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310 CMR 7.24 (9) Dispensing of E85 Motor Vehicle Fuel/Ethanol Blends

(a) Applicability:

Any person who owns, leases, operates or controls a Motor Vehicle Fuel Dispensing Facility for the purpose of dispensing E85 motor vehicle fuel/ethanol blends (E85 Dispensing System).

(b) Fuel Quality:

For purposes of compliance with 310 CMR 7.24(9), only ethanol meeting American Society for Testing and Materials (ASTM) Ed75Ed85 *Standard Specifications for Fuel Ethanol* may be blended with motor vehicle fuel meeting applicable Federal Reformulated Gasoline requirements (42 U.S.C. §7545(k)). Such blends shall only be blended in accordance with ASTM D5798-99 *Standard Specifications for Fuel Ethanol for Automotive Spark Ignition Engines*. Hereafter, said motor vehicle fuel and ethanol blend is referred to as E85.

(c) E85 Dispensing System Requirements

Any person subject to the requirements of 310 CMR 7.24(9) that modifies an existing motor vehicle fuel dispensing system or installs a new motor vehicle fuel dispensing system for the purpose of dispensing E85 shall modify or install said E85 dispensing system in accordance with the following requirements:

1. All tanks, piping, fittings, and joint-fixing materials shall be installed, operated and maintained in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification.
2. All tanks, piping, fittings, and joint-fixing materials shall be listed with Underwriters Laboratories, Inc. or certified by the manufacturer to be compatible with E85.
3. All motor vehicle fuel storage tanks shall be equipped with vapor balance return lines, submerged fill pipes, and a pressure vacuum vent valve.

(d) Maintenance Requirements

Any person subject to the requirements of 310 CMR 7.24(9) shall maintain said E85 dispensing system in accordance with the following requirements:

1. The E85 dispensing systems and its individual components shall be operated and maintained in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification.
2. Once every seven (7) days, the E85 dispensing system shall be visually inspected to determine if the system and its individual components are unbroken and correctly installed and functioning in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification. Each visual inspection shall include, but not be limited to, inspection of: nozzles; hoses; hose retractors; coaxial adaptors; dry breaks; fill caps and gaskets; vapor recovery caps and gaskets; spill containment boxes; and

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drain valves.

Visual inspections shall be performed only by a person who is trained to operate and maintain the E85 dispensing system in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification. A current record of all persons trained shall be maintained on site and include the following: the date training was last received; the trainee's printed name; and the personal signature of the trainee acknowledging receipt of training.

3. Any person subject to 310 CMR 7.24(9), upon obtaining knowledge that an E85 dispensing system component is incorrectly installed, non-functioning or broken, in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification, shall:

a. Immediately repair such component or immediately stop dispensing E85 through such component, conspicuously post "Out of Service" signs on the component, and repair it within 14 days of obtaining knowledge that the component is incorrectly installed, non-functioning or broken.

b. If the requirements of 310 CMR 7.24(9)(d)3.a. can not be met for an incorrectly installed, non-functioning or broken component, said component shall immediately be isolated and "Out of Service" signs conspicuously posted on it until such time as the component is correctly repaired.

Isolate shall mean, for the purposes of 310 CMR 7.24(9), to take out of service one or more components of an E85 dispensing system so that the remainder of the dispensing system operates in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification.

c. If an incorrectly installed, non-functioning or broken component cannot be repaired or isolated in accordance with 310 CMR 7.24(9)(d)3.a. or b., immediately stop dispensing E85 and conspicuously post "Out of Service" signs on all E85 dispensers until such time as all incorrectly installed, non-functioning or broken components are correctly repaired.

4. Routine maintenance or minor modification of an E85 dispensing system. Applicable compliance testing, record keeping and compliance certification submittals, as a result of routine maintenance or minor modification of an E85 dispensing system, are subject to the requirements of 310 CMR 7.24(9)(e)3.

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(e) Record Keeping

Any person subject to the requirements of 310 CMR 7.24(9) shall comply with the following:

1. E85 dispensing system maintenance records shall be maintained on site, in a centralized location, for the most recent rolling twelve-month period. Such records may be either (a) hard copy documents or (b) electronic documents, provided that a hard copy of the electronic documents shall be printed on-site immediately upon request. Such maintenance records shall include:
 - a. all of the facility's E85 weekly inspection checklists for the prior rolling twelve-month period, identifying:
 - i. the date each weekly visual inspection was performed and the signature of the person who performed the visual inspection;
 - ii. any component determined to be incorrectly installed, non-functioning or broken;
 - iii. whether the component determined to be incorrectly installed, non-functioning or broken component was immediately repaired, taken out of service and repaired within 14 days, isolated, or the facility stopped dispensing E85 and all E85 dispensers were taken out of service until the component was repaired;
 - iv. the date incorrectly installed, non-functioning or broken component was repaired.
 - b. A copy of compliance testing company test results for all compliance tests performed as required by 310 CMR 7.24(9)(f) during the prior rolling twelve-month period.
 - c. A copy of the E85 dispensing system's currently applicable E85 Compliance Certification.
2. All E85 dispensing system maintenance records shall be made available to the Department and/or the US EPA immediately upon request. In the event requested records cannot be made immediately available, requested records shall be delivered to the Department and/or the US EPA, as applicable, within 24 hours of the initial request.
3. Compliance testing, record keeping and submittal of compliance certifications as a result of routine maintenance or minor modification of an E85 dispensing system.
 - a. In the event of routine maintenance of an E85 dispensing system, a

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record of such maintenance shall be maintained on site as required by 310 CMR 7.24(9)(e) 1. - 2.. Compliance testing and submittal of a compliance certification to the Department is not required.

Routine Maintenance shall mean, for the purposes of 310 CMR 7.24(9), the regular re-installation, repair or replacement of one or more E85 dispensing system components including, but not limited to: hoses; nozzles; breakaways; swivels; hose retractors; bucket plow rings; “slip-on” spill or dry break buckets; “O” rings and seals; submersible pumps or suction pipes; fill adaptors; fill tubes; vapor adaptors; fill and vapor caps; drain valves; monitor caps; or riser caps.

- b. In the event of a minor modification of an E85 dispensing system, a Pressure Decay Test shall be performed and passed prior to commencing system operation and a record of such modification and test results shall be maintained on site as required by 310 CMR 7.24(9)(e)1.-2. Submittal of a compliance certification to the Department is not required.

Minor Modification shall mean, for the purpose of 310 CMR 7.24(9), the replacement or repair of: “screw-on” spill or dry break bucket, <50% of total dispensers (e.g., 1 of 4 dispensers), <50% of dispenser piping, or replace/repair ball float extractor valve housings.

(f) Compliance Testing and Certification

1. Installation/Substantial Modification Certification.

- a. Any person subject to the requirements of 310 CMR 7.24(9) who installs a new E85 dispensing system or makes a substantial modification to an existing E85 dispensing system shall, prior to commencing operation, perform and pass the following compliance tests:
 - i. Pressure Decay Test (Bay Area Air Pollution Control District Source Test Procedure ST-30 (2/6/91));
 - ii. P/V Vent Cap Test (Leak Rate and Cracking Pressure of Pressure/Vacuum Valves CARB TP-201.1E); and
 - iii. Underground Piping Check (Vapor Tie) Test (San Diego County Air Pollution Control District Test Procedure TP-96-1, Section 5.1.9).

Substantial Modification shall mean, for the purposes of 310 CMR 7.24(9), the: re-installation, repair or replacement of 50% or more of the E85 dispensers (e.g., 2 of 4 dispensers); re-installation, repair or replacement of E85 dispensing system components requiring excavation below a shear valve or tank pad (e.g., vent piping, two-point or coaxial Stage I systems; or motor vehicle fuel storage tanks); or the installation, repair or replacement of a tank

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and/or fuel distribution system. If the re-installation, repair or replacement of one or more E85 dispensers occurs at an E85 dispensing system with two or fewer dispensers, the re-installation, repair or replacement of all E85 dispensers shall be a Substantial Modification.

- b. Within 7 days of performing and passing said tests as required by 310 CMR 7.24(9)(f)1.a., submit to the Department a fully completed and signed E85 Dispensing System Installation/Substantial Modification Certification (Form A), attesting to compliance with the following requirements:
 - i. the E85 dispensing system components are installed or substantially modified in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification; and
 - ii. the required Pressure Decay Test, P/V Vent Cap Test and Vapor Tie Test were performed and passed prior to commencing operation.
- c. Any person subject to the requirements of 310 CMR 7.24(9)(f)1. shall attach to the required Form A, a copy of the Notification For Storage Tanks Regulated Under 527 CMR 9.00 (FP-290) Form, for the installation of said E85 dispensing system on record with the Massachusetts Department of Fire Safety.

2. Annual In-Use Compliance Certification.

- a. Any person subject to the requirements of 310 CMR 7.24(9) shall annually perform and pass a Pressure Decay Test and P/V Vent Test and submit (not more than 365 days after the postmarked date on the envelope used to submit Form A) to the Department a fully completed and signed E85 Annual In-Use Compliance Certification (Form B), attesting to the following:
 - i. the installed E85 Dispensing System is operated and maintained in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification; and
 - ii. the required Pressure Decay Test and P/V Vent Test were performed and passed not more than 30 days prior to the date postmarked on the envelope used to submit the required Form B to the Department.
- b. Any person subject to the requirements of 310 CMR 7.24(9) that fails a required Pressure Decay Test and/or P/V Vent Test shall immediately:

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- i. repair incorrectly installed, non-functioning or broken component(s) in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification;
 - ii. re-test and pass the required test(s); and
 - iii. submit to the Department the required Form B on or before the facility's Annual In-Use Compliance Certification submittal due date or within 30 days of the date of the E85 dispensing system's first passing test result, whichever occurs first.
- c. If an applicable E85 dispensing system fails a required Pressure Decay Test and/or P/V Vent Test and the incorrectly installed, non-functioning or broken component(s) cannot be immediately repaired and the system retested with passing test results, then any person subject to the requirements of 310 CMR 7.24(9) shall:
 - i. immediately isolate the incorrectly installed, non-functioning or broken component(s) from the E85 dispensing system so that the remainder of the system passes the required test(s); and
 - ii. submit to the Department the required Form B based on passing test results for the remainder of the E85 dispensing system on or before the facility's Annual In-Use Compliance Certification submittal date or within 30 days of said system's first passing test result, which ever occurs first.
 - iii. Any E85 dispensing system component isolated from the remainder of said system shall remain isolated until such time as said component is repaired in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification; and all applicable compliance testing, record keeping and certification requirements for the Routine Maintenance, Minor Modification, or Substantial Modification of an E85 dispensing system are complied with as set forth in 310 CMR 7.24(9)(e)3. or (f)1., as applicable.
- d. If an E85 dispensing system fails a required Pressure Decay Test and/or P/V Vent Cap Test and the incorrectly installed, non-functioning or broken components cannot be repaired or isolated as described in 310 CMR 7.24(9)(f) 2. b. or c., then any person subject to the requirements of 310 CMR 7.24(9) shall immediately stop dispensing E85 and conspicuously post "Out of Service" signs on all E85 dispensers until such time as:

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- i. all incorrectly installed, non-functioning or broken components are repaired in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification; and
 - ii. the required Pressure Decay Test and/or P/V Vent Test are performed and passed.
 - iii. Any person subject to the requirements of this section shall submit to the Department, within seven days of performing and passing the required tests, a fully completed Form B as required by 310 CMR 7.24(9)(f) 2..
 - e. Any person subject to the requirements of 310 CMR 7.24(9) who owns, leases, operates or controls an E85 dispensing system that fails a required Pressure Decay Test and/or P/V Vent Test and the incorrectly installed, non-functioning or broken components cannot be repaired or isolated as required by 310 CMR 7.24(9)(f)2.b. or c., before the System's currently applicable Annual In-Use Compliance Certification submittal date, shall submit to the Department a fully completed and signed E85 Facility Closure Notification (Form D) on or before said facility's applicable Annual In-Use Compliance Certification submittal due date. Upon making all necessary repairs to the E85 dispensing system, the owner, lessee, operator or controller of said E85 dispensing system shall perform and pass all required compliance tests and submit to the Department a Form A as required by 310 CMR 7.24(9)(f) 1.
3. Any E85 Dispensing System Certification submitted to the Department as required in 310 CMR 7.24(9)(f) shall be signed by an E85 Dispensing System Responsible Official in accordance with 310 CMR 7.24(9)(h).
 4. Compliance tests performed for the purposes of compliance with requirements of 310 CMR 7.24(9) shall be performed only by a compliance testing company in accordance with 310 CMR 7.24(9)(i).
 5. Any person subject to the requirements of 310 CMR 7.24(9), upon written notice from the Department, shall perform such compliance tests as the Department determines necessary and shall submit the results to the Department within 14 days of the performance of said tests.

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1. Any person, upon entering into a purchase, lease or other contractual agreement by which said person becomes the owner, lessee, operator, or controller of an E85 dispensing system shall submit to the Department, within 30 days of the date of becoming said owner, lessee, operator, or controller or within 10 days of a written request from the Department, a fully completed New E85 Dispensing System Owner, Lessee, Operator, or Controller Notification (Form C).
 - a. Said notification shall include the following: the name of the new E85 dispensing system owner, lessee, operator, or controller and related business documentation, including the name and address of the facility where the E85 dispensing system is located; and
 - b. the date said person became the new owner, lessee, operator, or controller.

2. The Form C shall be signed by the Responsible Official(s) for the new owner, lessee, operator, or controller of the E85 dispensing system, attesting to the following:
 - a. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment; and
 - b. I am fully authorized to make this attestation on behalf of this facility.

3. Any person subject to the requirements of 310 CMR 7.24(9), upon entering into a sale, lease or other contractual agreement by which said person is no longer the owner, lessee, operator, or controller of said E85 dispensing system shall submit to the Department, within 30 days of the date of said sale, lease or other contractual agreement, a signed letter notifying the Department of the following:
 - a. the name of the person no longer the owner, lessee, operator, or controller of the E85 dispensing system, the facility name, E85 Facility Customer Code Number and address;
 - b. the name of the new owner, lessee, operator, or controller of the E85 dispensing system and related business information, including the new facility name and address; and
 - c. the effective date of the change of owner, operator, lessee or controller.

4. Any person subject to the requirements of 310 CMR 7.24(9) seeking to

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permanently or temporarily take out of use an E85 dispensing system shall submit to the Department a fully completed and signed E85 Dispensing System Closure Notification (Form D).

- a. Said notification shall include the following:
 - i. the name of the E85 dispensing system owner, lessee, operator, or controller and related business information, including the name and address of the facility where the E85 dispensing system is located;
 - ii. the E85 Facility Customer Code number for the applicable facility; and
 - iii. a copy of the Notification For Removal or Closure of In Place Underground Storage Tanks Regulated Under 527 CMR 9.00 (FP-290R) Form, documenting the permanent or temporary out of use status of said E85 system on record with the Massachusetts Department of Fire Safety.
 - b. The temporary out of use status of an E85 dispensing system shall be renewed as necessary by any person subject to the requirements of 310 CMR 7.24(9) by submitting a new, fully completed Form D on or before the annual anniversary of the effective date said dispensing system was taken out of use, as noted in the required FP-290R Form. Said renewal shall include a current FP-290R Form for said dispensing system on record with the Massachusetts Department of Fire Safety documenting the system's continued temporary out of use status.
 - c. Any person subject to the requirements of 310 CMR 7.24(9) who temporarily takes out of use an E85 dispensing system shall, prior to re-commencing the distribution of E85, perform and pass applicable compliance tests and submit to the Department a fully completed Form A as required by 310 CMR 7.24(9)(f) 1.
 - d. Any person subject to the requirements of 310 CMR 7.24(9), where the E85 dispensing system is permanently taken out of use, shall no longer be subject to the requirements of 310 CMR 7.24(9) as of the date the facility was taken out of use as noted in the required FP-290R Form.
5. Any notification submitted to the Department as required in 310 CMR 7.24(9)(g) shall be signed by a Responsible Official for the E85 dispensing system as required by 310 CMR 7.24 (9)(h).

(h) E85 Dispensing System Responsible Official Certification of Compliance.

1. Except in circumstances described in 310 CMR 7.24(9)(h) 2. below, all E85

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Dispensing System Certifications and Notifications submitted to the Department shall be signed by an individual who is a Responsible Official for the E85 dispensing system.

Responsible Official shall mean, for the purposes of 310 CMR 7.24(9), in the case of:

- a. A sole proprietorship - the sole proprietor.
 - b. A partnership - a general partner with the authority to bind the partnership.
 - c. A corporation or a non-profit corporation - a corporate official with authority to bind the corporation such as a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions of the corporation.
 - d. A municipality or other public agency - a principal executive officer or ranking elected official who is empowered to enter into contracts on behalf of the municipality or public agency.
2. For E85 dispensing systems owned by one party and leased, operated or controlled by another independent party and where both parties have separate E85 dispensing system compliance responsibilities, the required certifications and notifications shall be signed by Responsible Officials for each party regarding E85 dispensing system compliance. Each E85 dispensing system Responsible Official shall attest to the following:
- a. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment;
 - b. that systems to maintain compliance are in place at the facility and will be maintained for the coming year even if the processes or operating procedures are changed over the course of the year; and
 - c. I am fully authorized to make this attestation on behalf of this facility.
3. Any person immediately responsible for obtaining information referenced in an applicable E85 compliance certification or notification, who knowingly and willfully makes false, inaccurate, incomplete or misleading statements

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pursuant to said certification or notification, may be in violation of 310 CMR 7.24(9). Notwithstanding the previous sentence, any person subject to the requirements of 310 CMR 7.24(9) shall comply with all applicable provisions of said regulation.

(i) Compliance Testing Company Requirements

1. Any person who owns, leases, operates or controls a company performing compliance tests for the purpose of 310 CMR 7.24(9), shall submit to the Department, prior to performing said tests, a fully completed Stage II Compliance Testing Company Notification, as required by 310 CMR 7.24(6)(g).

2. Any person subject to the requirements of 310 CMR 7.24(9)(i), shall perform the following E85 compliance tests only in accordance with the applicable test procedures cited below:
 - a. Pressure Decay Test (Bay Area Air Pollution Control District Source Test Procedure ST-30 (2/6/1991)) and Table A. Minimum Allowable Pressure.

Ullage (Gal)	Minimum Allowable Pressure ("wc)	Ullage (Gal)	Minimum Allowable Pressure ("wc)
500	3.70	6,000	9.38
600	4.50	7,000	9.46
700	5.20	7,500	9.50
800	5.80	8,000	9.52
900	6.20	9,000	9.56
1,000	6.50	10,000	9.60
1,250	7.05	11,000	9.62
1,750	7.90	12,000	9.64
2,000	8.20	13,000	9.66
2,250	8.35	14,000	9.68
2,500	8.50	15,000	9.70
2,750	8.60	16,000	9.71
3,000	8.70	17,000	9.71
3,250	8.80	18,000	9.72
3,500	8.90	19,000	9.73
3,750	9.00	20,000	9.73
4,000	9.10	21,000	9.74
4,250	9.15	22,000	9.75
4,500	9.20	23,000	9.75
4,750	9.25	24,000	9.76
5,000	9.30	25,000	9.77
		30,000	9.80

Note: For a valid test, total ullage must be at least 500 gallons but no more than 30,000 gallons.

- b. Underground Piping Check (Vapor Tie) Test (San Diego County Air Pollution Control District Test Procedure TP-96-1, Section 5.1.9)

- c. Pressure/Vacuum Vent Test (Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, CARB TP-201.1E) P/V relief vents

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shall be tested to be within .29oz/in² or 0.5 inches of water column of the designed pressure and within 1.2oz/in² or 2.0 inches of water column of the vacuum settings.

3. Any person subject to the requirements of 310 CMR 7.24(9)(i) shall perform applicable E85 compliance tests, only upon:
 - a. having been trained in accordance with the applicable compliance test protocols and procedures required by 310 CMR 7.24(9)(i) 2.;
 - b. confirmation that all above ground E85 dispensing system components including, but not limited to: nozzles; hoses; hose retractors; coaxial adaptors; dry breaks; fill caps and gaskets; vapor recovery caps and gaskets; spill containment boxes; and drain valve(s) are (i) installed and (ii) the correct components are installed in accordance with the terms and conditions of the applicable Underwriters Laboratories, Inc. listing and/or manufacturer's certification; and
 - c. if the E85 dispensing system has two or more motor vehicle fuel storage tanks, confirmation that said tanks are properly manifolded.

4. Any person subject to the requirements of 310 CMR 7.24(9)(i) shall certify to the Department that compliance tests performed to meet the requirements of 310 CMR 7.24(9)(f) were performed as required by 310 CMR 7.24(9)(i) 2. and 3. As applicable, said certification shall be submitted on an E85 Installation/Substantial Modification Certification or Annual In-Use Compliance Certification and shall include:
 - a. the date each compliance test was first performed and the result;
 - b. the date each compliance test was performed and passed;
 - c. a notation whether, (i) the entire installed E85 dispensing system was tested and passed all applicable compliance tested or (ii) incorrectly installed, non-functioning or broken components were isolated from the remainder of the installed E85 dispensing system and the remainder of E85 dispensing system was tested and passed all applicable compliance tests;

 - d. if the remainder of the E85 dispensing system was tested and passed all applicable compliance tests, as noted in 310 CMR 7.24(9)(i) 4.c., identify all components isolated from the remainder of the E85 dispensing system; and

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- e. a certification completed and signed by a Compliance Testing Company Responsible Official, attesting to the following:
 - i. I certify that I personally examined the foregoing and am familiar with the information contained in this document and all the attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment; and
 - ii. I am fully authorized to make this attestation on behalf of this Stage II Compliance Testing Company.
- 5. Any person subject to the requirements of 310 CMR 7.24(9)(i) shall maintain for each E85 dispensing system tested, a complete set of compliance testing records. Said records shall be maintained for a minimum of five years, at the compliance testing company location(s) referenced on the Stage II Compliance Testing Company Notification form as required by 310 CMR 7.24(9)(i) 1. Said records shall be maintained by the address where the E85 dispensing system is installed, and include:
 - a. the date and first result for each required test performed;
 - b. the date each test was performed and passed; and
 - c. an itemized list of all E85 dispensing system components re-installed, repaired or replaced as necessary for the system to pass the applicable test(s).
- 6. All records maintained as required by 310 CMR 7.24(6)(i) 5. shall be made available to the Department or the US EPA immediately upon the request of either.