SECTION 102: GASOLINE DISPENSING FACILITIES

102.1 PURPOSE

(a) Section 102 implements Control Technique Guidelines Reasonably Available Control Technology (CTG RACT) requirements for each gasoline dispensing facility (GDF) as required by Section 182(b)(2)(A) of the Clean Air Act (Act) under Title 42, Section 7511a of the U.S. Code (42 U.S.C. 7511a).

(b) This section regulates the use of CARB-Certified Enhanced Vapor Recovery (EVR) as a contingency measure for achieving the 2015 National Ambient Air Quality Standard for ozone as required by Section 172(c)(9) of the Act under 42 U.S.C. 7502.

102.2 APPLICABILITY

(a) Section 102 is applicable to any owner or operator of a gasoline dispensing facility (GDF) located:

(1) In Hydrographic Area 212 (the Las Vegas Valley) in Clark County; or

(2) In any other hydrographic area that the Administrator has designated nonattainment for ozone and has classified as a moderate or higher ozone nonattainment area on or after January 5, 2023.

(b) The provisions of Sections 102.4(a) and (b) (related to permitting requirements) shall not apply to an owner or operator whose total combined gasoline throughput is less than 120,000 gallons during any consecutive 12-month period.

(c) Section 102 does not apply to any gasoline storge tank whose capacity is less than 250 gallons (946 liters).

(d) The provisions of Section 102.7 (related to gasoline storage tanks vapor recovery control standards) shall not apply to the loading of gasoline into any storage tank that is equipped with a floating roof or the equivalent.

102.3 DEFINITIONS

Unless the context requires otherwise, the following terms shall have the meanings set forth below for the purposes of this section. When a term is not defined, it shall have the meaning provided in Section 0 of the Clark County Air Quality Regulations (AQRs), Chapter 445B of the Nevada Revised Statutes (NRS), the Act, or common usage, in that order of priority.

“Affected facility” means, with reference to a GDF, any part of the stationary source, including separate apparatus, components, and devices, to which a standard is applicable.

“CARB” means the California Air Resources Board.

“CARB-certified EVR” means a Phase I vapor recovery system, equipment, or any component that has been certified by CARB as EVR pursuant to Section 41954 of the California Health and Safety Code.

“Degassing” means the process of removing, cleaning, or scouring out gasoline vapors from all or a portion of a gasoline storage tank by active or passive means and emitting the vapors into the atmosphere.

“Dual-point vapor balance system” means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

“EVR” means enhanced vapor recovery.

“Existing source” means a GDF on which the owner or operator began actual construction or reconstruction before April 2, 2024.

“Gasoline” means any petroleum distillate blend having a Reid vapor pressure of 4 pounds per square inch or greater.

“Gasoline cargo tank” means a gasoline-carrying tank permanently attached to, and forming an integral part of, a motor vehicle, truck trailer, or railcar that is loading or unloading gasoline, or that has loaded or unloaded gasoline on the immediately previous load. For the purpose of this section, vacuum trucks used exclusively for maintenance or spill response are not considered cargo tanks.

“Gasoline dispensing facility” or “GDF” means any facility, except a bulk distribution terminal, capable of receiving, storing, and dispensing one or more grades of gasoline.

“Gasoline throughput” means the total volume of gasoline loaded into or dispensed from all the gasoline storage tanks at a single GDF. If a stationary source has two or more GDFs, each one at a different location with its own gasoline storage tanks, each GDF is treated as a separate operation with separate throughputs for the purpose of Section 102.

“Leak-free” means a condition in which there is no liquid gasoline escape or seepage of more than 3 drops per minute from gasoline storage, handling, or ancillary equipment, including, but not limited to, seepage and escapes from aboveground fittings. This does not include any excess gasoline drainage due to the disconnecting or connecting of either a gasoline loading hose from a gasoline fill line or a vapor recovery hose from a vapor line.

“Modification” means, or to “modify” refers to, a physical change in, or a change in the method of operation of, an affected facility at a GDF.

“New source” means a single source of air contaminant on which construction or reconstruction began after April 2, 2024.

“Purging” means removing, cleaning, or scouring out gasoline vapors from all or a portion of a gasoline cargo tank by active or passive means and emitting the vapors into the atmosphere.

“Storage tank” means a stationary unit that is located above or below ground and that is structurally supported and designed to hold a bulk quantity of liquid.

“Vapor balance system” means a combination of pipes, hoses, and fittings that creates a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

102.4 PERMITTING, REGISTRATION, AND NOTIFICATIONS

(a) No person shall commence construction or operation of or make a modification to a GDF on or after April 2, 2024 without first obtaining a stationary source permit in accordance with Sections 12.0 through 12.5 and Section 12.11, as applicable.

(b) No person shall operate an existing stationary source that was not already required to obtain a permit pursuant to Sections 12.0 through 12.5 and 12.11 prior to April 2, 2024 unless a complete permit application is submitted to the Control Officer no later than September 29, 2024.

(c) Notwithstanding paragraphs (a) and (b) of this section, no person shall operate a GDF with a total combined gasoline throughput of less than 120,000 gallons in any consecutive 12-month period unless a registration application is submitted on a form provided by the Control Officer. The registration application shall be submitted no later than September 29, 2024 for existing sources, and no later than 180 days after commencing operation for new sources.

(d) The Control Officer will provide written notice that the CARB-certified vapor recovery control standards of Section 102.7(c)(5) apply to owners and operators after a finding that Hydrographic Area 212 failed to attain the 2015 National Ambient Air Quality Standard for ozone by the area’s attainment date and a finding that additional VOC emission reductions from GDF operations located in Clark County will help Hydrographic Area 212 achieve and maintain attainment.

(e) Submission of a complete application for registration or for a stationary source permit to the Control Officer will satisfy the initial notification requirements of 40 CFR Part 63, Subpart CCCCCC.

102.5 WORK PRACTICE REQUIREMENTS

(a) An owner or operator shall comply with the requirements of this section by April 2, 2024.

(b) An owner or operator shall operate and maintain the GDF, including any associated air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

(c) An owner or operator shall implement measures to prevent vapor releases to the atmosphere for extended periods of time, including, but not limited to:

(1) Minimizing gasoline spills.

(2) Cleaning up spills as expeditiously as practicable.

(3) Covering all open gasoline containers and all gasoline storage fill pipes with a gasketed seal when not in use.

(4) Minimizing gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(d) An owner or operator shall not allow degassing of gasoline vapors from any gasoline storage tank at the GDF unless VOC emissions are controlled by a device that has been approved in advance by the Control Officer to be at least 90% efficient by weight.

102.6 GASOLINE STORAGE TANKS SUBMERGED FILLING CONTROL STANDARDS

(a) An owner or operator shall commence compliance with the submerged filling requirements of this section by April 2, 2024.

(b) No owner or operator shall load or allow the loading of gasoline into a stationary storage tank, above or below ground, unless the tank is equipped with a permanent submerged fill pipe. The discharge opening of the fill pipe must be entirely submerged when the liquid level is 6 inches (15 centimeters) above the bottom of the tank.

102.7 GASOLINE STORAGE TANKS VAPOR RECOVERY CONTROL STANDARDS

(a) An owner or operator of a GDF:

(1) That is a new source with a combined throughput of gasoline equal to or greater than 120,000 gallons in any consecutive 12-month period shall comply with Sections 102.7(c)(1)–(4) by April 2, 2024.

(2) That is an existing source with a combined throughput of gasoline greater than 120,000 gallons and less than 1,200,000 gallons in any consecutive 12-month period shall commence compliance with Sections 102.7(c)(1)–(4) by April 2, 2025.

(3) That is an existing source with a combined throughput of gasoline greater than 1,200,000 gallons in any consecutive 12-month period shall commence compliance with Sections 102.7(c)(1)–(4) by April 2, 2024.

(4) That increases its combined throughput of gasoline after April 2, 2024 to 120,000 gallons or greater in any consecutive 12-month period shall comply with Sections 102.7(c)(1)–(4) at the time of such increase.

(5) With a combined throughput of gasoline equal to or greater than 120,000 gallons in any consecutive 12-month period shall commence compliance with Section 102.7(c)(5) (related to CARB-certified EVR control standards) upon modifying, replacing, or newly installing any affected facility after 180 days from the Control Officer providing written notice satisfying the requirement in Section 102.4(d).

(b) All affected facilities shall comply with Section 102.7(c)(5) by two years after the Control Officer satisfies the notice requirement in Section 102.4(d) unless otherwise specified in Section 102.7(a)(5).

(c) By the compliance dates specified in this section, an owner or operator with a total combined throughput of gasoline equal to or greater than 120,000 gallons during any consecutive 12-month period shall not load, or permit the loading of, gasoline into a stationary storage tank, above or below ground, unless the tank is equipped with a vapor balance system that:

(1) Is installed, maintained, and operated according to certifications specified by the manufacturer, and is maintained to be leak-free, vapor-tight, and in proper working order.

(2) Recovers vapors displaced during filling.

(3) Is a dual-point vapor balance system, as defined in this section.

(4) Is operated so that:

(A) All vapor connections and lines on the gasoline storage tank are equipped with closures that seal upon disconnect.

(B) The vapor balance system is designed so the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.

(C) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, are designed to prevent over-tightening or loosening of fittings during normal delivery operations.

(D) If a gauge well that is separate from the fill tube is used, it is equipped with a submerged drop tube with an opening that is entirely submerged when the liquid level is 6 inches (15 centimeters) above the bottom of the gasoline storage tank.

(E) Liquid fill and vapor return connections for all systems are equipped with vapor-tight caps.

(F) The vapor balance system meets the static pressure performance requirement of the following equation:

$$P_f = 2e^{-500.887/v}$$

where:

P_f = Minimum allowable final pressure in inches of water
v = Total ullage affect by the test in gallons
e = Dimensionless constant equal to approximately 2.718
2 = Initial pressure in inches of water.

(G) The pressure/vacuum (PV) vent valves installed on the gasoline storage tank vent pipe have:

(i) A positive pressure setting of 2.5 to 6.0 inches of water.

(ii) A negative pressure setting of 6.0 to 10.0 inches of water.

(iii) A total leak rate of all PV vent valves at the facility, including connections, not exceeding 0.17 ft^3 per

hour at a pressure of 2.0 inches of water and 0.63 ft^3 per hour at a vacuum of 4 inches of water.

(5) Conforms to CARB-certified EVR by achieving a minimum vapor control volumetric efficiency of 98% for underground storage tanks and 95% for aboveground storage tanks for all affected facilities, including, but not limited to:

(A) Spill containers, containment assemblies, and covers/lids.

(B) Spill container lid.

(C) Replacement drain valve, plug, blank, and isolation kits.

(D) Product and vapor adaptors.

(E) Riser adaptors, support brackets, and seals.

(F) Drop tube risers, clamps, and overfill prevention devices.

(G) Dust caps and gaskets.

(H) P/V vent valves.

(I) Tank gauge port components.

(J) Emergency vents.

(K) Fuel locks.

(L) Bladder plugs.

(M) Tank bottom protectors.

(N) O-rings and seals.

(d) If the total combined gasoline throughput of a GDF ever exceeds the applicable throughput threshold of 120,000 gallons during any consecutive 12-month period, the GDF will remain subject to the vapor balance system control standards for sources above the applicable threshold even if throughput later falls below the threshold.

102.8 GASOLINE CARGO TANKS EMISSIONS CONTROL STANDARDS

(a) No person shall allow the unloading of gasoline into a storage tank that is subject to the control standards of Section 102 unless:

(1) All hoses in the vapor balance system are properly connected;

(2) The adapters or couplers that attach to the vapor line on the gasoline storage tank have closures that seal upon disconnect;

(3) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight;

(4) All gasoline tank truck vapor return equipment is compatible in size, and forms a vapor-tight connection with the vapor balance equipment on the gasoline storage tank;

(5) All dry breaks are leak-free; and

(6) All hatches on the tank truck are closed and securely fastened.

(b) An owner or operator shall ensure that gasoline storage tanks are filled from vapor-tight gasoline cargo tanks that are operated during transfer in a liquid leak-free manner and carry current documentation that the cargo tank has annually met the specifications of 40 CFR Part 60, Appendix A-8, "Test Methods 26 through 30B: Method 27– Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure Vacuum Test."

102.9 TESTING

(a) An owner or operator of a GDF with a combined throughput of gasoline equal to or greater than 120,000 gallons in any consecutive 12-month period that is equipped with a vapor balance system shall conduct initial and subsequent system tests as specified in this section.

(b) An owner or operator shall schedule each system test by submitting a notification to the Control Officer, in the manner and form prescribed, at least 30 calendar days before the anticipated date of testing unless otherwise approved by the Control Officer.

(c) An owner or operator shall submit system test results to the Control Officer, in the manner and form prescribed, within 60 days of test completion.

(d) An approved and scheduled system test shall not be canceled and/or rescheduled without notifying the Control Officer and receiving prior approval.

(e) An owner or operator shall:

(1) Conduct vapor balance system testing on the affected facility and demonstrate compliance with:

(A) The performance standard specified in Section 102.7(c)(4)(C) using CARB test procedure TP-201.1B, “Static Torque of Rotatable Phase I Adapters” (adopted October 8, 2003).

(B) The performance standard specified in Section 102.7(c)(4)(F) using CARB test procedures TP-201.3, “Determination of 2-inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities” (adopted July 26, 2012), or TP-201.3B, “Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks” (adopted April 12, 1996).

(C) The leak rate and cracking pressure standards specified in Section 102.7(c)(4)(G) for PV vent valves using CARB test procedure TP-201.1E, “Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves” (adopted October 8, 2003).

(D) The leak rate conforming to the standards specified in Section 102.7(c)(5) for EVR systems using CARB test procedures TP-201.1C, “Leak Rate of Drop Tube/Drain Valve Assembly” (adopted July 12, 2021), or TP-201.1D, “Leak Rate of Drop Tube Overfill Protection Devices and Spill Container Drain Valves” (adopted July 12, 2021), as applicable.

(E) The dispenser flow rate standard of 6–10 gallons per minute using Clark County test procedure CC_VRTP_1 (adopted January 10, 2008).

(2) Demonstrate initial compliance with the emission control standards for an affected facility through the system testing specified in paragraph (e) of this section:

(A) By October 2, 2025, for an existing source that was not required to conduct initial system testing before April 2, 2024.

(B) Within 180 days of startup for a new, reconstructed, or modified source after April 2, 2024.

(C) Within 90 days after completion of repairs or service when the vapor balance system’s integrity has been affected except for routine maintenance, including the replacement of hoses, nozzles, and efficiency compliance devices (e.g., fill or vapor caps, fill cap seals, vapor cap seals, etc.).

(3) Demonstrate compliance through subsequent vapor balance system testing on or before the three-year anniversary date of the previous successful test.

102.10 MONITORING

(a) An owner or operator shall conduct and record inspections on the vapor balance system and the vapor-tightness of gasoline cargo tanks upon each fuel delivery, or once daily if multiple deliveries are received per day, to determine if the affected facility complies with the control standards of Section 102.7, including at least the following items:

(1) The condition of the spill bucket and presence of fuel, liquid, or debris.

(2) The condition of the vapor cap and cap seal.

(3) The condition of the vapor adapter and adapter seal.

(4) The condition of the fill cap and cap seal.

(5) The swivel tightness of the fill and vapor adapters.

(6) The condition of the fill tube seal.

(7) The presence of the PV valve and visible parts.

(8) The condition of the spout tips.

(9) That cargo tanks delivering gasoline carry current vapor-tightness documentation.

(b) An owner or operator shall conduct and record inspections on the vapor balance system monthly, using one or more of the following procedures to identify a potential vapor leak.

(1) The use of sight, sound, or smell.

(2) The use of a soap solution spray in accordance with 40 CFR Part 60, Appendix A-7, “Method 21–Determination of Volatile Organic Compound Leaks,” Section 8.3.3, “Alternative Screening Procedure” (adopted August 3, 2017).

(c) If a potential vapor leak is detected, an owner or operator shall:

(1) Make repairs within 15 calendar days; or

(2) Perform a Method 21 test to determine the vapor-tight status of a vapor recovery system.

(A) If a leak is confirmed:

(i) For VOC emissions less than 10,000 ppm, nothing further is required of the owner or operator.

(ii) For VOC emissions equal to or greater than 10,000 ppm, the owner or operator must complete repairs within 15 calendar days.

102.11 RECORDKEEPING

(a) An owner or operator shall:

(1) Create and maintain the following records as applicable, and make them available and producible on-site to the Control Officer upon request and without prior notice during the owner or operator's hours of operation.

(A) Results of the required inspections of affected facilities specified in Section 102.10.

(B) Maintenance or repairs performed on affected facilities.

(C) Date and time of gasoline deliveries.

(D) Total combined monthly throughput of gasoline for each GDF.

(E) Total combined calendar year throughput of gasoline for each GDF.

(F) Vapor balance system testing results.

(G) Devices installed meeting CARB EVR certification.

(2) Record inspection date and time, equipment inspected, name of the person performing the inspection, and maintenance performed on affected facilities. Each record must identify any deficiencies found and the action taken to correct such deficiencies, when applicable.

(3) Retain all records for a period of five years from their creation.

History: Adopted March 19, 2024 (Ord. No. 5199). Amended February 4, 2025 (Ord. No. 5217).