R-39 REV. 1/77

IMPORTANT: Read Instructions on bottom of Certification Page before completing this form. Failure to comply with instructions may cause disapproval of proposed Regulations.

STATE OF CONNECTICUT

REGULATION

OF

NAME OF AGENCY

Environmental Protection

Concerning

Amendment of:

Section 22a-174-27, Emissions Standards and On-Board Diagnostic II Test Requirements for Periodic Motor Vehicle Inspection and Maintenance.

Section 1

Section 22a-174-27 of the Regulations of Connecticut State Agencies is amended to read as follows:

Sec. 22a-174-27. Emission standards AND ON-BOARD DIAGNOSTIC II TEST REQUIREMENTS for periodic motor vehicle inspection and maintenance.

(a) Applicability.

This section shall apply to any owner or operator of a [1968] 1979 and later model year motor vehicle that is not an antique, rare or special interest motor vehicle as defined in section 14-1 of the Connecticut General Statutes. This section shall not apply to motor vehicles that are exempt FROM THE PERIODIC AIR POLLUTION CONTROL SYSTEM INSPECTION AND MAINTENANCE REQUIREMENTS pursuant to subsection (c) of section 14-164c of the Connecticut General Statutes.

(b) Definitions. As used in this section:

(1) "ASM 2525" or "Acceleration Simulation Mode Test" means an emissions test TO ANALYZE EXHAUST EMISSIONS OF CO, NO, AND HC performed at a steady state of twenty-five (25) miles per hour (mph) and utilizing a dynamometer load set to simulate twenty-five (25%) of the power required to accelerate the particular vehicle being tested at 3.3 mph per second until a speed of twenty-five (25) mph is attained[. Such test shall analyze exhaust gas concentration, through percent by volume (vol. %) of CO and parts per million by volume (ppm) of NO and HC, and compare the test results to the maximum allowable exhaust emission standards for CO, NO and HC as published by the United States Environmental Protection Agency in subsection (a) of section 85.1 of the "Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications, Technical Guidance" EPA-AA-RPSD-IM-96-2 (July, 1996) except that the word "should" in subdivisions (a)(1) and (a)(2) of section 85.1 shall be replaced with the word "shall"];

(2) "CO" means carbon monoxide;

[(3) "HC" means hydrocarbon;]

[(4)](3) "Composite Motor Vehicle" [or "COMPO"] means a vehicle that is [constructed from the component parts of two or more motor vehicles of different model year or vehicle type;] DESIGNATED "COMP" OR "COMPO" IN THE "MAKE" FIELD OF AN APPLICABLE CONNECTICUT MOTOR VEHICLE REGISTRATION CERTIFICATE;

[(5)](4) "Gross Vehicle Weight Rating" or "GVWR" means the value specified by the manufacturer as the maximum loaded weight of a single or a combination (articulated) vehicle, or its registered gross weight, whichever is greater. The GVWR of a combination (articulated) vehicle commonly referred to as the "Gross Combination Weight Rating" or GCWR is the GVWR of the power unit plus the GVWR of the towed unit or units;

(5) "HC" MEANS HYDROCARBON;

(6) "HEAVY-DUTY GASOLINE POWERED VEHICLE" MEANS ANY MOTOR VEHICLE FUELED BY GASOLINE THAT IS RATED AT GREATER THAN EIGHT THOUSAND FIVE HUNDRED (8500) POUNDS GVWR AND LESS THAN OR EQUAL TO TEN THOUSAND (10,000) POUNDS GVWR;

[(6) "Idle exhaust test procedure with loaded preconditioning" means an analysis of exhaust gas concentration, by percent CO and HC, in accordance with section 4 of "Recommended I/M Short Test Procedures for the 1990's: Six Alternatives" EPA-AA-TSS-I/M-90-3 (January 1991);]

(7) "Light-duty truck" or "LDT" means a motor vehicle rated at [ten-thousand (10,000)] EIGHT THOUSAND FIVE HUNDRED (8500) pounds GVWR or less and is designed:

(A) To transport property or ten (10) or more persons, not including the operator; or

(B) With features enabling off-street or off-highway operation and use;

(8) "Light-duty vehicle" or "LDV" means a motor vehicle that is designed:

(A) To carry not more than ten (10) persons, including the operator; and

(B) To transport persons and their property with at least fifty percent (50%) of the total area enclosed by the outermost body contour lines, excluding the area enclosing the engine;

(9) "LOADED OPACITY TEST PROCEDURE" MEANS AN ANALYSIS OF EXHAUST OPACITY MEASURED BY AN OPACITY METER AND UTILIZING A DYNAMOMETER LOAD;

[(9)](10) "Loaded vehicle weight" or "LVW" means vehicle curb weight plus three-hundred (300) pounds;

(11) "MODEL YEAR" MEANS A MOTOR VEHICLE MANUFACTURER'S ANNUAL PRODUCTION PERIOD THAT INCLUDES JANUARY 1 OF SUCH CALENDAR YEAR OR, IF THE MANUFACTURER HAS NO ANNUAL PRODUCTION PERIOD, THE PRODUCTION PERIOD THAT INCLUDES JANUARY 1 OF SUCH YEAR;

(12) "MODIFIED SNAP-ACCELERATION SMOKE OPACITY TEST PROCEDURE" MEANS AN ANALYSIS OF EXHAUST OPACITY IN ACCORDANCE WITH A VARIANT OF THE "SNAP-ACCELERATION SMOKE OPACITY TEST" DEFINED IN SECTION 14-164i-1 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES;

[(10)](13) "NO" means nitric oxide;

(14) "ON-BOARD DIAGNOSTIC II SYSTEM" OR "OBD II SYSTEM" MEANS A COMPUTERIZED SELF-DIAGNOSTIC SYSTEM IN A LDV OR LDT THAT REGISTERS FAULTS INDICATING MALFUNCTIONS AND DETERIORATIONS OF THE LDV'S OR LDT'S EXHAUST AND EVAPORATIVE EMISSION CONTROL COMPONENTS;

(15) "PRE-CONDITIONED TWO SPEED IDLE TEST PROCEDURE" MEANS AN ANALYSIS OF EXHAUST EMISSIONS CONCENTRATIONS OF CO, IN PERCENT BY VOLUME (VOL. %), AND HC, IN PARTS PER MILLION (PPM); AND

[(11) "On-road testing" means the measurement of HC, CO and NOx emissions on any road or roadside within the state of Connecticut;

(12) "THC" means total hydrocarbons; and]

[(13)](16) "Vehicle curb weight" is defined as in 40 CFR [section] 86.082-2.

(c) Emission standards.

[(1) Idle exhaust emission standards. Maximum allowable emissions for any vehicle subject to an idle exhaust test procedure with loaded preconditioning administered by the Commissioner of Motor Vehicles or his designee shall be:]

(1) PRE-CONDITIONED TWO SPEED IDLE TEST STANDARDS SHALL BE AS FOLLOWS:

(A) MAXIMUM ALLOWABLE EMISSIONS FOR ANY LIGHT-DUTY TRUCK OR LIGHT-DUTY VEHICLE SUBJECT TO A PRE-CONDITIONED TWO SPEED IDLE TEST PROCEDURE ADMINISTERED BY THE COMMISSIONER OF MOTOR VEHICLES OR HIS DESIGNEE SHALL BE AS IDENTIFIED PER VEHICLE MODEL YEAR IN TABLE 27-1; AND

TABLE 27-1. PRE-CONDITIONED TWO SPEED IDLE TEST STANDARDS FOR LIGHT-DUTY TRUCKS AND LIGHT-DUTY VEHICLES.

Vehicle Model Year	CO (Vol. %)	HC (ppm)
[1968-69	5.00	500
1970	4.75	475
1971	4.40	450
1972	4.25	425
1973	4.00	390
1974	3.80	350
1975	3.00	300
1976	2.80	300
1977	2.70	300
1978	2.40	275]
1979	3.00	600
1980	3.00	600
[1981	1.20	200
1982	1.20	200
1983	1.00	175
1984	1.00	150
1985	1.00	150
1986	1.00	150
1987	1.00	150
1988 and later	1.00	125]
1981 AND LATER	1.20	220

(B) MAXIMUM ALLOWABLE EMISSIONS FOR ANY HEAVY-DUTY GASOLINE POWERED VEHICLE SUBJECT TO A PRE-CONDITIONED TWO SPEED IDLE TEST PROCEDURE ADMINISTERED BY THE COMMISSIONER OF MOTOR VEHICLES OR HIS DESIGNEE SHALL BE AS IDENTIFIED PER VEHICLE MODEL YEAR IN TABLE 27-2.

TABLE 27-2. PRE-CONDITIONED TWO SPEED IDLE TEST STANDARDS FOR HEAVY-DUTY GASOLINE POWERED VEHICLES.

VEHICLE MODEL YEAR	CO (VOL. %)	HC (ppm)
1980 AND EARLIER	3.0	600
1981 THROUGH 1987	1.6	450
1988 AND LATER	1.6	300

(2) ASM 2525 exhaust emission standards. Maximum allowable emissions for any vehicle subject to an ASM 2525 exhaust emission test administered by the Commissioner of Motor Vehicles or a designee of the Commissioner of Motor Vehicles shall be as published by the United States Environmental Protection Agency in [subdivision (a)(1) of section 85.1 of the "Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications, Technical Guidance" EPA-AA-RPSD-IM-96-2 (July, 1996). After December 31, 2001, maximum allowable emissions for any vehicle subject to an ASM 2525 exhaust emission test administered by the Commissioner of Motor Vehicles or a designee of the Commissioner of Motor Vehicles shall be as published by the United States Environmental Protection Agency in subdivision (a)(2) of section 85.1 of the "Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications, Technical Guidance" EPA-AA-RPSD-IM-96-2 (July, 1996).] SUBDIVISIONS (a)(2) AND (a)(3) OF SECTION 85.1 OF THE "ACCELERATION SIMULATION MODE TEST PROCEDURES, EMISSION STANDARDS, QUALITY CONTROL REQUIREMENTS, AND EQUIPMENT SPECIFICATIONS," FINAL TECHNICAL GUIDANCE, EPA420-B-03-008 (OCTOBER 2003).

(3) [Visible emission standards.] LOADED OPACITY TEST STANDARDS. Maximum allowable visible emissions for diesel powered LDVs and LDTs of model years [1968] 1979 and later SUBJECT TO A LOADED OPACITY TEST PROCEDURE ADMINISTERED BY THE COMMISSIONER OF MOTOR VEHICLES OR HIS DESIGNEE, shall be twenty percent (20%) particulate opacity. [as determined by any opacity meter.]

[(4) On-road testing emission standards. Maximum allowable emissions for any vehicle subject to an on-road emissions test administered by the Commissioner of Motor Vehicles or a designee of the Commissioner of Motor Vehicles shall be six percent (6% CO by volume.]

(4) MODIFIED SNAP-ACCELERATION SMOKE OPACITY TEST STANDARDS. MAXIMUM ALLOWABLE VISIBLE EMISSIONS FOR ANY DIESEL POWERED VEHICLE SUBJECT TO A MODIFIED SNAP-ACCELERATION SMOKE OPACITY TEST PROCEDURE ADMINISTERED BY THE COMMISSIONER OF MOTOR VEHICLES OR HIS DESIGNEE SHALL BE AS SPECIFIED IN SECTION 14-164i-2 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES.

(d) Undetermined GVWR. Where the gross vehicle weight rating cannot be determined, the emission standard for LDVs shall apply.

(e) Composite motor vehicles. [Where the vehicle is designated "COMPO" in the "make" field of the registration certificate, the emission standards for model year 1968 shall apply.] FOR 2005 AND EARLIER MODEL YEAR COMPOSITE MOTOR VEHICLES, THE MAXIMUM ALLOWABLE EMISSIONS SHALL BE 4.0 VOL. % CO AND 800 PPM HC. FOR 2006 AND LATER MODEL YEAR COMPOSITE MOTOR VEHICLES, THE MAXIMUM ALLOWABLE EMISSIONS SHALL BE 1.2 VOL. % CO AND 220 PPM HC.

(f) Alteration or replacement of vehicle engine.

(1) Any vehicle with an engine other than the one originally installed by the manufacturer or an identical replacement of such engine shall be subject to the test procedures and standards for the chassis type and model year of the vehicle.

(2) Any vehicle that is re-engineered from an internal combustion gasoline engine to another combustion or fuel type, shall be subject to the test procedures and standards for a gasoline powered vehicle.

(g) ON-BOARD DIAGNOSTIC II SYSTEM TEST PROCEDURES.

THE TEST SEQUENCE FOR ANY INSPECTION OF OBD II SYSTEMS ON MODEL YEAR 1996 AND NEWER LDV'S AND LDT'S ADMINISTERED BY THE COMMISSIONER OF MOTOR VEHICLES OR HIS DESIGNEE SHALL MEET THE REQUIREMENTS OF 40 CFR 51 AND 40 CFR 85 AND SHALL INCLUDE ALL PROCEDURES SET FORTH IN 40 CFR 85.2222.

Statement of Purpose: This amendment updates the motor vehicle emissions testing program standards implemented by the Commissioner of Motor Vehicles to conform to current requirements of the U.S. Environmental Protection Agency (EPA). Specifically, the amendment: (1) defines new on-board diagnostic test requirements; (2) deletes unnecessary on-road testing standards; (3) adds new emissions standards for vehicles subject to a pre-conditioned two speed idle exhaust emissions test procedure; (4) requires ASM 2525 exhaust emission standards consistent with federal guidance but for which the federal government has not adopted analogous standards; and (5) adds new emissions standards for diesel vehicles subject to a modified snap-acceleration smoke opacity test. The amendment will be submitted to EPA for approval as a revision to the State Implementation Plan.

CERTIFICATION

Be it known that the foregoing:

[x] Regulations ☐ Emergency Regulations

Are:

☐ Adopted [x] Amended as hereinabove stated ☐ Repealed

By the aforesaid agency pursuant to:

[x] Section 22a-174 of the General Statutes.

☐ Section_____of the General Statutes, as amended by Public Act No.____of the___Public Acts.

☐ Public Act No._____of the Public Acts.

After publication in the Connecticut Law Journal on November 18, 2003 of the notice of the proposal to:

☐ Adopt [x] Amend ☐ Repeal such regulations

(If applicable): [x] And the holding of a public hearing on the 23rd day of December 2003

WHEREFORE, the foregoing regulations are hereby:

☐ Adopted [x] Amended as herein above stated ☐ Repealed

Effective:

[x] When filed with the Secretary of State.

(OR)

☐ The __ day of _____ 200__.

	DATE	SIGNED *(Head of Board, Agency or Commission)*	OFFICIAL TITLE, DULY AUTHORIZED
In Witness Whereof:	July 12, 2004		Deputy Commissioner

	DATE	SIGNED	OFFICIAL TITLE, DULY AUTHORIZED
Approved by the Attorney General as to legal sufficiency in accordance with Sec. 4-169, as amended			7/15/04

☒ Approved

☐ Disapproved

☐ Disapproved in part, *(Indicate Section Numbers disapproved only)*

☐ Rejected without prejudice.

	DATE	SIGNED	OFFICIAL TITLE
By the Legislative Regulation Review Committee pursuant to Sec. 4-170 amended, of the General Statutes.	8/24/04		Administrator

Two certified copies received and filed, and one such copy forwarded to the Commission on Official Legal Publications in accordance with Section 4-172, as amended, of the General Statutes.

DATE SIGNED *(Secretary of the State.)* BY

INSTRUCTIONS

1. One copy of all regulations for adoption, amendment or repeal, except emergency regulations, must be presented to the Attorney General for his determination of legal sufficiency. Section 4-169 of the General Statutes

2. Seventeen copies of all regulations for adoption, amendment or repeal, except emergency regulations, must be presented to the standing Legislative Regulation Review Committee for its approval. Section 4-170 of the General Statutes

3. Each regulation must be in the form intended for publication and must include the appropriate regulation section number and section heading. Section 4-172 of the General Statutes.

4. Indicate by "(NEW)" in heading if new regulation. Amended regulations must contain new language in capital letters and deleted language in brackets. Section 4-170 of the General Statutes.

Office of Secretary of the State
State of Connecticut
30 Trinity Street, P.O. Box 150470, Hartford, CT 06115-0470

Susan Bysiewicz
Secretary of the State

Maria M Greenslade
Deputy Secretary of the State

RECEIVED
AUG 3 0 2004
Dept. of Environmental Protection
Office of the Commissioner

August 26, 2004

Hon. Arthur Rocque, Jr., Commissioner
Dept. of Environmental Protection
79 Elm Street
Hartford, CT 06105

Re: Agency Regulation Concerning:

Section 22a-174-27, Emissions Standards and On-Board Diagnostic II Test Requirements for Period Motor Vehicle Inspection and Maintenance

Regulation Review Committee Docket Number: 2004-059
Secretary of the State File Number: 5530

Dear Commissioner Rocque:

This is to acknowledge receipt of two certified copies of the above referenced regulation issued by your department.

Said regulation was received and filed in this office on August 25, 2004. The effective date of this regulation is August 25, 2004.

One of the two copies has been forwarded to the Commission on Official Legal Publications as required by law.

Sincerely,

Barbara Sladek
Assistant Coordinator
Records & Legislative Services

RECEIVED
AUG 3 0 2004
DEPT. OF ENVIRONMENTAL PROTECTION
OFFICE OF DEPUTY COMMISSIONER
AIR, WASTE AND WATER

CC: Commission on Official Legal Publications (Letter and Copy of Regulation)

File