

# **Article XXVI**

## **Gasoline Dispensing Sites and Transport Vehicles**

(Statutory authority: Delegation of Authority from New York State Department of Environmental Conservation Title 6 NYCRR Part 201 and Environmental Conservation Law, §3-0301,§19-0301)

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## **§ 873.2601 Definitions.**

- (1) *Annual throughput.* The amount of gasoline transferred into or dispensed from a gasoline dispensing site during 12 consecutive months.
- (2) **Commissioner.** The Term Commissioner shall mean the Commissioner of Health for the County of Westchester.
- (3) **County.** The term shall mean the County of Westchester.
- (4) **Department.** The term shall mean the Westchester County Department of Health.
- (5) *Equivalent control.* The use of alternate operational and/or equipment controls for the reduction of gasoline vapor emissions, that have been approved by the commissioner, such that the aggregate emissions of gasoline vapor from the facility do not exceed those from the application of defined reasonably available control technology.
- (6) *Gasoline.* A volatile liquid mixture containing hydrocarbons or a blend of this mixture with one or more oxygen containing ashless organic compounds, such as alcohols or ethers, which is suitable for use in motor vehicles with spark-ignition, internal combustion engines and which is commonly or commercially known or sold as gasoline.
- (7) *Gasoline dispensing site.* Any site where gasoline is dispensed into vehicle fuel tanks or into portable containers used to fuel any motor from any stationary storage container(s) larger than 250 gallons.

(8) *Gasoline transport vehicle*. Any tank truck, trailer or railroad tank car, with a capacity of 300 gallons or more, used for the transportation of gasoline.

(9) *Stage I vapor collection system*. A system where gasoline vapors are forced from a gasoline storage tank into a vapor-tight gasoline transport vehicle or vapor control system through direct displacement by the gasoline being loaded.

(10) *Stage II vapor collection system*. A system where at least 90 percent, by weight, of the gasoline vapors that are displaced or drawn from a vehicle fuel tank during refueling are captured and either retained in the storage tanks or destroyed in an emission control device.

(11) *State*. The term shall mean the New York State Department of Environmental Conservation.

(12) *Submerged filling*. The use of a fill pipe or drop tube whose discharge opening is entirely submerged when the liquid is six inches above the bottom of the container. For containers loaded from the side, *submerged filling* is defined as the use of a fill pipe whose discharge is entirely submerged when the liquid level is 18 inches, or twice the diameter of the fill pipe, whichever is greater, above the bottom of the container.

(13) *Substantially modified*. A modification of an existing gasoline dispensing site which involves the addition of one or more new stationary gasoline storage tanks or the repair, replacement or reconditioning of an existing tank.

(14) *Vapor control system*. A system that prevents emissions to the outdoor atmosphere from exceeding 4.7 grains per gallon (80 grams per 1,000 liters) of petroleum liquid loaded.

## **§ 873.2602 Gasoline dispensing sites - prohibitions and requirements.**

(1) No person may transfer or allow the transfer of gasoline into storage tanks at gasoline dispensing sites whose annual throughput exceeds 120,000 gallons, unless the site has been properly registered with the Department and the gasoline storage tank is equipped with:

(a) a stage I vapor collection system consisting of a vapor-tight return line from the storage tank, or its vent, to the gasoline transport vehicle;

- (b) a properly installed onsite vapor control system connected to a vapor collection system; or
  - (c) an equivalent control system.
- (2) Stationary gasoline storage tanks with a capacity of 250 gallons or more, installed or modified after January 1, 1979, at any gasoline dispensing site located in the County, except for gasoline tanks with a capacity less than 550 gallons used exclusively for farm tractors which are used for agricultural purposes or for snowplowing, must have a stage I vapor collection or vapor control system regardless of the annual throughput of gasoline.
- (3) No owner and/or operator of a gasoline dispensing site after the effective date of this article may transfer or allow the transfer of gasoline into a motor vehicle fuel tank at gasoline dispensing sites located in the County whose annual throughput exceeds 120,000 gallons, unless the gasoline dispensing site is equipped with a stage II vapor collection system which has been approved by the State. A list of stage II systems which have been approved by the State is available on request. Approval of a stage II vapor collection system will be based on a determination that a properly installed and operated system will control at least 90 percent by weight of the gasoline vapors that are displaced or drawn from a vehicle fuel tank during refueling. The list of approved stage II systems is revised periodically to include new systems and components.
- (4) Stage I and stage II vapor collection system are required at any gasoline dispensing site located in the County, except for gasoline tanks with a capacity less than 550 gallons used exclusively for farm tractors which are used for agricultural purposes or for snowplowing, which is constructed, replaced, or substantially modified after June 27, 1987.
- (5) Stationary gasoline storage tanks installed before January 2, 1979 at gasoline dispensing sites located in the County whose annual throughput does not exceed 120,000 gallons, must be equipped for submerged filling.
- (6) Stationary gasoline storage tanks with a capacity less than 550 gallons used exclusively for farm tractors which are used for agricultural purposes or snowplowing which were constructed after January 1, 1979 at gasoline dispensing sites located in the County must be equipped for submerged filling.

(7) Owners and/or operators of gasoline storage tanks, gasoline transport vehicles and gasoline dispensing sites subject to stage I and/or stage II vapor collection or vapor control system requirements must:

- (a) install all necessary stage I and/or stage II vapor collection and control systems, and make any modifications necessary to comply with the requirements;
- (b) provide adequate training and written instructions to the operator of the affected gasoline dispensing site and the gasoline transport vehicle;
- (c) replace, repair or modify any worn or ineffective component or design element to ensure the vapor-tight integrity and efficiency of the stage I vapor collection and vapor control systems;
- (d) connect and ensure proper operation of the stage I and/or stage II vapor collection and control systems whenever gasoline is being loaded, unloaded or dispensed;
- (e) with respect to stage I vapor collection systems, connect the stage I vapor collection hose before connecting the gasoline delivery hose to the gasoline transport vehicle, and disconnect the gasoline delivery hose before disconnecting the stage I vapor collection hose from the gasoline transport vehicle and:
  - i. ensure that the product fill cap or vapor cap is properly installed; and
  - ii. ensure that the poppet/dry break maintains the proper vapor seal.
- (f) with respect to stage II vapor collection systems, conspicuously post operating instructions for the system on each dispenser which include:
  - (i) a clear description of how to correctly dispense gasoline with the vapor recovery nozzles utilized at the site;
  - (ii) a warning that continued attempts at dispensing gasoline after the system indicates that the vehicle tank is full may result in spillage or recirculation of gasoline; and

(iii) the telephone number established by the department for use by the public to report problems experienced with the stage II vapor recovery systems in the County.

(8) The modification, removal, replacement or addition of any element which would render the stage II vapor collection system inoperative or impair its integrity and efficiency is prohibited.

(9) Any owner or operator of a gasoline-dispensing site which is not regulated by this Article must comply with all other applicable Parts of this Article. Certification of a stage II vapor collection system by the department does not relieve the owner and/or operator of the responsibility to comply with other applicable codes and regulations pertaining to fire prevention, weights and measures and safety matters.

(10) The Stage II vapor collection system must have no defective, malfunctioning or missing components.

(11) For the purposes of this section, a defect in a Stage II vapor collection system shall include:

- (a) Absence or disconnection of any part required to be used in such Stage II Vapor collection system;
- (b) A vapor hose which is crimped, crushed or flattened such that the vapor passage is impeded or blocked;
- (c ) presence of holes of  $\frac{1}{4}$  inch or more in diameter;
- (d ) slits and tears totaling more than 1 inch;
- (e ) material weathering so as to allow vapor loss;
- (f ) improper length so as to allow contact with the pavement;
- (g) A nozzle boot which has a hole of  $\frac{1}{4}$  inch or more in diameter, a tear or a slit 1 inch or more in length;
- (h) A faceplate, or flexible cone on a boot which is damaged so that the ability to achieve a seal with a fill pipe interface is affected for at least  $\frac{1}{4}$  of the total circumference or more of the faceplate or flexible cone;

(i) A hose retractor which does not automatically return the hose to the top of the retractor assembly, or which allows the hose to sag and contact the pavement;

(j) A hose, nozzle boot, faceplate, retractor assembly or any component of a vapor recovery system which has been repaired with tape, glue or other unapproved methods etc.

(12) Daily visual inspections of components of stage II vapor collection systems must be performed to ensure the integrity and efficiency of the system.

(a ) A written log is to be maintained detailing who made the daily inspection, the inspection dates, any problems found and corrective actions taken.

(13) Dispensers with defective stage II components must be removed from service, locked and sealed to prevent vapor loss from operational dispensers until approved replacement parts are installed.

(14) Stage II systems must be constructed and maintained to prevent accumulations of liquids which block vapor return lines. Underground vapor lines must be sloped from the dispensers to the underground storage tanks or equipped with a condensate trap to allow liquid to accumulate without blocking the vapor return line. All vapor return line condensate traps must be accessible and must be emptied periodically to prevent blockage.

(15) *Testing requirements.*

(a) (i) Owners and/or operators of stage II systems installed or modified after July 20, 1994 must perform dynamic back pressure, liquid blockage, and leak tests before commencing operation.

(ii) Owners and/or operators of stage II systems must perform dynamic back pressure, liquid blockage, and leak tests at five year intervals after commencing operation.

(b) (i) Back pressure during dynamic back pressure tests must not exceed 0.45 inches of water column gauge at a flow rate of 60 cubic feet per hour or 0.95 inches of water column gauge at a flow rate of 100 cubic feet per hour.

- (ii) Back pressure during liquid blockage tests must not exceed 0.03 inches of water column gauge above the dynamic back pressure test results for the system for flow rates of 60 and 100 cubic feet per hour.
- (iii) Pressure in gasoline storage tanks must not fall below the values in Table 1 after five minutes from an initial pressure of 10.0 inches of water column during the leak test.

<b>Table 1</b> <b>Leak Test Criteria for Gasoline Dispensing Sites with Stage II Vapor Recovery</b>	
<i><b>Ullage Space (Gallons)</b></i>	<i><b>Minimum Pressure After 5 Minutes (Inches of Water)</b></i>
500	3.7
600	4.5
700	5.2
800	5.8
900	6.2
1,000	6.5
1,500	7.6
2,000	8.2
2,500	8.5
3,000	8.7
3,500	8.9
4,000	9.1
4,500	9.2
5,000	9.3
7,500	9.5
10,000	9.6
15,000	9.7
30,000	9.8

Use linear interpolation for intermediate values.

## **§ 873.2603 Gasoline transport vehicles - applicability.**

This Part applies to owners and operators of all gasoline transport vehicles which:

- (1) deliver gasoline to any gasoline dispensing site required to be equipped with a stage I vapor collection system or equivalent, including such gasoline dispensing sites located in jurisdictions adjacent to the County; or
- (2) convey gasoline either to or from any gasoline loading terminal or gasoline bulk plant which is required by Title 6 NYCRR Part 229 of the State to be equipped with a vapor control system or equivalent control.

## **§ 873.2604 Gasoline transport vehicles - prohibitions and requirements.**

- (1) No owner or operator of a gasoline transport vehicle subject to this Article will allow said vehicle to be filled or emptied unless the gasoline transport vehicle:
  - (a) sustains a pressure change of not more than three inches of water (six millimeters of mercury) in five minutes when pressurized to a gauge pressure of 18 inches of water (34 millimeters of mercury) and evacuated to a gauge pressure of six inches of water (11 millimeters of mercury);
  - (b) is repaired by the owner or operator within 15 days after failing to meet the pressure change standard in this section; and
  - (c) displays a marking, near the U.S. Department of Transportation certificate plate, in letters and numerals at least two inches high, which reads: NYS DEC and the date on which the gasoline transport vehicle was last tested.
- (2) All gasoline transport vehicles subject to this Article must be tested annually by the owner or his agent, using test methods acceptable to the commissioner. Reference method 27 in Appendix A of 40 CFR part 60 is considered to be an acceptable method. (See table 1, of 6 NYCRR Part 200.9 of the State.) If the pressure-vacuum test does not show

compliance with the pressure change standard, the gasoline transport vehicle must be repaired to make the tank vapor-tight, and retested.

- (3) (a) Gasoline transport vehicles, which are loaded at gasoline terminals or gasoline bulk plants with an average daily throughput of 20,000 gallons or more located in the County, must pass a pressure-vacuum test.
  - (b) Gasoline transport vehicles, which deliver gasoline to gasoline dispensing sites located in the County which are required to install stage I vapor collection systems pursuant to section 873.2602 of this Article, must pass an initial pressure-vacuum test.
  - (c) Gasoline transport vehicles, which are loaded at gasoline terminals located inside of the County and/or deliver gasoline to gasoline dispensing sites required to install stage I vapor collection systems located either inside or outside of the County, must pass an initial pressure-vacuum test.
- (4) At the discretion of the commissioner, the requirements for testing and marking gasoline transport vehicles subject to this Article may be satisfied if the vehicle undergoes equivalent certification in another state.
- (5) During the loading or unloading of a gasoline transport vehicle subject to this Article, leakage of vapors from any component of the gasoline transport vehicle, or the vapor collection or control system, must not equal or exceed 100 percent of the lower explosive limit (LEL measured as propane), when measured at a distance of one inch with a combustible gas detector. No avoidable visible liquid leak from such components is allowed. Components of the transport vehicle or vapor collection or control system include all piping, seals, hoses, connections, pressure-vacuum seals, and other possible leak sources. The combustible gas detector used for determining compliance with this standard will have a minimum range of 0-100 percent of the LEL as propane, a probe with an external diameter of one quarter inch (0.625 cm), and a response time less than 30 seconds with sampling line and probe attached, and be properly calibrated.
- (6) No owner or operator of a gasoline transport vehicle subject to this Article will allow a compartment on said vehicle to be loaded under a pressure exceeding 18 inches of water (34 millimeters of mercury) gauge, or to be unloaded under a vacuum exceeding six inches of water (11 millimeters of mercury) gauge, or to be unloaded under pressure.

(7) Dome covers on gasoline transport vehicles subject to this Article must be closed while the transport vehicle is being loaded, being unloaded or in motion, except when gasoline transport vehicles are hatch-loaded in conformance with 6 NYCRR Part 229.3(c)(3)(ii) or 229.3(d)(2)(i) of the State.

## **§ 873.2605 Gasoline dispensing sites - recordkeeping and reporting.**

(1) The owner and/or operator of any gasoline dispensing site in the County must maintain records showing the quantity of all gasoline delivered to the site. These records must be retained at the gasoline dispensing site for at least two years, and must be made available to the commissioner or the commissioner's representative upon request at any reasonable time.

(2) The sum of all gasoline deliveries to a gasoline-dispensing site during the previous 12 consecutive months will be used to determine whether the requirements of section 873.2602 of this Article apply. Once a gasoline-dispensing site becomes subject to the requirements of section 873.2602 because its annual gasoline throughput exceeds an applicability level, subsequent decreases in gasoline deliveries or throughput do not excuse a source owner from having to maintain the effectiveness of the stage I and/or stage II equipment.

(3) The owner or operator of a gasoline dispensing site must conspicuously post a copy of the registration form required by Section 873.2602 of this Article at the gasoline dispensing site in a location accessible for inspection during all operational hours.

(4) Owners and/or operators of gasoline dispensing sites required to perform tests of stage II systems pursuant to section 873.2602(14) of this Article must submit a notarized report of test results to the department within 30 days of the test.

(a) These test results must also be retained at the gasoline dispensing site for five years following the test, and must be made available for inspection by the commissioner's representative during normal business hours.

## **§ 873.2606 Gasoline transport vehicles - recordkeeping and reporting.**

(1) The owner of any gasoline transport vehicle subject to this Article must maintain records of pressure-vacuum testing and repairs. The records must include the identity of the gasoline transport vehicle, the results of the testing, the date that the testing and repairs, as needed, were done, the nature of needed repairs and the date of retests where appropriate.

(a) All gasoline transport vehicles must be pressure-vacuum tested annually.

(2) A copy of the most recent pressure-vacuum test results, in a form acceptable to the commissioner, must be kept with the gasoline transport vehicle.

(3) Records acceptable to the commissioner must be retained for two years after the testing occurred, and must be made available to the commissioner or his representative on request at any reasonable time.

## **§ 873.2607 Variances.**

Where it can be shown to the satisfaction of the commissioner that a gasoline dispensing site or gasoline transport vehicle cannot comply with the requirements of this Article for reasons of technological or economic feasibility, the commissioner may, upon submission of satisfactory evidence, grant to the source owner or operator a variance from the requirements of this Article and accept a lesser degree of control or an alternate compliance schedule.

## **§ 873.2608. Fees**

The commissioner may establish a registration fee to recover any direct cost associated with the implementation, administration or enforcing of this article.

## **§ 873.2609. Training**

The Commissioner may establish and conduct or designate training programs and require that owners and or operators of gasoline dispensing sites and or gasoline transport vehicles attend them.

## **§ 873.2610. Registration**

- (1) The Owner or operator of gasoline dispensing sites located in the County covered in this article shall register the facility within 30 days of the enactment of this article.
- (2) Registration shall be good for 5 years
- (3) Registration shall not be transferable
- (4) New owners shall have 15 days after the transfer of ownership to re-register the facility.
- (5) The owner must register any new facility with the Department before it is placed in service.