hardship has previously been issued, the vehicle passed all required emissions tests prior to issuance of another emissions compliance certificate for economic hardship;
 - 4) The registered owner of the subject vehicle presents either of the following, which shall not include any costs associated with any motor vehicle emission related recall that has been, or is to be, paid by a manufacturer or dealer:
 - A) A written estimate prepared by a recognized repair technician for emission related vehicle repairs, parts or services, including diagnostic fees, related to the emissions test failure, in the amount of 50 percent or greater of the current waiver repair minimum amount contained in Section 276.401(a)(2) of this Part; or

- B) If the registered owner intends to perform the necessary services or repairs, the written estimate shall include only the cost of emission related parts;
- 5) The registered owner of the vehicle grants authorization to the Agency or its representatives to make legitimate inquiries as necessary, including to all relevant State departments or agencies, including but not limited to the Illinois Secretary of State and the Department of Human Services, to verify ownership and income information.
- b) An emissions compliance certificate issued under this Section is not transferable to one or more subsequent owners.
- c) An emissions compliance certificate issued under this Section may be revoked by the Agency if the Agency determines that the applicant or applicants made false statements on the economic hardship extension application.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.405 Outside of Affected Counties Annual Exemption Requirements

- a) The owner of a vehicle that is located and being primarily operated outside of the affected counties and in other jurisdictions in which vehicle emission inspections are not required, may be issued a one year emissions compliance certificate allowing the motorist to renew the registration without having an emissions inspection. Written proof of the vehicle's location must be provided by one of the following:
 - 1) Tax bill;
 - 2) Utility bill;
 - 3) Tuition bill;
 - 4) Storage receipt;
 - 5) Military orders; or
 - 6) Other written proof deemed acceptable by the Agency.
- b) Vehicles obtaining a one year emissions compliance certificate under this Section will be subject to inspection by the next TBD unless the motorist complies with subsection (a) of this Section.

- c) A vehicle owner who is currently in the military and deployed outside the affected counties may be issued a one year emissions compliance certificate under this Section if written proof as specified in subsection (a)(5) or (a)(6) is provided.

(Source: Amended at 36 Ill. Reg. 2257, effective January 30, 2012)

SUBPART E: TEST EQUIPMENT SPECIFICATIONS

Section 276.501 General Requirements

Compliance with Illinois vehicle test standards shall be determined by following the test procedures set forth in Subpart B of this Part and by utilizing the following:

- a) Steady-state idle test equipment meeting the specifications set forth in Sections 276.502 and 276.503 of this Part and the evaporative system test equipment meeting the specifications set forth in Section 276.504 of this Part; or
- b) On-road remote sensing test equipment meeting the specifications set forth in Section 276.507 of this Part; or
- c) OBD test equipment meeting the specifications set forth in Section 276.508 of this Part.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.502 Steady-State Idle Exhaust Test Analysis Systems Functional Requirements

The steady-state idle exhaust test analysis system shall meet the functional requirements specified in 40 CFR 85.2225(b), incorporated by reference in Section 276.104(a) of this Part. Additionally, all exhaust gas analyzers shall:

- a) Provide reliable, continuous service;
- b) Make an automatic selection of the proper emission standard for each vehicle tested;
- c) Make automatic pass/fail determinations for each vehicle tested;
- d) Record test data in machine-readable (computer) form for subsequent data processing and analysis; and
- e) Make an instantaneous printing of duplicate copies of test results.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.503 Steady-State Idle Exhaust Test Analysis Systems Performance Criteria

The steady-state idle exhaust test analysis system shall meet the performance criteria specified in 40 CFR 85.2225(c), incorporated by reference in Section 276.104(a) of this Part.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.504 Evaporative System Integrity Test Functional Requirements and Performance Criteria

- a) Requirements
Both fuel cap leak flow testers and fuel cap pressure decay testers used for evaporative system integrity testing shall be:
- 1) Easily connected to fuel caps, including those tethered to the vehicle;
 - 2) Compatible with at least 95 percent of all vehicles required to receive a fuel cap test;
 - 3) Adaptable as required to test future model year vehicles as they enter the eligible fleet;
 - 4) Capable of performing the following additional functions:
 - A) Provide reliable, continuous service;
 - B) Provide for the automatic selection of the proper fuel cap test equipment (if applicable) for each vehicle tested;
 - C) Provide for an automatic pass/fail determination for each vehicle tested;
 - 5) Unaffected by atmospheric variation (i.e., barometric pressure, humidity, temperature, etc.). Test accuracy shall be within 2 percent of stated values from 0°F to 120°F;
 - 6) Pressurized using air, Nitrogen (N₂), or an equivalent non-toxic, non-greenhouse, inert gas;
 - 7) Capable of controlling the supply pressure and preventing over pressurization;
 - 8) Tamper resistant; and
 - 9) Designed to avoid damage to the vehicle during installation, testing and

removal.

- b) Fuel cap pressure decay tester
The fuel cap pressure decay tester used for evaporative system integrity testing shall be equipped with a pressure gauge with a minimum range of 0 to 50 inches of water and an accuracy of 0.3 inches of water or 2 percent of point, whichever is greater.
- c) Fuel cap leak flow tester
The fuel cap leak flow tester used for evaporative system integrity testing shall be:
 - 1) Equipped with a serviceable air filter upstream of the flow comparison circuitry;
 - 2) Equipped with an automatic shutoff and a low-battery indicator if battery powered;
 - 3) Supplied with a NIST traceable reference passing fuel cap of nominal 52 to 56 cc/min for daily test verification;
 - 4) Supplied with a NIST traceable reference failing fuel cap of nominal 64 to 68 cc/min for daily test verification;
 - 5) Accurate to 3 cc/min at the 60 min flow standard; and
 - 6) Able to be modified, either by the manufacturer or an authorized service center, to test at a revised leakage (flow) rate from that originally shipped.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.505 Transient Loaded Mode Test Systems Functional Requirements (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.506 Transient Loaded Mode Test Systems Performance Criteria (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.507 On-Road Remote Sensing Test Systems Functional Requirements and Performance Criteria

- a) The on-road remote sensing test equipment shall consist of the following:

- 1) An infrared SDM capable of measuring the concentration of HC, CO, and CO₂ present in an in-use vehicle;
 - 2) A camera system that automatically photographs vehicle license plates;
 - 3) A system that links each emission record to the correct vehicle license plate photograph; and
 - 4) A laser based speed and acceleration measurement system.
- b) The Infrared SDM shall be of a design certified to meet the following accuracy requirements:

<u>Pollutant</u>	<u>Range</u>	<u>Accuracy</u>
HC	ALL	±150 ppm or ±15 percent of expected HC Concentration
CO	≤ 3.0 percent	±10 percent or 0.25 percent (Whichever is greater)
	> 3.0 percent	±15 percent

- c) The speed and acceleration measurement system shall be of a design certified to measure vehicle speed to within ±0.5 miles per hour and vehicle acceleration to within ±0.3 miles per hour per second at the moment exhaust is measured.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.508 On-Board Diagnostic Test Systems Functional Requirements and Performance Criteria

The OBD test system shall meet the functional requirements specified in 40 CFR 85.2231, incorporated by reference in Section 276.104(b) of this Part.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

SUBPART F: EQUIPMENT MAINTENANCE AND CALIBRATION

Section 276.601 Steady-State Idle Test Equipment Maintenance

All operators of exhaust gas analyzers shall conduct a preventive maintenance and quality control program consisting of the following elements:

- a) an HC hang-up check conducted prior to each test and after the last test of the day; HC hang-up shall not exceed 20 ppm HC prior to any test;

- b) visual inspection of all equipment prior to the first test of the day;
 - c) performance of analyzer preventative maintenance (e.g., filter replacement, inspection and cleaning of probes, sample lines, water traps, etc.) according to manufacturer's recommended schedules and as needed; and
 - d) all calibration and operating procedures specified in Section 276.602.
- (Source: Amended at 22 Ill. Reg. 18867, effective September 28, 1998)

Section 276.602 Steady-State Idle Test Equipment Calibration

All operators of steady-state idle exhaust test gas analyzers shall comply with the following calibration and operating procedures unless alternative procedures have been approved by the Agency:

- a) Exhaust gas analyzers shall be warmed up prior to each vehicle inspection, zero check, span check, or calibration. Analyzers shall be considered to be in a warmed-up condition once stabilized zero readings (readings stabilize for one minute within ± 2 percent of full scale, low range on all 3 channels) are obtained.
- b) The analyzer shall conduct a zero and span check prior to each test. The span check shall include the HC, CO and CO₂ channels, and the NO and O₂ channels, if present. If zero and/or span drift cause the signal levels to move beyond the adjustment range of the analyzer, it shall lock out from testing.
- c) The system shall lock out from testing if sample flow falls below 3 percent of full scale, or causes system response time to exceed 13 seconds to 90 percent of a step change in input, whichever is less.
- d) A system leak check shall be performed within 24 hours before the test, and may be performed in conjunction with the gas calibration described in subsection (e)(1) of this Section. If a leak check is not performed within 24 hours or if the analyzer fails the leak check, the analyzer shall lock out from testing. The leak check shall be a procedure demonstrated to effectively check the sample hose and probe for leaks and shall be performed in accordance with good engineering practices. An error of more than +2 percent of the reading using low range span gas shall cause the analyzer to lock out from testing and shall require repair of leaks.
- e) Gas Calibration
 - 1) Analyzers must undergo a two-point calibration within 72 hours before each test unless changes in barometric pressure are compensated for automatically and statistical process control demonstrates equal or better quality control using different frequencies. Gas calibration shall be accomplished by introducing span gas that meets the requirements of subsection (e)(3) of this Section into the analyzer through the calibration

port. If the analyzer reads the span gas within the allowable tolerance range (i.e., the square root sum of the squares of the span gas tolerance described in subsection (e)(3) of this Section and the calibration tolerance, which shall be equal to 2 percent), no adjustment of the analyzer is necessary. The gas calibration procedure shall correct readings that exceed the allowable tolerance range to the center of the allowable tolerance range. The pressure in the sample cell shall be the same with the calibration gas flowing during calibration as with the sample gas flowing during sampling. If the system is not calibrated, or the system fails the calibration check, the analyzer shall lock out from testing.

2) A two point gas calibration procedure shall be followed. The span shall be accomplished at one of the following pairs of span points:

A) Low

300 – ppm propane (HC)
1.0 – percent CO
6.0 – percent CO₂
1000 – ppm nitric oxide (if equipped with NO)

High

1200 – ppm propane (HC)
4.0 – percent CO
12.0 – percent CO₂
3000 – ppm nitric oxide (if equipped with NO)

B) Low

0 – ppm propane (HC)
0.0 – percent CO
0.0 – percent CO₂
0 – ppm nitric oxide (if equipped with NO)

High

600 – ppm propane (HC)
1.6 – percent CO
11.0 – percent CO₂
1200 – ppm nitric oxide (if equipped with NO)

3) The span gases used for the gas calibration shall be traceable to NIST standards within two percent and shall be within two percent of the span points specified in subsection (e)(2) of this Section.

f) Other Checks

In addition to the other periodic checks described in this Section, those described in subsections (f)(1) and (f)(2) of this Section shall also be used to verify system performance under the special circumstances described therein.

- 1) Gas Calibration
 - A) Each time the analyzer electronic or optical systems are repaired or replaced, a gas calibration shall be performed prior to returning the unit to service.
 - B) Multi-point calibrations shall be performed every 6 months. The calibration curve is checked at 20 percent, 40 percent, 60 percent, and 80 percent of full scale, and must be adjusted or repaired if the specifications in Section 276.503 are not met.
- 2) Leak Checks

Each time the sample line integrity is broken, a leak check shall be performed prior to testing.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.603 Evaporative System Integrity Test Maintenance and Calibration

- a) Applicability

Relevant parameters of the fuel cap pressure decay tester and leak flow testers shall be inspected according to the procedures contained in this Section.

 - 1) Pressure Decay Tester
 - A) The fuel cap pressure decay tester shall be checked for integrity at the beginning of each operating day and after 5 hours of use each day. If, after the fuel cap attachment end of the pressure decay tester is capped and pressurized to between 14 and 28 inches of water, the pressure system changes more than 0.2 inches of water over 15 seconds, the pressure decay tester shall be removed from service.
 - B) The pressure gauge for the pressure decay tester shall be checked on a weekly basis against a reference gauge. A pressure decay tester that has a deviation in the measured pressure exceeding 0.3 inches of water shall be removed from service.
 - 2) Leak Flow Tester
 - A) The accuracy of the leak flow tester shall be verified by testing and correctly identifying the passing and failing reference fuel caps at the beginning of each operating day. Reference fuel caps shall be stored in a dirt and dust free manner to prevent clogging and changes in flow rate. Reference fuel caps shall be stored at the same temperature as the leak flow fuel cap tester to provide accurate flow reference.

- B) Independent flow bench verification of the reference fuel caps and the internal flow standard orifice shall be conducted before initial usage and as recommended by the leak flow tester manufacturer or as suggested by analysis of quality control data. The bend flow verification results shall be traceable to NIST.
- C) The upstream filter for the leak flow tester shall be maintained in accordance with manufacturer's specifications.
- b) Any fuel cap leak flow tester or pressure decay tester that fails an inspection shall be removed from service until repaired and its accuracy verified.
- c) The fuel cap adapters shall be checked for leaks or damage following the recommendations of the fuel cap tester manufacturer or the fuel cap adapter supplier.

(Source: Amended at 22 Ill. Reg. 18867, effective September 28, 1998)

Section 276.604 Record Keeping

All maintenance and calibration records pertaining to emission test equipment shall be submitted to the Agency, as required, upon request.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.605 Transient Loaded Mode Test Equipment Maintenance and Calibration (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.606 On-Road Remote Sensing Test Systems Maintenance and Calibration

- a) All equipment utilized for on-road remote sensing emission measurement shall be maintained and calibrated according to the manufacturer's specifications.
- b) The accuracy of the Infrared SDM shall be verified by measuring the concentration of tri-blend (CO₂, HC, CO) calibration gas released from a specially modified vehicle. A two point gas calibration procedure shall be followed. The span shall be accomplished at the following pair of span points:
 - 300 – ppm propane (HC)
 - 1.0 – percent CO
 - 6.0 – percent CO₂
 - 1200 – ppm propane (HC)
 - 4.0 – percent CO
 - 12.0 – percent CO₂

The Infrared SDM shall measure the span gas within the allowable tolerance range specified in Section 276.507(b) of this Part.

(Source: Added at 22 Ill. Reg. 18867, effective September 28, 1998)

Section 276.607 On-Board Diagnostic Test Systems Maintenance and Calibration

All equipment utilized for OBD test systems shall be maintained and calibrated according to the manufacturer's specifications.

(Source: Added at 22 Ill. Reg. 18867, effective September 28, 1998)

SUBPART G: FLEET SELF TESTING REQUIREMENTS

Section 276.701 General Requirements

- a) Any owner or lessee of a fleet of 15 or more vehicles subject to inspection may apply to the Agency for a permit to establish and operate one or more private official inspection stations for the limited purpose of self-testing their fleet of vehicles.
- b) Vehicle inspections shall be conducted in accordance with Subpart B of this Part, as applicable.
- c) If the Agency substantially amends emissions test standards, procedures, or other requirements, it may require emissions inspectors to be re-certified and fleet self-testers to be re-permitted.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.702 Fleet Inspection Permit

The Agency may issue fleet inspection permits to eligible applicants upon a showing of compliance with the following requirements:

- a) **Equipment**
All fleet inspections shall be conducted utilizing equipment approved by the Agency. This equipment shall meet the same functional requirements, performance criteria, maintenance standards, and calibration requirements as specified in Subparts E and F of this Part.
- b) **Training**
Each fleet inspector shall be required to complete and pass a training course given by the Agency covering the following topics:
 - 1) I/M rules and regulations;
 - 2) Testing procedures;
 - 3) Analyzer use;

4) Analyzer calibration and quality control; and

5) Data recording and submittal.

c) General Fleet Inspection Permit Requirements

1) Applicants shall submit an application for a fleet inspection permit for each inspection location on forms provided by the Agency and shall include a list of vehicles that will be inspected at the private official inspection station.

2) Applicants shall execute a fleet inspection agreement.

3) Fleet inspection permits issued by the Agency shall expire two years after the date of issuance.

4) Fleet inspection permits are not transferable.

5) Any change in the name and/or address of any permittee or any fleet inspector or inspectors employed by the permittee shall be reported to the Agency in writing on forms provided by the Agency within 30 days after the change.

6) A permittee may request, and the Agency may grant, a relocation of equipment at a private official inspection station.

d) Fleet Inspection Permit Suspension and Revocation

For the following reasons, the Agency may suspend for a period of up to two years or revoke, with the permittee being ineligible to reapply for two years, a fleet inspection permit:

1) The permittee has violated any applicable laws, rules, or regulations;

2) The permittee has provided false or misleading information in its application for a fleet inspection permit;

3) The permittee has failed to notify the Agency that a vehicle has been proposed to be added or deleted from its vehicle inventory within the time specified by the Agency;

4) 20 percent or more of the vehicles in the permittee's fleet have failed to comply with the Vehicle Emissions Inspection Law of 2005;

5) The permittee has misrepresented any information provided in fleet vehicle lists, vehicle inspection reports, and/or equipment maintenance

and calibration reports;

- 6) The number of vehicles subject to inspection in the permittee's fleet becomes less than 15.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.703 Fleet Inspection Permittee Operating Requirements

a) Vehicle Eligibility

- 1) The permittee shall furnish the Agency with a list of all vehicles subject to inspection and for which fleet inspection is requested. The permittee shall provide this list to the Agency by electronic media and shall include, at a minimum, the following:
 - A) VIN;
 - B) License plate number;
 - C) Vehicle make;
 - D) Vehicle model; and
 - E) Vehicle model year.
- 2) The permittee shall notify the Agency in writing on forms provided by the Agency or by electronic media in the format required by the Agency in the event that any vehicles in the fleet inventory are proposed to be added or deleted from its vehicle inventory within the time specified by the Agency.
- 3) Unless authorized by the Agency, vehicles contained in the fleet vehicle inventory pursuant to subsection (a) of this Section shall only be inspected at private official inspection stations. If authorization is given by the Agency for a vehicle contained in the fleet vehicle inventory to be tested or retested at an official inspection station, any subsequent retests in that vehicle's testing cycle shall be conducted at an official inspection station.

b) Inspection Frequency/Scheduling

At a minimum, all vehicles in the fleet inventory shall be inspected biennially.

c) Inspection Results

All inspection results shall be submitted to the Agency electronically.

d) Equipment, Maintenance and Calibration

All equipment used for emissions testing in private official inspection stations shall meet the functional requirements, performance criteria, maintenance standards, and calibration requirements contained in Subparts E and F of this Part.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.704 Private Official Inspection Station Auditing and Surveillance

- a) All private official inspection stations shall be equipped with surveillance equipment as specified in the fleet inspection agreement referenced in Section 276.702(c)(2).
- b) The Agency may, on an unscheduled and unannounced basis, during normal business hours, conduct an audit inspection of any private official inspection stations to determine if inspection equipment is properly operating and calibrated and to check inspector proficiency. During the course of the audit inspection, the Agency representative may take one or more of the following actions:
 - 1) Require that, if any vehicle emissions test equipment, calibration equipment, or related materials fails to perform as required, the item shall be removed from service until corrective action is taken;
 - 2) The fleet inspector may be required to perform an emissions inspection on a fleet vehicle. If no fleet vehicles are available, the fleet inspector may be required to perform an emissions inspection on an Agency vehicle.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.705 Fleet Station Auditing and Surveillance (Renumbered)

(Source: Renumbered to Section 276.704 at 20 Ill. Reg. 8456, effective June 14, 1996)

SUBPART H: GRIEVANCE PROCEDURE

Section 276.801 General Requirements

Any person aggrieved by a decision regarding the failure of an emissions test or the denial of a waiver may petition the Agency which will thereupon investigate the matter. This grievance procedure is limited to filing a petition concerning a vehicle failing an emissions inspection or being denied a waiver; it shall not be used to grieve an action or decision of Agency or contractor personnel related to any activities other than a vehicle emissions test failure or waiver denial decision.

(Source: Amended at 20 Ill. Reg. 8456, effective June 14, 1996)

Section 276.802 Procedure for Filing Grievance

- a) Grievances shall be filed with the Agency within 30 days after the decision made by the Agency.
- b) Grievances shall be made in writing on petition forms provided by the Agency.
- c) Grievance petition forms and instructions shall be available at all full-service official inspection stations and by mail from the Agency.
- d) Original repair orders, receipts, and other pertinent documentation shall be submitted with the grievance petition.
- e) Grievances and supporting documentation shall be mailed to the Agency at the address specified on the grievance petition.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.803 Agency Investigation

- a) The Director of the Agency or the Director's designee shall appoint an Agency employee to investigate every grievance regarding the failure of an emissions test or the denial of a waiver submitted to the Agency in accordance with this Part.
- b) The Agency's investigation shall be concluded within 45 days after the receipt of the grievance petition.
- c) Within the 45 day investigation period, the Agency shall submit to the petitioner, and affected inspector or station, its written determination indicating the correctness or incorrectness of the decision that precipitated the grievance. In conducting the investigation, the Agency may require the petitioner to present the vehicle for inspection by the Agency or its designated agent.
- d) The Agency's written determination shall include a statement of the facts relied upon and the legal and technical issues decided by the Agency in making its determinations.
- e) The Agency's written determination may also require that an employee of the Agency or its designee:
 - 1) Issue an emissions compliance certificate;
 - 2) Reinspect the vehicle;
 - 3) Apply the standards that the Agency has determined to be applicable; or

- 4) Take any other action that the Agency deems to be appropriate.
- f) If the Agency's investigation determines that a part needed to complete the necessary and appropriate repairs is unavailable after contacting at least 3 independent sources, one of which shall be the original equipment manufacturer, a waiver may be granted.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.804 Review of Agency's Determination

The Agency's written determination shall be subject to review in the Circuit Court in accordance with the provisions of the Administrative Review Law [735 ILCS 5/Art. III].

(Source: Amended at 20 Ill. Reg. 8456, effective June 14, 1996)

SUBPART I: NOTICES

Section 276.901 General Requirements

The Agency shall send a vehicle emissions test notice to owners of vehicles subject to inspection that shall include the TED and be accompanied by a clear statement from the Agency that, based on vehicle records, the vehicle is subject to inspection under the Vehicle Emissions Inspection Law of 2005.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.902 Vehicle Emissions Test Notice

At least 15 days after the beginning of the TED, the Agency shall send a vehicle emissions test notice to the registered owner of the vehicle requesting that the vehicle be tested. This vehicle emissions test notice shall include the following:

- a) Information relating to the operation of official inspection stations;
- b) Agency vehicle emissions test program contact information;
- c) Brief explanation of the program; and
- d) Instructions for vehicle inspections.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.903 Warning Notice (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.904 Second Warning Notice (Repealed)

(Source: Repealed at 20 Ill. Reg. 8456, effective June 14, 1996)

SUBPART J: RECIPROCITY WITH OTHER JURISDICTIONS

Section 276.1001 Requirements for Vehicles Registered in Affected Counties and Located in Other Jurisdictions Requiring Vehicle Emissions Inspection

- a) Vehicles registered in the affected counties and located and being primarily operated in other jurisdictions requiring vehicle emission testing, or that are permanently located in such other jurisdiction, must be tested in that jurisdiction and comply with the jurisdiction's emissions testing requirements and the vehicle's registered owner must comply with the following requirements:
 - 1) Upon written notification from the Agency and/or the Illinois Secretary of State to the vehicle's registered owner to have the vehicle inspected, the vehicle must be presented for inspection in the jurisdiction where the vehicle is located; and
 - 2) When the vehicle passes the inspection, receives a waiver or exemption, or otherwise complies with the emissions inspection requirements of the jurisdiction in which the vehicle is located, the vehicle inspection report or other appropriate documentation must be forwarded to the Agency using the method stated on the vehicle emission test notice.
- b) When the Agency receives the appropriate vehicle inspection report or other documentation, the vehicle inspection record will be updated to reflect compliance and the vehicle's registered owner will be issued an emission compliance certificate.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.1002 Requirements for Vehicles Registered in Other Jurisdictions Requiring Vehicle Emissions Inspection and Located in an Affected County

Vehicles that are registered in another jurisdiction that requires vehicle emissions testing, that are located and being primarily used in an affected county, and that would be considered a non-exempt vehicle as defined in this Part, may be tested at a full service official inspection station in accordance with the following:

- a) The vehicle's registered owner shall obtain a voluntary test voucher from the Agency prior to inspection;

- b) The vehicle's registered owner shall have the vehicle inspected; and
- c) After the vehicle has received an emissions inspection, the appropriate test results will be issued to the vehicle's registered owner for submission to the jurisdiction requiring emissions inspections.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)

SUBPART K: REPAIR FACILITY PERFORMANCE REPORTING

Section 276.1101 Requirements for Collecting and Reporting Data Pertaining to the Repair of Vehicles that Failed or Were Rejected from an Emissions Inspection

- a) The Agency shall:
 - 1) Compile pertinent emissions repair data into a report that is provided to owners of vehicles that do not pass an emissions inspection and that is made available to the general public; and
 - 2) Specify the method for transmitting repair data to the Agency.
- b) Individuals or businesses that perform emissions-related repairs and report that data to the Agency shall:
 - 1) Register at a website specified by the Agency and agree to be bound by the terms and conditions of any user agreement associated with that website;
 - 2) Submit accurate, complete, and legible repair data in order to be included in the compiled report; and
 - 3) Perform a minimum number of repairs within a specified period of time and achieve a minimum performance level as determined by the Agency in order to be included in the compiled report.
- c) An individual or business shall be excluded from the compiled report for not less than one year if the Agency determines that:
 - 1) An individual or business has violated a user agreement as referenced in subsection (b)(1) of this Section;
 - 2) An individual or business has violated Illinois law or rule or any provision of a local ordinance, code, or rule relating to solicitation or advertisement of emission-related repair services;

- 3) An individual or business uses the Agency servicemark, Illinois Air Team servicemark, or Air Team servicemark; uses any reproduction, counterfeit, copy, variation, or imitation of these servicemarks; or uses the Agency, Illinois Air Team, or Air Team name in any of their advertisements, solicitations, or other marketing devices without prior written authorization of the Agency;
 - 4) An individual or business directly or indirectly creates the impression that the Agency, Illinois Air Team, or Air Team endorses, approves, or recommends the emission-related repair services of the individual or business; or
 - 5) An individual or business intentionally, negligently, or through gross negligence affects or attempts to affect the integrity of a vehicle emissions inspection or an inspection procedure.
- d) If the Agency determines that an individual or business has repeated any action listed in subsection (c) of this Section, the Agency may permanently exclude the individual or business from the compiled report.
- e) Agency Determinations, Disputes, and Appeals
- 1) Agency Determinations
Agency determinations under subsection (c) or (d) of this Section shall be furnished in writing to the individual or business by mail, electronic mail, facsimile, personal service, or similar means.
 - 2) Disputes
 - A) An individual or business that disagrees with an Agency determination under subsection (c) or (d) of this Section may dispute that determination. Disputes shall:
 - i) Be in writing;
 - ii) Include a copy of the Agency's written determination;
 - iii) Include a justification with any supporting documentation explaining why the individual or business should not be excluded from the compiled report; and
 - iv) Be clearly marked "Repair Facility Performance Report Dispute".
 - B) The written dispute must be postmarked within 30 days after the date of the Agency's determination.

- C) If the written dispute has not been disposed of by written agreement within 30 days after the postmarked date of the written dispute, the individual or business may appeal the Agency's determination to the Director in accordance with subsection (e)(3) of this Section.

3) Appeals

- A) If a dispute is not disposed of by written agreement as specified in subsection (e)(2) of this Section, an individual or business may file a notice of appeal with the Director of the Agency.
- B) A notice of appeal shall:
 - i) Be in writing;
 - ii) Include a copy of the Agency's written determination;
 - iii) Include a copy of the written dispute;
 - iv) Include any additional justification with any supporting documentation explaining why the individual or business should not be excluded from the compiled report; and
 - v) Be clearly marked "Repair Facility Performance Report Appeal".
- C) The notice of appeal must be postmarked within 60 days after the postmarked date of the written dispute.
- D) The appeal shall be decided by the Director, or his or her authorized representative, who shall render a decision in writing. This decision shall be furnished to the individual or business by mail, electronic mail, facsimile, personal service, or similar means. The decision of the Director shall be final and conclusive.
- E) The Director shall not be precluded from considering questions of law or equity in any decision.

(Source: Added at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.TABLE A Transient Driving Cycle (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)

Section 276.TABLE B Fast-Pass Speed Variation Limits Using Positive Kinetic Energy (PKE) Measurements (Repealed)

(Source: Repealed at 35 Ill. Reg. 11268, effective June 28, 2011)