

SECTION 101: VOC EMISSIONS CONTROL FOR INDUSTRIAL ADHESIVE OPERATIONS

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101.1 PURPOSE

Section 101 implements Control Technique Guidelines Reasonably Available Control Technology (CTG RACT) requirements for industrial adhesive operations as required by Section 182(b)(2)(A) of the Clean Air Act (the Act) under Title 42, Section 7511a of the U.S. Code (42 U.S.C. 7511a).

101.2 APPLICABILITY

- (a) Except as provided under Section 101.4, Section 101 is applicable to any owner or operator of a stationary source with projected maximum emissions of volatile organic compounds (VOC) equal to or greater than 3.0 tons per calendar year from industrial adhesive operations when the stationary source is 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) Except as provided under Section 101.4, Sections 101.6, 101.7(b)–(c), and 101.8–101.10 are applicable to any owner or operator of a stationary source with projected maximum emissions of VOC of less than 3.0 tons per calendar year from industrial adhesive operations when the stationary source is 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.
- (c) Section 101 does not apply:
 - (1) If the stationary source uses less than 500 gallons (1,892 L) of industrial adhesive materials per calendar year in industrial adhesive operations.
 - (2) To the following activities at an industrial adhesives operation:
 - (A) Testing or evaluating adhesives or adhesive primers in a research and development, quality assurance, or analytical laboratory.

- (B) Conducting tire repair operations if the label for the adhesive states “For tire repair only.”
- (C) Assembling, repairing, and manufacturing aerospace components or undersea-based weapons systems.
- (D) Manufacturing medical equipment.
- (E) Assembling fiberglass parts at fiberglass boat manufacturing facilities, and at other reinforced plastic composite manufacturing facilities when using polyester bonding putties.

101.3 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, the Act, or common usage, in that order of priority.

“Acrylonitrile-butadiene-styrene” or “ABS” means, with respect to a welding adhesive, any adhesive intended by the manufacturer to weld acrylonitrile-butadiene-styrene pipe, which is made by reacting monomers of acrylonitrile, butadiene, and styrene.

“Adhesive” means a material applied for the primary purpose of bonding two surfaces together by surface attachments. Adhesives may be used to facilitate the attachment of two surfaces or substances in varying degrees of permanence.

“Adhesive primer” means any product intended by the manufacturer for application to a substrate prior to the application of an adhesive to provide a bonding surface.

“Aerospace component” means, for the purposes of this rule, the fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile, or space vehicle, including passenger safety equipment.

“Aerosol adhesive” means an adhesive packaged as an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for handheld application without the need for ancillary hoses or spray equipment.

“Airless spray” means an application method using a pump to force the industrial adhesive material through an atomizing nozzle at high pressure (1,000–6,000 pounds per square inch [psi]).

“Air-assisted airless spray” means an application method consisting of an airless spray gun with a compressed air jet at the gun tip to atomize industrial adhesive material at low pressure (5–20 psi).

“ASTM methods” means methods developed and recommended by ASTM International, formerly the American Society for Testing and Materials.

“Ceramic tile installation adhesive” means any adhesive intended by the manufacturer for use in the installation of ceramic tiles.

“Cleanup solvent” means a VOC-containing material used to remove a loosely held, uncured (i.e., not dry to the touch) adhesive from a substrate or to clean equipment used in applying an industrial adhesive material.

“Contact adhesive” means an adhesive that:

1. Is applied to both surfaces to be bonded together.
2. Dries before the two surfaces are placed in contact with each other.
3. Forms an immediate bond that is difficult or impossible to reposition after both adhesive-coated surfaces are placed in contact with each other.
4. Does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.
5. Contact adhesives do not include rubber cements primarily intended for use on paper substrates or vulcanizing fluids designed and labeled “for tire repair only.”

“Cove base” means a flooring trim unit generally made of vinyl or rubber, with a concave radius on one edge and a convex radius on the opposite edge, that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.

“Cove base installation adhesive” means any adhesive intended by the manufacturer to be used for the installation of cove base or wall base on a wall or vertical surface at floor level.

“Cyanoacrylate adhesive” means any adhesive with a cyanoacrylate content of at least 95% by weight.

“Emission Control System (ECS)” means the combination of an emissions capture device and an add-on emissions control device that reduces VOC emissions and that is designed and operated in accordance with good engineering practice.

“EPDM roof membrane” means a prefabricated single sheet of elastomeric material composed of ethylene propylenediene monomer that is field-applied to a building roof using one layer of membrane material.

“Exempt compound” means a specified organic compound, as listed in 40 CFR Part 51.100, that the Administrator has determined to have negligible photochemical reactivity.

“Existing industrial adhesive operations” means industrial adhesive operations for which the owner or operator began actual construction or reconstruction before April 2, 2024, or first constructed and operated on or after April 2, 2024, and subsequently modified such that the industrial adhesive operations became subject to Section 101 after the modification.

“Existing inventory” means industrial adhesive materials that an owner or operator purchased before April 2, 2024.

“Flexible vinyl” means non-rigid polyvinyl chloride plastic with at least 5% by weight plasticizer content.

“Floor covering installation adhesive” means:

1. For indoor flooring installations, any adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl backed carpet, resilient sheet and roll, or artificial grass. Adhesives used to install ceramic tile and perimeter bonded sheet flooring with vinyl backing onto a nonporous substrate, such as flexible vinyl, are excluded from this category.
2. For outdoor flooring installations, any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.
3. For perimeter bonded sheet flooring installation, any installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to 4 inches (10.2 cm) wide around the perimeter of the sheet flooring.

“Flow coat” means an application method accomplished by flowing a stream of industrial adhesive material over an object.

“Industrial adhesive” means an adhesive or adhesive primer applied at a manufacturing or repair facility.

“Industrial adhesive operations” means the operation of one or more pieces of equipment used to apply, dry, and/or cure an adhesive or adhesive primer at a stationary source, along with all associated cleanup and storage operations.

“Industrial adhesive material” means adhesives, adhesives primer, solvent, and cleanup solvent used in industrial adhesive operations that contain more than 0.17 lb of VOC/gal (20 g/L), as applied, excluding water and exempt compounds as used.

“In use” means the active application of industrial adhesive material or cleaning solvent to a substrate or equipment or the filling or draining of a container holding an industrial adhesive, cleaning solvent, or waste material.

“Laminate” means a product made by bonding together two or more layers of material.

“Low solids material” means any adhesive product that contains 0.26 lb (120 grams) or less of solids per liter of material.

“Manufacturing medical equipment” means the manufacture of medical devices such as, but not limited to, catheters, heart valves, blood cardioplegia machines, tracheostomy tubes, blood oxygenators, and cardiatory reservoirs.

“Material change” means a change in the owner or operator, a change in location, a change in compliance method, a change to a different ECS, or an increase in either the stationary source’s maximum emissions or its annual actual emissions of VOC above the projected maximum emissions.

“Metal to urethane/rubber molding or casting adhesive” means any adhesive intended by the manufacturer to bond metal to high-density or elastomeric urethane or molded rubber materials, in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper-handling equipment.

“Motor vehicle adhesive” means an adhesive, including glass bonding adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied for the purpose of bonding two vehicle surfaces together without regard to the substrates involved.

“Motor vehicle glass bonding primer” means a primer that is used at a facility that is not an automobile or light-duty truck assembly coating facility and that is applied to windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass bonding adhesives or the installation of adhesive bonded glass. Motor vehicle glass bonding primer includes glass bonding/cleaning primers that perform both functions (cleaning and priming of the windshield, other glass, or body openings) prior to the application of adhesive or the installation of adhesive bonded glass.

“Motor vehicle weatherstrip adhesive” means an adhesive that is used at a facility that is not an automobile or light-duty truck assembly coating facility and that is applied to weatherstripping materials to bond the weatherstrip material to the surface of a vehicle.

“Multipurpose construction adhesive” means any adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including, but not limited to, drywall, subfloor, panel, fiberglass reinforced plastic, ceiling tile, and acoustical tile.

“New industrial adhesives operations” means industrial adhesives operations for which the owner or operator began actual construction or reconstruction on or after April 2, 2024.

“Plastic cement welding adhesive” means any adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.

“Plastic solvent welding adhesive” means any adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.

“Plastic solvent welding adhesive primer” means any primer intended by the manufacturer for use to prepare plastic substrates before bonding or welding.

“Plasticizer” means a material, such as a high boiling point organic solvent, that is incorporated into a vinyl to increase its flexibility, workability, or distensibility, as determined by ASTM Method E-260-96.

“Polyvinyl chloride plastic” or “PVC plastic” means a polymer of the chlorinated vinyl monomer that contains 57% chlorine.

“Polyvinyl chloride welding adhesive” or “PVC welding adhesive” means any adhesive intended by the manufacturer for use in the welding of PVC plastic pipe.

“Porous material” means a substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, wood, paper, and corrugated paperboard.

“Projected maximum emissions” means the highest annual rate, in tons per year, at which the stationary source is projected to emit VOC based on anticipated production, throughput, heat input, or material utilization rates that does not include emission reductions from add-on controls.

“Reactive diluent” means a liquid that is a reactive organic compound during application, and one that through chemical and/or physical reactions (such as polymerization) becomes 20% or more of the finished material.

“Reinforced plastic composite” means a composite material consisting of plastic reinforced with fibers.

“Repair” means gluing together the edges of torn membrane, attaching a patch over a hole, and reapplying flashings to vents, pipes, or ducts installed through the membrane.

“Rubber” means any natural or manmade rubber substrate, including, but not limited to, styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene, and ethylene propylene diene terpolymer.

“Sheet-applied rubber installation” means the process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand.

“Single-ply roof membrane” means a prefabricated single sheet of rubber, normally ethylene-propylenediene terpolymer, that is field applied to a building roof using one layer of membrane material.

“Single-ply roof membrane installation and repair adhesive” means any adhesive labeled for use in the installation or repair of single-ply roof membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, and ducts that protrude through the membrane.

“Slot-die coating” means a precision liquid coating method used to apply thin and uniform layers of adhesives to a substrate by distributing a metered quantity of adhesive through a slotted head onto a moving substrate.

“Single-ply roof membrane adhesive primer” means any primer labeled for use to clean and promote adhesion of single-ply roof membrane seams or splices prior to bonding.

“Solvent” means any substance containing an organic compound (or combination of organic compounds) that is liquid at atmospheric pressure and ambient temperature and is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or other additive used for a similar purpose. It does not include substances used as fuel, antiseptics, or anesthetics.

“Structural glazing adhesive” means any adhesive intended by the manufacturer to apply glass, ceramic, metal, stone, or composite panels to exterior building frames.

“Thin metal laminating adhesive” means any adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 mil.

“Tire repair” means a process that includes expanding a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.

“Undersea-based weapons systems” means the fabrication of parts, assembly of parts, or completed units of any portion of a missile launching system used on undersea ships.

“VOC-containing material” means any coatings, solvent, or cleaning material used in industrial adhesive operations that contain more than 0.17 lb/gal (20 g/L) of VOC as applied, excluding water and exempt compounds.

“Waste material” means any VOC-containing material designated for disposal, including VOC-laden rags and wipes.

“Waterproof resorcinol glue” means a two-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

101.4 EXEMPTIONS

Unless and until the Control Officer objects to an owner or operator’s use of an exemption in accordance with Section 101.9, industrial adhesive operations that meet the criteria in this section are exempt from one or more requirements of Section 101 if the owner or operator complies with the notification, recordkeeping, and reporting requirements in Section 101.9, as applicable.

- (a) Sections 101.5–101.8 (related to emissions standards, work practice requirements, compliance obligations, and registration requirements) and Sections 101.9.1(a), 101.9.2, and 101.9.3 (related to testing notification, recordkeeping, and reporting requirements) do not apply when VOC emissions from the industrial adhesive operations are controlled by RACT emissions standard(s) at least as stringent as Section 101 under another SIP-approved applicable section of the AQRs.
- (b) Section 101.5 (related to emissions standards) does not apply to the use of any industrial adhesive materials provided the total volume of noncomplying industrial adhesive materials is less than 55 gallons (208.2 L) per calendar year.
- (c) Sections 101.5–101.7 (related to emissions standards, work practice requirements, and compliance obligations) do not apply when using the materials listed in paragraphs (c)(1)–(3) of this section. Sections 101.5–101.8 (related to emissions standards, work practice requirements, compliance obligations, and registration requirements), 101.9.1 (related to notifications), and 101.9.3 (related to reporting requirements) do not apply if these are the only materials used at the industrial adhesive operations:
 - (1) Cyanoacrylate adhesive.
 - (2) Adhesives or adhesive primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of 16 fluid ounces (473 ml) or less, or a net weight of one pound (454 g) or less, except for plastic cement welding adhesives and contact adhesives.

- (3) Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of one gallon (3.8 L) or less.

101.5 EMISSIONS STANDARDS

Except as provided in Section 101.4, an owner or operator of industrial adhesive operations shall limit VOC emissions from industrial adhesive operations by complying with paragraph (a); or paragraphs (b) and (d); or paragraphs (c) and (d) of this section.

- (a) Reduce VOC emissions from industrial adhesive operations using an ECS that reduces VOC emissions by at least 85% by weight.
- (b) Use VOC-compliant coatings that meet the following requirements:
 - (1) The VOC content of adhesives and adhesive primers, as applied, excluding water and exempt compounds, is equal to or less than the VOC content limit listed for the applicable adhesive or substrate type in Table 1.
 - (2) When bonding dissimilar substrates together, the VOC content is less than the highest VOC content limit among the applicable substrate types in Table 1.

Table 1. VOC Content Limits for Adhesives and Adhesive Primers

General Adhesive Based on Substrate Type	VOC Content Limit ^{1,2}	
	(g/L)	(lb/gal)
Reinforced plastic composite	200	1.7
Flexible vinyl	250	2.1
Metal	30	0.3
Porous material (except wood)	120	1
Rubber	250	2.1
Wood	30	0.3
Other substrates	250	2.1
Specialty Adhesives Based on Application	VOC Content Limit ¹	
	(g/L)	(lb/gal)
Ceramic tile installation	130	1.1
Contact	250	2.1
Cove base installation	150	1.3
Floor covering installation (indoor)	150	1.3
Floor covering installation (outdoor)	250	2.1
Floor covering installation (perimeter bonded sheet vinyl)	660	5.5
Metal to urethane/rubber molding or casting	850	7.1
Motor vehicle adhesive	250	2.1
Motor vehicle weatherstrip	750	6.3
Multipurpose construction	200	1.7
Plastic solvent welding (abs)	400	3.3

General Adhesive Based on Substrate Type	VOC Content Limit ^{1,2}	
	(g/L)	(lb/gal)
Plastic solvent welding (except abs)	500	4.2
Sheet-applied rubber installation	850	7.1
Single-ply roof membrane installation/repair (except EPDM)	250	2.1
Structural glazing	100	0.8
Thin metal laminating	780	6.5
Tire repair	100	0.8
Waterproof resorcinol glue	170	1.4
Adhesive Primer	VOC Content Limit ¹	
	(g/L)	(lb/gal)
Motor vehicle glass bonding primer	900	7.5
Plastic solvent welding adhesive primer	650	5.4
Single-ply roof membrane adhesive primer	250	2.1
Other adhesive primer	250	2.1

¹ Limits are mass of VOC per volume of adhesive or adhesive primer, excluding water and exempt compounds, as applied.

² If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC emission limit applies.

- (c) Use low-VOC industrial adhesives and an ECS that, in combination, result in a mass of VOC per volume of industrial adhesive material no greater than the emissions control requirement in paragraph (b) of this section on a monthly average basis.
- (d) Use one or more of the following efficient application methods:
 - (1) Electrostatic spray coating;
 - (2) Flow coating;
 - (3) Dip coating, including electrodeposition;
 - (4) Roll coating or hand application, including non-spray application methods such as a hand or mechanically powered caulking gun, a brush, or direct hand application;
 - (5) HVLP spray coating;
 - (6) Airless spray coating;
 - (7) Air-assisted airless spray coating;
 - (8) Slot-die coating designed and operated to achieve at least 65% transfer efficiency; or
 - (9) An adhesive application method that is designed and operated to achieve at least 65% transfer efficiency.

101.6 WORK PRACTICE REQUIREMENTS FOR STORING, HANDLING, AND DISPOSING OF INDUSTRIAL ADHESIVE MATERIALS AND WASTE MATERIALS

An owner or operator of industrial adhesive operations shall comply with the following requirements of this section to minimize VOC emissions to the atmosphere:

- (a) Ensure all containers with a capacity of 1 gallon (3.8 L) or more are clearly labeled with the product name and the type of industrial adhesive material or waste materials inside.
- (b) Repair any liquid leak, visible tear, or crack detected in a storage container within one calendar day or drain all contents from the leaking container and transfer the contents to a container meeting the requirements of paragraph (d) of this section. The owner or operator may not use the leaking container until repaired or replaced.
- (c) Securely close all containers containing industrial adhesive material or waste materials when not in use, and store VOC-laden rags and wipes in closed containers when not in use.
- (d) Use closed, nonabsorbent, nonleaking containers to store and dispose of industrial adhesive material and waste materials, including used rags and wipes.
- (e) Use care when handling and transferring industrial adhesive materials and waste materials to and from containers, enclosed systems, waste receptacles, and other equipment to minimize spills; immediately contain and clean up any spills that occur.
- (f) Use closed and labeled containers or pipes to convey industrial adhesive material and waste material from one location to another.
- (g) Minimize VOC emissions from the cleaning of application, storage, mixing, or conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleanup solvent and that all spent solvent is captured in closed containers.

101.7 COMPLIANCE OBLIGATIONS

To demonstrate compliance with the emissions standards and work practices in Section 101, an owner or operator of industrial adhesive operations shall:

- (a) Perform the following calculations (the variables needed can be found in EPA Test Method 24 and/or manufacturer's data sheets). The manufacturer's information may contain the VOC content information required in paragraphs (1)–(3) of this section, removing the need to calculate the values:

- (1) For adhesives or adhesive primers that do not contain reactive diluents, calculate the VOC content in weight of VOC per volume of adhesive or adhesive primer, excluding water and exempt compounds, using the following equation:

$$\text{Adhesive}_{\text{VOC}} = \frac{(W_s - W_w - W_{es})}{(V_m - V_w - V_{es})}$$

where:

$\text{Adhesive}_{\text{VOC}}$ = VOC content per volume of adhesive or adhesive primer (g/L or lb/gal)

W_s = weight of volatile compounds, including water and exempt compounds

W_w = weight of water

W_{es} = weight of exempt compounds

V_m = volume of material, including water and exempt compounds

V_w = volume of water

V_{es} = volume of exempt compounds.

- (2) For adhesives or adhesive primers that contain reactive diluents, calculate the VOC content in weight of VOC per volume of adhesive or adhesive primer, excluding water and exempt compounds, after curing using the following equation:

$$\text{Adhesive}_{\text{VOC}} = \frac{(W_{rs} - W_{rw} - W_{re})}{(V_{rm} - V_{rw} - V_{re})}$$

where:

$\text{Adhesive}_{\text{VOC}}$ = VOC content per volume of adhesive or adhesive primer (g/L or lb/gal)

W_{rs} = weight of volatile compounds not consumed during curing

W_{rw} = weight of water not consumed during curing

W_{re} = weight of exempt compounds not consumed during curing

V_{rm} = volume of material not consumed during curing

V_{rw} = volume of water not consumed during curing

V_{re} = volume of exempt compounds not consumed during curing.

- (3) Calculate grams of VOC per liter or pounds of VOC per gallon of low-solids material using the following equation:

$$\text{Weight per volume of materials} = \frac{W_s - W_w - W_e}{V_m}$$

where:

Ws = weight of volatile compounds

Ww = weight of water

We = weight of exempt compounds

Vm = volume of material.

- (b) Conduct periodic (at least quarterly) inspections to assure compliance with the requirements of Section 101.6.
- (c) Provide training to newly hired workers on the work practice requirements of Section 101.6.

101.7.1 Compliance When Using an Emissions Control System

An owner or operator of industrial adhesive operations using an ECS shall:

- (a) Develop, maintain, and comply with an operations and maintenance plan, in accordance with manufacturer recommendations where available, if using an ECS to comply with Section 101.5. Such plan shall:
 - (1) Identify monitoring devices, monitoring frequencies, and key system operating parameters, i.e., those needed to ensure that good operation and engineering practices are associated with operation of the ECS, such as temperature, pressure, and/or flow rate.
 - (2) Include schedules for inspection, schedules for anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.
 - (3) Include a monitoring plan to ensure proper operation of the ECS using the key operating parameters identified.
 - (4) Include provisions for minimizing emissions during periods of startup, shutdown, and malfunction.
 - (5) Determine the control efficiency of the ECS used to comply with Section 101 through manufacturer design specifications or performance testing. The following reference materials may assist in determining the control efficiency of the ECS:

- (A) “Guidelines for Determining Capture Efficiency,” EPA Office of Air Quality Planning and Standards, January 9, 1995.
 - (B) EPA Test Methods 1–4 in 40 CFR Part 60, Appendices A–1 through A–3, to determine flow rates.
 - (C) “Method 204—Criteria for and Verification of a Permanent or Temporary Total Enclosure,” at 40 CFR Part 51, Appendix M; or, as applicable, EPA Test Methods 204A, 204B, 204C, or 204D.
 - (D) “Method 18—Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,” at 40 CFR Part 60, Appendix A–6.
 - (E) “Method 25—Determination of Total Gaseous Nonmethane Organic Emissions as Carbon,” at 40 CFR Part 60, Appendix A–7, or, as applicable, EPA Test Methods 25A or 25B.
- (b) Install, calibrate, operate, and maintain monitoring devices on an ECS used to comply with Section 101 according to manufacturer specifications and the operations and maintenance plan.
 - (c) Operate the monitoring devices required by paragraph (b) of this section at all times an ECS operates.

101.8 REGISTRATION REQUIREMENTS

An owner or operator of industrial adhesive operations shall comply with the registration requirements of this section, as indicated below.

- (a) Except as provided in paragraph (d) of this section, an owner or operator of industrial adhesive operations shall comply with the following registration requirements:
 - (1) No later than August 29, 2024, or 45 days after becoming subject to any requirements in Section 101, whichever is later, submit a registration application to the Control Officer in the manner and form prescribed that includes, at a minimum, the following information:
 - (A) Name, email address, and telephone number of the owner or operator and the Responsible Official;
 - (B) Company name and address (and source name and address, if different);

- (C) Projected maximum emissions of VOC (in tons per calendar year) from industrial adhesive operations at the stationary source;
 - (D) Calculations to support the values reported in paragraph (a)(1)(C) of this section;
 - (E) Type of ECS used to comply with Section 101, if any;
 - (F) Copy of the ECS operations and maintenance plan developed to comply with Section 101.7.1, if required;
 - (G) A declaration signed by the Responsible Official under penalty of perjury that the statements and information in the registration are true, accurate, and complete. Signature on the declaration statement shall subject the Responsible Official to liability for perjury under NRS 199.145; and
 - (H) Other information as required by the Control Officer.
- (2) Submit an updated registration to the Control Officer within 60 days of a material change.
- (b) The Control Officer may require updated information after the initial registration to determine that the source continues to operate below the applicability threshold in Section 101.2(a).
 - (c) Owners or operators may submit a revised registration application with reduced projected maximum emissions from industrial adhesive operations at the stationary source if less than 3.0 tons of VOC were emitted and reported in each of the previous three consecutive calendar years.
 - (d) In lieu of complying with the registration requirements of Section 101.8, but by the deadlines established in paragraph (a)(1), a stationary source regulated by a minor source permit, an authority to construct permit, or a Part 70 operating permit shall apply for a permit revision to incorporate Section 101 requirements in accordance with the requirements in Sections 12.1, 12.4, and 12.5.

101.9 NOTIFICATION, RECORDKEEPING, AND REPORTING REQUIREMENTS

An owner or operator of industrial adhesive operations shall comply with the notification, recordkeeping, and reporting requirements of this section, as indicated below. The Control Officer may deny exemption use or applicability status upon finding that the industrial adhesive operation does not meet the eligibility criteria for exemption(s) or applicability, the stationary source has a poor regulatory compliance history, or the RACT emissions standard does not provide comparable emission reductions to Section 101.

101.9.1 Notification Requirements

- (a) Owners or operators using a performance test to determine the control efficiency of an ECS to comply with Section 101.5 shall comply with the following requirements and with the compliance dates in Section 101.10:
 - (1) Conduct a performance test within 180 days of initial operation of the ECS or August 29, 2024, whichever is later.
 - (2) Submit a performance testing protocol to the Control Officer in accordance with department guidelines containing test, reporting, and notification schedules, test protocols, and anticipated test dates at least 45 days, but no more than 90 days, before the anticipated test date.
 - (3) Submit a report to the Control Officer in accordance with department guidelines describing the results of a performance test within 60 days of completing the test.
- (b) Owners or operators relying on the exemption in Section 101.4(a) shall submit a notice to the Control Officer that identifies the exemption claimed by the owner or operator within 30 days of the applicable compliance date in Section 101.10.

101.9.2 Recordkeeping Requirements

An owner or operator of industrial adhesive operations shall comply with the following recordkeeping requirements:

- (a) Owners or operators required to comply with Section 101 shall, at a minimum:
 - (1) Maintain records to document eligibility for applicability thresholds or for any exemption claimed under Section 101.4.
 - (2) Retain all records for a period of five years from their creation.
 - (3) Make records available and producible onsite to the Control Officer's authorized representative upon request and without prior notice during the owner or operator's hours of operation.
 - (4) Each month, record the type and amount of VOC-containing material used in the previous month. The owner or operator may track the actual use of VOC-containing material or use purchase and inventory records (assuming that all purchases not retained in inventory are used).

- (5) Maintain a list of VOC-containing materials used that includes, at a minimum:
 - (A) Material name and manufacturer;
 - (B) VOC content of each VOC-containing material, listed as lb/gal or g/L of VOC; and
 - (C) Product data sheet or technical data sheet with specific mixing instructions and the VOC content, as applied, of VOC-containing material requiring dilution.
- (6) Maintain a record of calendar year emission calculations.
- (b) Owners or operations using noncompliant industrial adhesive materials, as allowed under Section 101.4(b), shall keep a separate list to demonstrate compliance with the exemption, including, at a minimum:
 - (1) Material name and manufacturer; and
 - (2) Monthly and annual total gallons or liters of noncompliant industrial adhesive materials used.
- (c) Owners or operators using an ECS to comply with Section 101.5 shall:
 - (1) Maintain a record of monitoring of the key system operating parameters specified in the operations and maintenance plan.
 - (2) Record and maintain monitoring data collected to comply with Section 101.7.1(b).
- (d) Owners or operators required to comply with Sections 101.6 and 101.7(b)–(c) shall maintain inspection and training logs.

101.9.3 Reporting Requirements

- (a) Owners or operators subject to Section 101.2(a) shall complete and submit to the Control Officer an annual emissions inventory for VOCs in the manner and form prescribed.
- (b) The inventory must be submitted to and received by the department on or before March 31 of each year (or other specified date upon prior notice from the Control Officer), and shall include emission factors and calculations used to determine emissions in the previous calendar year.
- (c) The inventory shall include, at a minimum:

- (1) Actual annual emissions of VOC (in tons per calendar year) for the previous calendar year from industrial adhesive operations at the stationary source; and
- (2) Calculations to support the values reported in paragraph (c)(1) of this section.
- (d) Any information submitted pursuant to this section shall contain a certification by the Responsible Official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the information in the statement or inventory is true, accurate, and complete.

101.10 COMPLIANCE DATES

- (a) Except as provided in paragraphs (c)–(e) of this section, an owner or operator of existing industrial adhesive operations shall comply with the requirements in Section 101 by August 29, 2024, or by the date the industrial adhesive operations commence normal operations or meet the applicability criteria in Section 101.2, whichever of the three dates is later.
- (b) An owner or operator of new industrial adhesive operations shall comply with Section 101 upon commencing normal operation.
- (c) An owner or operator of existing industrial adhesive operations may use industrial adhesive materials from their existing inventory that do not meet the requirements of Section 101.5 until April 2, 2025, or 12 months after first becoming subject to Section 101, whichever is later. Except as provided in Section 101.4(b), beginning on the compliance date specified in paragraph (a) of this section, an owner or operator shall not purchase industrial adhesive materials that do not comply with the VOC content limitations in Section 101.5(b) unless emissions from such industrial adhesive materials are controlled in accordance with the requirements in Section 101.5(a) or Sections 101.5(c) and (d).
- (d) An owner or operator of existing industrial adhesive operations who elects to comply with Section 101.5 by installing a new ECS must comply with Section 101.5(a) or 101.5(c) no later than August 29, 2025.
- (e) The Control Officer may establish an alternative compliance date for meeting Section 101.5 not later than April 2, 2027, considering the technical feasibility and time needed to comply, through issuance of a minor source permit or an authority to construct permit, or by revising a Part 70 operating permit. The filing of a complete application for a minor source permit, authority to construct permit, or Part 70 significant permit revision requesting an alternative compliance date stays the

compliance date in paragraph (a) of this section until the proposed alternative compliance date, or until the Control Officer denies the request or issues the minor source permit, authority to construct permit, or revised Part 70 operating permit.

History: Adopted March 19, 2024.

SECTION 102: GASOLINE DISPENSING FACILITIES

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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 173(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 storage 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 August 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 August 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 ft³ per

hour at a pressure of 2.0 inches of water and 0.63 ft³ 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_V RTP_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 August 29, 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.

SECTION 103: VOC EMISSIONS CONTROL FOR MISCELLANEOUS METAL OR PLASTIC PARTS COATING OPERATIONS

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103.1 PURPOSE

Section 103 implements Control Technique Guidelines Reasonably Available Control Technology (CTG RACT) requirements for miscellaneous metal or plastic parts coating operations 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).

103.2 APPLICABILITY

- (a) Except as provided under Section 103.4, Section 103 is applicable to any owner or operator of a stationary source with projected maximum emissions of volatile organic compounds (VOC) equal to or greater than 3.0 tons per calendar year from miscellaneous metal or plastic parts coating operations when the stationary source is 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) Except as provided under Section 103.4, Sections 103.6, 103.7(b)–(c), and 103.8–103.10 are applicable to any owner or operator of a stationary source with projected maximum emissions of VOC of less than 3.0 tons per calendar year from miscellaneous metal or plastic parts coating operations when the stationary source is 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.
- (c) Section 103 does not apply:
 - (1) If the stationary source uses less than 500 gallons (1,892 L) of coatings per calendar year in miscellaneous metal or plastic parts coating operations.
 - (2) When applying coatings to a test panel or coupon, or using coatings in research and development, quality control, or performance evaluation activities.

103.3 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.

“Adhesion primer” means a coating applied to a polyolefin part to promote the adhesion of a subsequent coating. This type of coating is clearly identified on its accompanying Safety Data Sheet (SDS) by this term or as an adhesion promoter.

“Affected source” means the miscellaneous metal or plastic parts operations at a stationary source subject to any requirement in Sections 103.4–103.6.

“Air dried” means a coating that is cured or dried at a temperature below 194°F (90°C).

“Antifoulant” means a coating applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of biological organisms, and that is registered with the U.S. Environmental Protection Agency (EPA) as a pesticide under Section 2 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. § 136).

“Appurtenance” means an accessory to a stationary structure that is coated at the facility. The term includes:

1. Bathroom and kitchen fixtures;
2. Cabinets;
3. Concrete forms;
4. Doors;
5. Elevators;
6. Fences;
7. Hand railings;
8. Heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools;
9. Lampposts;
10. Partitions;
11. Pipes and piping systems;
12. Rain gutters and downspouts;
13. Stairways;
14. Fixed ladders;
15. Catwalks and fire escapes; and
16. Window screens.

“Baked” means a coating cured at a temperature at or above 194°F (90°C).

“Black coating” means a coating that, based on Cielab color space, 0/45 geometry, has a maximum lightness of 23 units and a saturation less than 2.8, where saturation equals the square root of $A^2 + B^2$. For spherical geometry, specular included, maximum lightness is 33 units.

“Business machine” means a device that uses an electronic or mechanical method to process information, perform calculations, print or copy information, or convert sound into electrical impulses for transmission. The term includes devices listed in Standard Industrial Classification codes 3572, 3573, 3574, 3579, and 3661, as well as photocopy machines, a subcategory of Standard Industrial Classification code 3861.

“Camouflage” means a coating used principally by the military to conceal equipment from detection.

“Clear coat” means a colorless coating that contains binders, but no pigment, and is formulated to form a transparent film. The term includes a transparent coating that uses the undercoat as a reflective base or undertone color.

“Coating” means a material containing more than 0.17 lb/gal of VOC (20 g/L) as applied, excluding water and exempt compounds, applied onto or into a substrate for protective, decorative, or functional purposes, that dries or cures to form a continuous solid film. The term includes paints, sealants, caulks, primers, inks, maskants, varnish, stains, lacquer, enamel, and shellac. The term does not include protective oils, acids or bases, adhesives, or combinations of these materials.

“Coating category” means a type of coating designated in the “coating category” column of Tables 1–9 in this rule.

“Coating operation” means all steps involved in the application of one or more coatings, including application, drying or curing, surface preparation, and cleaning steps.

“Dip coat” means a coating application method accomplished by dipping an object into coating.

“Drum” means a cylindrical metal shipping container with a capacity of more than 12 gallons (45.4 L) but less than 110 gallons (416.4 L).

“Electric dissipating coating” means a coating that rapidly dissipates a high-voltage electric charge.

“Electric-insulating coating” or “Electric-insulating varnish” means a non-convertible-type coating applied to electric motors, components of electric motors, or power transformers to provide electrical, mechanical, or environmental protection or resistance.

“Electromagnetic and radio frequency interference” or “EMI/RFI” means a shield coating used on electrical or electronic equipment to provide shielding against electromagnetic interference, radio frequency interference, or static discharge.

“Electrostatic prep coat” means a coating applied to a plastic part solely to provide conductivity for the subsequent application of a primer, topcoat, or other coating through the use of electrostatic spray application methods. This will be clearly identified as an electrostatic prep coat on its accompanying SDS.

“Electrostatic spray application” means a coating application method accomplished by charging atomized paint particles for deposition by electrostatic attraction on a metal part or product.

“Emission Control System (ECS)” means the combination of emissions capture and an add-on emissions control device that reduces VOC emissions and that is designed and operated in accordance with good engineering practice.

“Etching filler” means a coating that contains less than 23% solids by weight and at least 0.5% acid by weight, and is used instead of applying a pretreatment coating followed by a primer.

“Exempt compound” means a specified organic compound, as listed in 40 CFR Part 51.100, that the Administrator has determined to have negligible photochemical reactivity.

“Existing miscellaneous metal or plastic parts coating operations” mean miscellaneous metal or plastic parts coating operations on which an owner or operator began actual construction or reconstruction before April 2, 2024, or first constructed and operated on or after April 2, 2024, and subsequently modified such that the miscellaneous metal or plastic parts coating operations became subject to Section 103 after the modification.

“Extreme high gloss” means:

1. For miscellaneous metal part surface coatings or miscellaneous plastic part surface coatings other than pleasure craft coatings, a coating that shows a reflectance of at least 75% on a 60° meter when tested by ASTM Method D-523-08; or
2. For pleasure craft coatings, a coating that shows a reflectance of at least 90% on a 60° meter when tested by ASTM Method D-523-08.

“Extreme performance” means a coating where the coated surface is subject to chronic exposure to corrosive, caustic, or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions; repeated exposure to temperatures exceeding 250°F (121°C); or repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents. The term includes coatings applied to locomotives, railroad cars, farm machinery, and heavy-duty trucks.

“Finish primer/surfacer” means a coating applied with a wet film thickness of less than 10 mil prior to the application of a topcoat to provide corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary to fill in surface imperfections.

“Flexible primer” means a coating required to comply with engineering specifications for impact resistance, mandrel bend, or elongation as defined by the original equipment manufacturer.

“Flow coat” means a coating application method accomplished by flowing a stream of coating over an object.

“Fog coat” means a coating applied to a plastic part, at a thickness of no more than 0.5 mil of coating solids, for color matching without masking a molded-in texture.

“Gloss reducer” means a coating applied to a plastic part, at a thickness of no more than 0.5 mil of coating solids, solely to reduce the shine of the part.

“Heat-resistant” means a coating that must withstand a temperature of at least 400°F (232°C) during normal use.

“Heavier vehicle” means a vehicle designed for transporting persons or property on a street or highway that has a gross vehicle weight rating over 8,500 pounds.

“High bake” means a coating designed to cure only at temperatures of more than 194°F (90°C).

“High build primer/surfacer” means a coating applied with a wet film thickness of 10 mil or more before application of a topcoat for providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections.

“High gloss” means a coating that achieves at least 85 gloss units on a 60° meter when tested by ASTM Method D-523-08.

“High performance architectural” means a coating used to protect aluminum architectural subsections that meets the requirements of American Architectural Manufacturers Association publication AAMA 2604 (“Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels”) or 2605 (“Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels”).

“High temperature” means a coating certified to withstand a temperature of 1,000°F (538°C) for 24 hours.

“In use” means the active application of a coating or cleaning material to a substrate or the filling or draining of a container holding a coating or cleaning material.

“Magnetic tape storage disk coating” means a coating used on a metal disk that stores data magnetically.

“Maskant” means a thin film coating applied through a template to coat a small portion of a substrate.

“Material change” means a change in the owner or operator, a change in location, a change in compliance method, a change to a different ECS, or an increase in either the stationary source’s maximum emissions or its annual actual emissions of VOC above the projected maximum emissions.

“Metal particles” means pieces of a pure elemental metal or a combination of elemental metals.

“Metallic” means a coating that contains more than 5 grams of metal particles per liter of coating as applied.

“Military specification” means a coating that has a formulation approved by any branch of the U.S. Department of Defense for use on military equipment.

“Miscellaneous metal or plastic parts coating operations” means a process or processes of applying one or more coatings to metal or plastic parts or products, including components of such parts or products, and all associated cleaning operations. These operations are found at manufacturing facilities whose operations fall under Standard Industrial Classification codes 33–41, including, for example, manufacturers of:

1. Fabricated metal products;
2. Molded plastic parts;
3. Farm machinery;
4. Commercial and industrial machinery and equipment;
5. Automotive or transportation equipment;
6. Interior or exterior automotive parts;
7. Construction equipment;
8. Motor vehicle accessories;
9. Bicycles and sporting goods;
10. Toys;
11. Recreational vehicles;
12. Pleasure craft;
13. Extruded aluminum structural components;
14. Railroad cars;

15. Heavier vehicles;
16. Lawn and garden equipment;
17. Business machines;
18. Laboratory and medical equipment;
19. Electronic equipment;
20. Steel drums;
21. Metal pipes; or
22. Casino slot and gaming machines.

“Mold-release” means a coating applied to a mold to prevent the molded product from sticking to the mold as it is removed.

“Mold-seal” means the initial coating applied to a new or repaired mold to provide a smooth surface that, when coated with a mold-release coating, prevents products from sticking to the mold.

“Motor vehicle bedliner” means a multicomponent coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to a cargo bed after the application of topcoat to provide additional durability and chip resistance.

“Motor vehicle cavity wax” means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied into the cavities of a vehicle primarily to enhance corrosion protection.

“Motor vehicle deadener” means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to selected vehicle surfaces primarily to reduce the sound of road noise in the passenger compartment.

“Motor vehicle gasket/gasket sealing material” means a fluid coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to coat a gasket or to replace and perform the same function as a gasket. The term includes room temperature vulcanization seal material.

“Motor vehicle lubricating wax/compound” means a protective lubricating coating material, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to vehicle hubs and hinges.

“Motor vehicle sealer” means a high viscosity coating material, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., a primer/surfacer). The primary purpose of the material is to fill body joints completely so there is no intrusion of water, gases, or corrosive materials into the passenger area of the body compartment. The material is also referred to as sealant, sealant primer, or caulk.

“Motor vehicle trunk interior coating” means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the trunk interior to provide chip protection.

“Motor vehicle underbody coating” means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the undercarriage or firewall to prevent corrosion or provide chip protection, or both.

“Multi-colored coating” means a coating that exhibits more than one color when applied, and is packaged in a single container and applied in a single coat.

“Multicomponent” means a coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to the substrate to form an acceptable dry film.

“New miscellaneous metal or plastic parts coating operations” mean miscellaneous metal or plastic parts coating operations on which an owner or operator began actual construction or reconstruction on or after April 2, 2024.

“One component” means a coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner may be added to reduce the viscosity, but it is not considered a component.

“Optical coating” means a coating applied to an optical lens.

“Pan backing” means a coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating element.

“Pleasure craft” means a vessel that is manufactured or operated primarily for recreational purposes.

“Pleasure craft coating” means a marine coating, except for unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, roller, or other means to a pleasure craft.

“Powder coating” means a coating applied as a dry, finely divided solid that, when melted and fused, adheres to the substrate as a paint film.

“Prefabricated architectural” means a coating applied to a prefabricated metal part or product if the part or product is to be used as an architectural appurtenance or structure. The appurtenance is detached from the structure when coated in a shop setting.

“Pretreatment coating” means a coating that contains no more than 12% solids by weight and at least 0.5% acid by weight that is used to provide surface etching and that is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

“Pretreatment wash primer” means a coating that contains no more than 12% solids by weight and at least 0.5% acid by weight that is used to provide surface etching and that is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings.

“Primer” means a coating applied for purposes of corrosion prevention, protection from the environment, functional fluid resistance, and/or adhesion of subsequent coatings. It also includes a coating that is formulated to be used as a primer but that, in a specific application, is used as an initial and final coating without subsequent application of a topcoat.

“Projected maximum emissions” means the highest annual rate, in tons per year, at which the stationary source is projected to emit VOC based on anticipated production, throughput, heat input, or material utilization rates.

“Red coating” means a coating that meets the following, based on Cielab color space, 0/45 geometry:

1. Yellow limit: the hue of hostaperm scarlet;
2. Blue limit: the hue of monastral red-violet;
3. Lightness limit for metallics: 35% aluminum flake;
4. Lightness limit for solids: 50% titanium dioxide white;
5. Solid reds: hue angle of -11 to 38 degrees and maximum lightness of 23 to 45 units; and
6. Metallic reds: hue angle of -16 to 35 degrees and maximum lightness of 28 to 45 units.
7. For spherical geometry, specular included, the upper limit is 49 units.

“Repair coating” means a coating used to recoat portions of a previously coated product that has sustained mechanical damage to the coating following normal coating operations.

“Resist coating” means a coating that is applied to a plastic part before metallic plating to prevent deposits of metal on portions of the plastic part.

“Roll coat” means applying a coating by rolling the coating onto a surface using a roll applicator.

“Safety-indicating coating” means a coating applied to pressurized air cylinders that undergoes a wide color change when exposed to high temperature.

“Shock-free coating” means a coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being of low capacitance and high resistance, and is resistant to breaking down under high voltage.

“Silicone release” means a coating that contains silicone resin and is intended to prevent food from sticking to metal surfaces, such as baking pans.

“Solar absorbent” means a coating that has as its prime purpose the absorption of solar radiation.

“Solid-film lubricant” means a thin film coating of an organic binder system containing as its chief pigment material one or more of the following: molybdenum disulfide, graphite, polytetrafluoroethylene, or other solids that act as a dry lubricant between meeting surfaces.

“Solvent” means any substance containing an organic compound, or combination of organic compounds, that is liquid at atmospheric pressure and ambient temperature and is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or other additives used for a similar purpose. It does not include substances used as fuel, antiseptics, or anesthetics.

“Stencil coating” means an ink or coating that is applied onto a template, stamp, or stencil to add identifying letters, numbers, or decorative designs, or a combination of these, to a metal or plastic part or product.

“Texture coat” or “texture topcoat” means a coating applied to a plastic part that, in its finished form, consists of discrete raised spots of the coating.

“Thermal-conducting coating” means a coating applied to improve the heat management properties of material.

“Topcoat” means a final coating that applies two or more coatings.

“Touch-up coating” means a coating used to cover minor coating imperfections appearing after the main coating operation.

“Transfer efficiency” means the ratio of weight of coating solids adhering to the surface coated to the weight of coating solids used in the coating operation, expressed as a percentage.

“Vacuum-metalizing” means a coating having either an undercoat applied to a substrate on which the metal is deposited prior to a vacuum-metalizing process or an overcoat applied directly to the metal film after a vacuum-metalizing process.

“Vacuum-metalizing process” means the process of evaporating metals inside a vacuum chamber and depositing them on a substrate to achieve a uniform metalized layer.

“VOC-containing material” means any coatings, solvent, or cleaning material used in miscellaneous metal or plastic part operations that contain more than 0.17 lb/gal (20 g/L) of VOC as applied, excluding water and exempt compounds.

“Waste material” means any VOC-containing material designated for disposal, including VOC-laden rags and wipes.

103.4 EXEMPTIONS

Unless and until the Control Officer objects to an owner or operator’s use of an exemption in accordance with Section 103.9, miscellaneous metal or plastic parts coating operations that meet the criteria in this section are exempt from one or more requirements of Section 103 if the owner or operator complies with the notification, recordkeeping, and reporting requirements in Section 103.9, as applicable.

- (a) Sections 103.5–103.8 (related to emissions standards, work practice requirements, compliance obligations, and registration requirements), 103.9.1(a), 103.9.2, and 103.9.3 (related to testing notification, recordkeeping, and reporting requirements) do not apply when VOC emissions from the miscellaneous metal or plastic parts coating operations are controlled by RACT emissions standard(s) at least as stringent as Section 103 under another applicable SIP-approved section of the AQRs.
- (b) Section 103.6 (related to work practice requirements) and Sections 103.7 (b)–(c) (related to compliance obligations) do not apply when a stationary source uses only aerosol products in their miscellaneous metal or plastic parts coating operations.
- (c) Section 103.5 (related to emissions standards) does not apply when applying the following coatings to a metal part or product:
 - (1) Stencil coating;
 - (2) Safety-indicating coating;
 - (3) Solid-film lubricant;
 - (4) Electric-insulating and thermal-conducting coating;
 - (5) Magnetic tape storage disk coating;
 - (6) Plastic extruded onto metal parts to form a coating; or
 - (7) Powder coating.
- (d) Section 103.5 (related to emissions standards) is not applicable when applying the following coatings to a plastic part or product:
 - (1) Touch-up and repair coating;
 - (2) Stencil coating applied on a clear or transparent substrate;

- (3) Clear coating;
 - (4) Coating applied at a paint manufacturing facility while conducting performance tests on coating;
 - (5) Reflective coating applied to highway cones;
 - (6) Maskant, if the coating is less than 0.5 mm thick (dried) and the area coated is less than 25 in²;
 - (7) EMI/RFI shielding coating;
 - (8) Heparin-benzalkonium chloride (HBAC)-containing coating applied to a medical device, provided that the total usage of HBAC-containing coatings does not exceed 100 gallons in one calendar year at the stationary source; or
 - (9) Powder coating.
- (e) Section 103.5(d) (related to efficient application method) is not applicable when applying the following coatings to metal or plastic parts:
- (1) Touch-up coating, repair coating, or textured finish to a metal part or product;
 - (2) Powder coating to a plastic part or product, including automotive/transportation and business machine plastic parts or products;
 - (3) Coating applied through airbrush operations to a plastic part or product when 5 gallons (18.9 L) or less are used in the airbrush operation in a calendar year;
 - (4) Repair coating applied to any metal parts or products; or
 - (5) Extreme high gloss coating applied to a pleasure craft.
- (f) Sections 103.5(a)–(c) (related to emissions standards) do not apply when applying the following coatings to automotive/transportation and business machine parts:
- (1) Texture coat;
 - (2) Vacuum-metalizing coating;
 - (3) Gloss reducer;
 - (4) Texture topcoat;

- (5) Adhesion primer;
- (6) Electrostatic prep coat;
- (7) Resist coating; or
- (8) Stencil coating.

103.5 EMISSIONS STANDARDS

Except as provided in Section 103.4, an owner or operator of miscellaneous metal or plastic parts coating operations shall limit VOC emissions from coating operations by complying with paragraph (a); or paragraphs (b) and (d); or paragraphs (c) and (d) of this section.

- (a) Reduce VOC emissions from the coating operations using an ECS that reduces VOC emissions by at least 90% by weight.
- (b) Use coatings that, as applied, excluding water and exempt compounds, have a VOC content equal to or less than the VOC content limit for the applicable coating category specified in Tables 1–5. If more than one VOC content limit applies to a specific application, use the most restrictive VOC content limit. When a category for a specific coating is not in the tables, use a coating that meets the relevant VOC content limit for the following categories:
 - (1) For metal parts or product coatings, “General One Component” or “General Multicomponent coating” in Table 1.
 - (2) For plastic parts or products coatings, “General One Component” or “General Multicomponent” in Table 2.
 - (3) For pleasure craft coatings, “All other pleasure craft” in Table 4.

Table 1. Metal Parts and Products VOC Coating Content Limits, as Applied (maximum VOC content in weight of VOC per volume of coating, less water and exempt compounds)

Coating Category	Air Dried		Baked	
	kg VOC/L coating	lb VOC/gal coating	kg VOC/L coating	lb VOC/gal coating
General One Component	0.34	2.8	0.28	2.3
General Multicomponent	0.34	2.8	0.28	2.3
Camouflage	0.42	3.5	0.42	3.5
Electric-Insulating Varnish	0.42	3.5	0.42	3.5
Etching Filler	0.42	3.5	0.42	3.5
Extreme High Gloss	0.42	3.5	0.36	3.0
Extreme Performance	0.42	3.5	0.36	3.0
Heat-Resistant	0.42	3.5	0.36	3.0

Coating Category	Air Dried		Baked	
	kg VOC/L coating	lb VOC/gal coating	kg VOC/L coating	lb VOC/gal coating
High Performance Architectural	0.74	6.2	0.74	6.2
High Temperature	0.42	3.5	0.42	3.5
Metallic	0.42	3.5	0.42	3.5
Military Specification	0.34	2.8	0.28	2.3
Mold-Seal	0.42	3.5	0.42	3.5
Pan Backing	0.42	3.5	0.42	3.5
Prefabricated Architectural Multi-Component	0.42	3.5	0.28	2.3
Prefabricated Architectural One Component	0.42	3.5	0.28	2.3
Pretreatment Coatings	0.42	3.5	0.42	3.5
Repair and Touch Up Coatings	0.42	3.5	0.36	3.0
Silicone Release	0.42	3.5	0.42	3.5
Solar Absorbent	0.42	3.5	0.36	3.0
Vacuum-Metalizing	0.42	3.5	0.42	3.5
Drum Coating, New, Exterior	0.34	2.8	0.34	2.8
Drum Coating, New, Interior	0.42	3.5	0.42	3.5
Drum Coating, Reconditioned, Exterior	0.42	3.5	0.42	3.5
Drum Coating, Reconditioned, Interior	0.50	4.2	0.50	4.2

Table 2. Plastic Parts and Products VOC Coating Content Limits, as Applied (maximum VOC content in weight of VOC per volume of coating, less water and exempt compounds)

Coating Category	kg VOC/L coating	lb VOC/gal coating
General One Component	0.28	2.3
General Multicomponent	0.42	3.5
Electric Dissipating Coatings and Shock-Free Coatings	0.80	6.7
Extreme Performance	0.42 (2-pack coatings)	3.5 (2-pack coatings)
Metallic	0.42	3.5
Military Specification	0.34 (1 pack) 0.42 (2 pack)	2.8 (1 pack) 3.5 (2 pack)
Mold-Seal	0.76	6.3
Multi-colored Coatings	0.68	5.7
Optical Coatings	0.80	6.7
Vacuum-Metalizing	0.80	6.7

Table 3. Automotive/Transportation and Business Machine Plastic Parts VOC Coating Content Limits, as Applied (maximum VOC content in weight of VOC per volume of coating, less water and exempt compounds)

Coating Category	kg VOC/L coating	lb VOC/gal coating
Automotive/Transportation Coatings ¹		
I. High Bake Coatings—Interior and Exterior Parts		
• Flexible Primer	0.54	4.5
• Non-flexible Primer	0.42	3.5
• Base Coats	0.52	4.3
• Clear Coat	0.48	4.0
• Non-basecoat/clear coat	0.52	4.3
II. Low Bake/Air Dried Coatings—Exterior Parts		
• Primers	0.58	4.8
• Basecoat	0.60	5.0
• Clear coats	0.54	4.5
• Non-basecoat/clear coat	0.60	5.0
III. Low Bake/Air Dried Coatings—Interior Parts	0.60	5.0
IV. Touchup and Repair Coatings	0.62	5.2
Business Machine Coatings		
I. Primers	0.35	2.9
II. Topcoat	0.35	2.9
III. Texture Coat	0.35	2.9
IV. Fog Coat	0.26	2.2
V. Touchup and repair	0.35	2.9

¹ For red, yellow, and black automotive coatings, except touch-up and repair coatings, the limit is determined by multiplying the appropriate limit in this table by 1.15.

Table 4. Pleasure Craft VOC Coating Content Limits, as Applied (maximum VOC content in weight of VOC per volume of coating, less water and exempt compounds)

Coating Category	kg VOC/L coating	lb VOC/gal coating
Extreme High Gloss Topcoat	0.49	4.1
High Gloss Topcoat	0.42	3.5
Pretreatment Wash Primers	0.78	6.5
Finish Primer/Surfacer	0.42	3.5
High Build Primer/Surfacer	0.34	2.8
Aluminum Substrate Antifoulant Coating	0.56	4.7
Other Substrate Antifoulant Coating	0.33	2.8
All other pleasure craft surface coatings for metal or plastic	0.42	3.5

Table 5. Motor Vehicle Materials VOC Content Limits, as Applied (maximum VOC content in weight of VOC per volume of coating, less water and exempt compounds)

Coating Category	kg VOC/L coating	lb VOC/gal coating
Motor vehicle cavity wax	0.65	5.4
Motor vehicle sealer	0.65	5.4
Motor vehicle deadener	0.65	5.4
Motor vehicle gasket/gasket sealing material	0.20	1.7
Motor vehicle underbody coating	0.65	5.4
Motor vehicle trunk interior coating	0.65	5.4
Motor vehicle bedliner	0.20	1.7
Motor vehicle lubricating wax/compound	0.70	5.8

- (c) Use coatings that, as applied, have a VOC content equal to or less than the mass of VOC per volume of coating solids limit for the applicable coating category in Tables 6–9 by using a combination of low VOC-containing material and an ECS.

Table 6. Metal Parts and Products Coatings VOC Emissions Rate Limit, as Applied (weight of VOC per volume of coating solids)

Coating Category	Air Dried		Baked	
	kg VOC/L solids	lb VOC/gal solids	kg VOC/L solids	lb VOC/gal solids
General One Component	0.54	4.52	0.40	3.35
General Multicomponent	0.54	4.52	0.40	3.35
Camouflage	0.80	6.67	0.80	6.67
Electric-Insulating Varnish	0.80	6.67	0.80	6.67
Etching Filler	0.80	6.67	0.80	6.67
Extreme High Gloss	0.80	6.67	0.61	5.06
Extreme Performance	0.80	6.67	0.61	5.06
Heat-Resistant	0.80	6.67	0.61	5.06
High Performance Architectural	4.56	38.0	4.56	38.0
High Temperature	0.80	6.67	0.80	6.67
Metallic	0.80	6.67	0.80	6.67
Military Specification	0.54	4.52	0.40	3.35
Mold-Seal	0.80	6.67	0.80	6.67
Pan Backing	0.80	6.67	0.80	6.67
Prefabricated Architectural Multi-component	0.80	6.67	0.40	3.35
Prefabricated Architectural One Component	0.80	6.67	0.40	3.35
Pretreatment Coatings	0.80	6.67	0.80	6.67
Silicone Release	0.80	6.67	0.80	6.67
Solar Absorbent	0.80	6.67	0.61	5.06
Vacuum-Metalizing	0.80	6.67	0.80	6.67

Coating Category	Air Dried		Baked	
	kg VOC/L solids	lb VOC/gal solids	kg VOC/L solids	lb VOC/gal solids
Drum Coating, New, Exterior	0.54	4.52	0.54	4.52
Drum Coating, New, Interior	0.80	6.67	0.80	6.67
Drum Coating, Reconditioned, Exterior	0.80	6.67	0.80	6.67
Drum Coating, Reconditioned, Interior	1.17	9.78	1.17	9.78

Table 7. Plastic Parts and Products Coatings VOC Emissions Rate Limit, as Applied (weight of VOC per volume of coating solids)

Coating Category	kg VOC/L solids	lb VOC/gal solids
General One Component	0.40	3.35
General Multicomponent	0.80	6.67
Electric Dissipating Coatings and Shock-Free Coatings	8.96	74.7
Extreme Performance	0.80 (2-pack coatings)	6.67 (2-pack coatings)
Metallic	0.80	6.67
Military Specification	0.54 (1 pack) 0.80 (2 pack)	4.52 (1 pack) 6.67 (2 pack)
Mold-Seal	5.24	43.7
Multi-colored Coatings	3.04	25.3
Optical Coatings	8.96	74.7
Vacuum-Metalizing	8.96	74.7

Table 8. Automotive/Transportation and Business Machine Plastic Parts Coatings VOC Emissions Rate Limit, as Applied (weight of VOC per volume of coating solids)

Coating Category	kg VOC/L solids	lb VOC/gal solids
General One Component	0.40	3.35
General Multicomponent	0.80	6.67
Electric Dissipating Coatings and Shock-Free Coatings	8.96	74.7
Extreme Performance	0.80 (2-pack coatings)	6.67 (2-pack coatings)
Metallic	0.80	6.67
Military Specification	0.54 (1 pack) 0.80 (2 pack)	4.52 (1 pack) 6.67 (2 pack)
Mold-Seal	5.24	43.7
Multi-colored Coatings	3.04	25.3
Optical Coatings	8.96	74.7
Vacuum-Metalizing	8.96	74.7

**Table 9. Pleasure Craft Coatings VOC Emissions Rate Limit, As Applied
(weight of VOC per volume of coating solids)**

Coating Category	kg VOC/L solids	lb VOC/gal solids
Extreme High Gloss Topcoat	1.10	9.2
High Gloss Topcoat	0.80	6.7
Pretreatment Wash Primers	6.67	55.6
Finish Primer/Surfacer	0.80	6.7
High Build Primer/Surfacer	0.55	4.6
Aluminum Substrate Antifoulant Coating	1.53	12.8
Other Substrate Antifoulant Coating	0.53	4.4
All other pleasure craft surface coatings for metal or plastic	0.80	6.7

- (d) Use one or more of the following efficient application methods:
- (1) Electrostatic spray coating;
 - (2) Flow coating;
 - (3) Dip coating, including electrodeposition;
 - (4) Roll coating;
 - (5) HVLP spray coating;
 - (6) Airless spray coating;
 - (7) Air-assisted airless spray coating;
 - (8) Slot-die coating designed and operated to achieve at least a 65% transfer efficiency; or
 - (9) A coating application method that is designed and operated to achieve at least a 65% transfer efficiency.

103.6 WORK PRACTICES REQUIREMENTS FOR USING, STORING, HANDLING, AND DISPOSING OF VOC-CONTAINING AND WASTE MATERIALS

An owner or operator of miscellaneous metal or plastic parts coating operations shall comply with the requirements of this section to minimize VOC emissions to the atmosphere.

- (a) Ensure all containers with a capacity of 1 gallon (3.8 L) or more are clearly labeled with the product name and the type of VOC-containing material or waste material inside.

- (b) Minimize air circulation around the miscellaneous metal or plastic parts coating operations to the extent possible without compromising workplace safety when VOC-containing materials are in use.
- (c) Repair any liquid leak, visible tear, or crack detected in a storage container within one calendar day, or drain all contents from the leaking container and transfer to a container meeting the requirements of paragraph (e) of this section. The owner or operator may not use the leaking container until repaired or replaced.
- (d) Securely close all containers containing VOC-containing material or waste material when not in use, and store VOC-laden rags and wipes in closed containers when not in use.
- (e) Use closed, nonabsorbent, nonleaking containers to store and dispose of VOC-containing material and waste material, including used rags and wipes.
- (f) Use care when handling and transferring VOC-containing material or waste material to and from containers, enclosed systems, waste receptacles, and other equipment to minimize spills; immediately contain and clean up any spills that occur.
- (g) Use closed and labeled containers or pipes to convey VOC-containing material and waste material from one location to another.
- (h) Minimize VOC emissions from the cleaning of application, storage, mixing, or conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and that all spent solvent is captured in closed containers.

103.7 COMPLIANCE OBLIGATIONS

To demonstrate compliance with the emissions standards and work practices in Section 103, an owner or operator of miscellaneous metal or plastic parts coating operations shall:

- (a) Identify the VOC content of all VOC-containing material using information provided by the manufacturer.
- (b) Conduct periodic (at least quarterly) inspections to assure compliance with the requirements of Section 103.6.
- (c) Provide training to newly hired workers on the work practices requirements of Section 103.6.

103.7.1 Compliance When Using an Emissions Control System

An owner or operator of miscellaneous metal or plastic parts coating operations using an ECS shall:

- (a) Develop, maintain, and comply with an operations and maintenance plan, in accordance with manufacturer recommendations where available, if using an ECS to comply with Section 103.5. Such plan shall:
 - (1) Identify monitoring devices, monitoring frequencies, and key system operating parameters, i.e., those needed to ensure that good operation and engineering practices are associated with operation of the ECS, such as temperature, pressure, and/or flow rate.
 - (2) Include schedules for inspection, schedules for anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.
 - (3) Include a monitoring plan to ensure proper operation of the ECS using the key operating parameters identified.
 - (4) Include provisions for minimizing emissions during periods of startup, shutdown, and malfunction.
 - (5) Determine the control efficiency of the ECS used to comply with Section 103 through manufacturer design specifications or performance testing. The following reference materials may assist in determining the control efficiency of the ECS:
 - (A) "Guidelines for Determining Capture Efficiency," EPA Office of Air Quality Planning and Standards, January 9, 1995.
 - (B) EPA Test Methods 1–4 in 40 CFR Part 60, Appendices A–1 through A–3, to determine flow rates.
 - (C) "Method 204—Criteria for and Verification of a Permanent or Temporary Total Enclosure," at 40 CFR Part 51, Appendix M; or, as applicable, EPA Test Methods 204A, 204B, 204C, or 204D.
 - (D) "Method 18—Measurement of Gaseous Organic Compound Emissions by Gas Chromatography," at 40 CFR Part 60, Appendix A–6.
 - (E) "Method 25—Determination of Total Gaseous Nonmethane Organic Emissions as Carbon," at 40 CFR Part 60,

Appendix A–7, or, as applicable, EPA Test Methods 25A or 25B.

- (b) Install, calibrate, operate, and maintain monitoring devices on an ECS used to comply with Section 103 according to manufacturer specifications and the operations and maintenance plan.
- (c) Operate the monitoring devices required by paragraph (b) of this section at all times an ECS operates.

103.8 REGISTRATION REQUIREMENTS

An owner or operator of miscellaneous metal or plastic parts coating operations shall comply with the registration requirements of this section, as indicated below.

- (a) Except as provided in paragraph (d) of this section, an owner or operator of miscellaneous metal or plastic parts coating operations shall comply with the following registration requirements:
 - (1) No later than September 29, 2024, or 45 days after becoming subject to any requirements in Section 103, whichever is later, submit a registration application to the Control Officer in the manner and form prescribed that includes, at a minimum, the following information:
 - (A) Name, email address, and telephone number of the owner or operator and the Responsible Official;
 - (B) Company name and address (and source name and address, if different);
 - (C) Projected maximum emissions of VOC (in tons per calendar year) from miscellaneous metal or plastic parts coating operations at the stationary source;
 - (D) Calculations to support the values reported in paragraph (a)(1)(C) of this section;
 - (E) Type of ECS used to comply with Section 103, if any;
 - (F) Copy of the ECS operations and maintenance plan developed to comply with Section 103.7.1, if required;
 - (G) A declaration signed by the Responsible Official under penalty of perjury that the statements and information in the registration are true, accurate, and complete. Signature on the declaration statement shall subject the Responsible Official to liability for perjury under NRS 199.145; and

- (H) Other information as required by the Control Officer.
- (2) Submit an updated registration to the Control Officer within 60 days of a material change.
- (b) The Control Officer may require updated information after the initial registration to determine that the source continues to operate below the applicability threshold in Section 103.2(a).
- (c) Owners or operators may submit a revised registration application with reduced projected maximum emissions from miscellaneous metal or plastic parts coating operations at the stationary source if less than 3.0 tons of VOC were emitted and reported in each of the previous three consecutive calendar years.
- (d) In lieu of complying with the registration requirements of Section 103.8, but by the deadlines established in paragraph (a)(1), a stationary source regulated by a minor source permit, an authority to construct permit, or a Part 70 operating permit shall apply for a permit revision to incorporate Section 103 requirements in accordance with the requirements in Sections 12.1, 12.4, and 12.5.

103.9 NOTIFICATION, RECORDKEEPING, AND REPORTING REQUIREMENTS

An owner or operator of miscellaneous metal or plastic parts coating operations shall comply with the notification, recordkeeping, and reporting requirements of this section, as indicated below. The Control Officer may deny exemption use or applicability status upon finding that the miscellaneous metal or plastic parts coating operation does not meet the eligibility criteria for exemption(s) or applicability, the stationary source has a poor regulatory compliance history, or the RACT emissions standard does not provide comparable emission reductions to Section 103.

103.9.1 Notification Requirements

- (a) Owners or operators using a performance test to determine the control efficiency of an ECS to comply with Section 103.5 shall comply with the following requirements and with the compliance dates in Section 103.10:
 - (1) Conduct a performance test within 180 days of initial operation of the ECS or September 29, 2024, whichever is later.
 - (2) Submit a performance testing protocol to the Control Officer in accordance with department guidelines containing test, reporting, and notification schedules, test protocols, and anticipated test dates at least 45 days, but no more than 90 days, before the anticipated test date.

- (3) Submit a report to the Control Officer in accordance with department guidelines describing the results of a performance test within 60 days of completing the test.
- (b) Owners or operators relying on the exemption in Section 103.4(a) shall submit a notice to the Control Officer that identifies the exemption claimed by the owner or operator within 30 days of the applicable compliance date in Section 103.10.

103.9.2 Recordkeeping Requirements

An owner or operator of miscellaneous metal or plastic parts coating operations shall comply with the following recordkeeping requirements:

- (a) Owners or operators required to comply with Section 103 shall, at a minimum:
 - (1) Maintain records to document eligibility for applicability thresholds or for any exemption claimed under Section 103.4.
 - (2) Retain all records for a period of five years from their creation.
 - (3) Make records available and producible onsite to the Control Officer's authorized representative upon request and without prior notice during the owner or operator's hours of operation.
 - (4) Each month, record the type and amount of VOC-containing material used in the previous month. The owner or operator may track the actual use of VOC-containing material or use purchase and inventory records (assuming that all purchases not retained in inventory are used).
 - (5) Maintain a list of VOC-containing material used that includes, at a minimum:
 - (A) Material name and manufacturer;
 - (B) VOC content of each VOC-containing material, listed as lb/gal or g/L of VOC; and
 - (C) Product data sheet or technical data sheet with specific mixing instructions and the VOC content, as applied, of VOC-containing material requiring dilution.
 - (6) Maintain a record of calendar year emission calculations.
- (b) Owners or operators using an ECS to comply with Section 103.5 shall:

- (1) Maintain a record of monitoring of the key system operating parameters specified in the operations and maintenance plan.
 - (2) Record and maintain monitoring data collected to comply with Section 103.7.1(b).
- (c) Owners or operators required to comply with Sections 103.6 and 103.7(b)–(c) shall maintain inspection and training logs.

103.9.3 Reporting Requirements

- (a) Owners or operators subject to Section 103.2(a) shall complete and submit to the Control Officer an annual emissions inventory for VOCs in the manner and form prescribed.
- (b) The inventory must be submitted to and received by the department on or before March 31 of each year (or other specified date upon prior notice from the Control Officer), and shall include emission factors and calculations used to determine emissions in the previous calendar year.
- (c) The inventory shall include, at a minimum:
 - (1) Actual annual emissions of VOC (in tons per calendar year) for the previous calendar year from miscellaneous metal or plastic parts coating operations at the stationary source; and
 - (2) Calculations to support the values reported in paragraph (c)(1) of this section.
- (d) Any information submitted pursuant to this section shall contain a certification by the Responsible Official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the information in the statement or inventory is true, accurate, and complete.

103.10 COMPLIANCE DATES

- (a) Except as provided in paragraphs (c)–(e) of this section, an owner or operator of existing miscellaneous metal or plastic parts coating operations shall comply with the requirements in Section 103 by September 29, 2024, or by the date the miscellaneous metal or plastic parts coating operations first commence normal operations or meet the applicability requirements in Section 103.2, whichever of the three dates is later.

- (b) An owner or operator of new miscellaneous metal or plastic parts coating operations shall comply with Section 103 upon commencing normal operation.
- (c) An owner or operator of existing miscellaneous metal or plastic parts coating operations may use VOC-containing materials from their existing inventory that do not meet the requirements of Section 103.5 until April 2, 2025 or 12 months after first becoming subject to Section 103.5, whichever is later. Beginning on the compliance date specified in paragraph (a) of this section, the owner or operator shall not purchase any VOC-containing materials that do not comply with the VOC content limitations in Section 103.5(b) or (c) unless the emissions from such VOC-containing materials are controlled by an ECS in accordance with the requirements in Section 103.5.
- (d) An owner or operator of existing miscellaneous metal or plastic parts coating operations who elects to comply with Section 103.5 by installing a new ECS shall comply with Sections 103.5(a) or (c) no later than September 24, 2025.
- (e) The Control Officer may establish an alternative compliance date for meeting Section 103.5 not later than April 2, 2027, considering the technical feasibility and time needed to comply, through issuance of a minor source permit or an authority to construct permit, or by revising a Part 70 operating permit. The filing of a complete application for a minor source permit, authority to construct permit, or Part 70 significant permit revision requesting an alternative compliance date stays the compliance date in paragraph (a) of this section until the proposed alternative compliance date, or until the Control Officer denies the request or issues the minor source permit, authority to construct permit, or revised Part 70 operating permit.

History: Adopted March 19, 2024.

SECTION 104: VOC EMISSIONS CONTROL FOR INDUSTRIAL CLEANING SOLVENT OPERATIONS

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104.1 PURPOSE

Section 104 implements Control Technique Guidelines Reasonably Available Control Technology (CTG RACT) requirements for industrial cleaning solvent operations 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).

104.2 APPLICABILITY

- (a) Except as provided under Section 104.4, Section 104 is applicable to any owner or operator of a stationary source with projected maximum emissions of volatile organic compounds (VOC) equal to or greater than 3.0 tons per calendar year from industrial cleaning solvent operations when the stationary source is 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) Except as provided under Section 104.4, Sections 104.6, 104.7(c)–(d), and 104.8–104.10 are applicable to any owner or operator of a stationary source with projected maximum emissions of VOC of less than 3.0 tons per calendar year from industrial cleaning solvent operations when the stationary source is 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.
- (c) Section 104 does not apply:
 - (1) If the stationary source uses less than 500 gallons (1,892 L) of industrial cleaning solvent per calendar year in industrial cleaning solvent operations.
 - (2) When industrial cleaning solvents are used to clean any of the following equipment, or in the following operations:
 - (A) Janitorial services.

- (B) Electrical and electronic components.
- (C) Precision optics.
- (D) Resin mixing, molding, and application equipment.
- (E) Coating, ink, and adhesive mixing, molding, and application equipment.
- (F) Stripping of cured inks, cured adhesives, and cured coatings.
- (G) Research and development laboratories.
- (H) Medical devices.
- (I) Pharmaceutical preparations.
- (J) Performance or quality assurance testing of coatings, inks, or adhesives.
- (K) Architectural coating manufacturing and application operations.
- (L) Magnet wire coating operations.
- (M) Semiconductor wafer fabrication.
- (N) Polyester resin operations.

104.3 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, the Act, or common usage, in that order of priority.

“Coating” means a material containing more than 0.17 lb/gal (20 g/L) of VOC as applied, excluding water and exempt compounds, that is applied onto or into a substrate for protective, decorative, or functional purposes and that dries or cures to form a continuous solid film. The term includes, but is not limited to, paints, sealants, caulks, primers, inks, maskants, varnish, stains, lacquer, enamel, and shellac. The term does not include protective oils, acids or bases, adhesives, or combinations of these materials.

“Coating operation” means all steps involved in the application of one or more coatings, including application, drying/curing, surface preparation, and cleaning steps.

“Containers” means drums, buckets, cans, pails, trays, or similar storage units.

“Electrical and electronic components” means components and assemblies of components that generate, convert, transmit, or modify electrical energy. These include, but are not limited to, wires, windings, stators, rotors, magnets, contacts, relays, printed circuit boards, printed wire assemblies, wiring boards, integrated circuits, resistors, capacitors, and transistors. They do not include cabinets that house electrical and electronic components.

“Emissions Control System (ECS)” means the combination of an emissions capture device and an add-on emissions control device that reduces VOC emissions and that is designed and operated in accordance with good engineering practice.

“Exempt compound” means a specified organic compound, as listed in 40 CFR Part 51.100, that the Administrator has determined to have negligible photochemical reactivity.

“Existing industrial cleaning solvent operations” means industrial cleaning solvent operations for which the owner or operator began actual construction or reconstruction before April 2, 2024, or first constructed and operated on or after April 2, 2024, and subsequently modified such that the industrial cleaning solvent operations became subject to Section 104 after the modification.

“Existing inventory” means industrial cleaning solvents that an owner or operator purchased before April 2, 2024.

“In use” means the active application of an industrial cleaning solvent to a substrate or equipment, or the filling or draining of a container holding an industrial cleaning solvent.

“Industrial cleaning solvent” means solvents and other VOC-containing materials used to remove residue or other unwanted materials from equipment during industrial cleaning solvent operations, or to clean equipment used in industrial cleaning operations.

“Industrial cleaning solvent operations” means the use of solvents to remove contaminants, including, but not limited to, adhesives, inks, paint, dirt, soil, oil, and grease, from parts, products, tools, machinery, equipment, vessels, and work production-related areas for a variety of reasons, including safety, operability, and avoiding product contamination. This includes activities such as wiping, flushing, spraying, dipping, and purging. It also includes the cleaning of equipment used to remove contaminants. It does not include the solvent(s) used in a metal solvent degreaser, discussed in Section 105.

“Janitorial services” means the cleaning of buildings or building components, including, but not limited to, floors, ceilings, walls, windows, doors, stairs, bathrooms, furnishings, and exterior surfaces of office equipment, but excluding the cleaning of work areas where manufacturing or repair activity is performed.

“Magnet wire” means wire used in electromagnetic field applications in electrical machinery and equipment, such as transformers, motors, generators, and magnetic tape recorders.

“Magnet wire coating operations” means the process of applying insulation coatings, such as varnish or enamel, onto magnet wire where the wire is continuously drawn through a coating applicator.

“Material change” means a change in the owner or operator, a change in location, a change in compliance method, a change to a different ECS, or an increase in either the stationary source’s projected maximum emissions or its annual actual emissions of VOC above the projected maximum emissions.

“Medical device” means an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar article, including any component or accessory, that is intended for use in the diagnosis of diseases or other conditions or in the cure, mitigation, treatment, or prevention of diseases; is intended to affect the structure or any function of the body; or is defined in the National Formulary or the U.S. Pharmacopeia (and any supplement to it).

“Metal solvent degreaser” means a tank, drum, or other container in which metal objects are exposed to a solvent or solvent vapors to remove contaminants. For the purposes of this rule, it includes only cold cleaners, open vapor top degreasers, and conveyORIZED degreasers.

“New industrial cleaning solvent operations” means industrial cleaning solvent operations for which the owner or operator began actual construction or reconstruction on or after April 2, 2024.

“Pharmaceutical preparation” means medical devices, pharmaceutical products (and associated manufacturing and product handling equipment and material), work surfaces, maintenance tools, and room surfaces subject to the U.S. Food and Drug Administration’s Current Good Manufacturing Practice or Good Laboratory Practice for Nonclinical Laboratory Studies regulations, or to Centers for Disease Control and Prevention or National Institutes of Health guidelines for biological disinfection of surfaces.

“Polyester resin operations” means the fabrication, rework, repair, or touch-up of composite products for commercial, military, or industrial uses by mixing, pouring, manually applying, molding, impregnating, injecting, forming, spraying, pultrusion, filament winding, or centrifugally casting with polyester resins.

“Precision optics” means the optical elements used in electro-optical devices that are designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes in light energy levels.

“Projected maximum emissions” means the highest annual rate, in tons per year, at which the stationary source is projected to emit VOC based on anticipated production, throughput, heat input, or material utilization rates that does not include emission reductions from add-on controls.

“Solvent” means any substance containing an organic compound (or combination of organic compounds) that is liquid at atmospheric pressure and ambient temperature and is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or other additive used for a similar purpose. It does not include substances used as fuel, antiseptics, or anesthetics.

“VOC-containing material” means any coatings, solvent, or cleaning material used in industrial cleaning solvent operations that contain more than 0.17 lb/gal (20 g/L) of VOC as applied, excluding water and exempt compounds.

“Waste material” means any VOC-containing material designated for disposal, including VOC-laden rags and wipes.

104.4 EXEMPTIONS

Unless and until the Control Officer objects to an owner or operator’s use of an exemption in accordance with Section 104.9, industrial cleaning solvent operations that meet the criteria in this section are exempt from one or more requirements of Section 104 if the owner or operator complies with the notification, recordkeeping, and reporting requirements of Section 104.9, as applicable.

- (a) Sections 104.5–104.8 (related to emissions standards, work practice requirements, compliance obligations, and registration requirements) and Sections 104.9.1(a), 104.9.2, and 104.9.3 (related to testing notification, recordkeeping, and reporting requirements) do not apply when VOC emissions from the industrial cleaning solvent operations are controlled by RACT emissions standard(s) at least as stringent as Section 104 under another applicable SIP-approved section of the AQRs.
- (b) Section 104.6 (related to work practice requirements) and Sections 104.7(c)–(d) (related to compliance obligations) do not apply when a stationary source uses only aerosol products of industrial cleaning solvents.

104.5 EMISSIONS STANDARDS

Except as provided in Section 104.4, an owner or operator of industrial cleaning solvent operations shall limit VOC emissions from industrial cleaning solvents by complying with paragraphs (a), (b), or (c) of this section.

- (a) Use industrial cleaning solvents that have a VOC content equal to or less than 0.42 lb/gal (50 g/L), as applied, excluding water and exempt compounds;
- (b) Use industrial cleaning solvents with a maximum composite vapor pressure of 8.0 mm Hg measured at 68°F (20°C); or
- (c) Reduce VOC emissions from industrial cleaning solvent operations using an ECS that reduces VOC emissions by at least 85% by weight, or reduce VOC emissions to an overall percent efficiency equivalent of at least 85%, using the following equation to calculate the minimum required percent control of the ECS:

$$MCE = \left(1 - \frac{E}{V}\right) * 100$$

where:

MCE = minimum required control efficiency (%)

E = 0.42 lb/gal (50 g/L) of VOC

V = VOC content of industrial cleaning solvent in lb/gal or g/L.

104.6 WORK PRACTICES REQUIREMENTS FOR USING, STORING, HANDLING, AND DISPOSING OF INDUSTRIAL CLEANING SOLVENTS

An owner or operator of industrial cleaning solvent operations shall comply with the requirements of this section to minimize VOC emissions to the atmosphere.

- (a) Ensure all containers with a capacity of 1 gallon (3.8 L) or more are clearly labeled with the product name and the type of industrial cleaning solvent or waste material inside.
- (b) When industrial cleaning solvents are in use:
 - (1) Use closed, nonabsorbent, nonleaking containers (except as necessary to relieve pressure buildup) or handheld spray bottles that deliver industrial cleaning solvent without propellant-induced force, or use a reservoir cleaner that prevents industrial cleaning solvent vapors from escaping from the solvent reservoir, directs solvent flow in a manner that prevents splashing, and is not used for cleaning porous or absorbent materials.
 - (2) Do not atomize the industrial cleaning solvent unless the emissions are vented to an ECS meeting Section 104.5(c) requirements, except when cleaning nozzle tips of automated spray equipment systems that are not part of a robotic system.

- (3) Minimize air circulation around industrial cleaning solvent operations to the extent possible without compromising workplace safety.
- (c) Repair any liquid leak, visible tear, or crack detected in a storage container within one calendar day or drain all contents from the leaking container and transfer them to a container meeting the requirements of paragraph (b)(1) of this section. The owner or operator may not use the leaking container until repaired or replaced.
- (d) Securely close all containers containing industrial cleaning solvent or waste material when not in use, and store solvent-laden rags and wipes in closed containers when not in use.
- (e) Use closed, nonabsorbent, nonleaking containers to store and dispose of industrial cleaning solvent and waste material, including used rags and wipes.
- (f) Use care when handling and transferring waste material or industrial cleaning solvents to and from containers, enclosed systems, waste receptacles, and other equipment to minimize spills; immediately contain and clean up any spills that occur.
- (g) Use closed and labeled containers or pipes to convey industrial cleaning solvent and waste material from one location to another.

104.7 COMPLIANCE OBLIGATIONS

To demonstrate compliance with the emissions standards and work practices in Section 104, an owner or operator of industrial cleaning solvent operations shall:

- (a) Identify the VOC content per volume of industrial cleaning solvent using information provided by the manufacturer, or calculate the VOC content using the following equation:

$$C_{mvoc} = (W_s - W_w - W_{es})/V_m$$

where:

C_{mvoc} = VOC content per volume of cleaning solvent

W_s = weight of volatile compounds, including water and exempt compounds

W_w = weight of water

W_{es} = weight of exempt compounds

V_m = volume of cleaning solvent, including water and exempt compounds.

- (b) Determine the variables for paragraph (a) of this section using the following information:
 - (1) “Method 24–Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings,” including updates and revisions, at 40 CFR Part 60, Appendix A-7; or
 - (2) Manufacturer’s Safety Data Sheet or formulation data.
- (c) Conduct periodic (at least quarterly) inspections to assure compliance with the requirements of Section 104.6.
- (d) Provide training to newly hired workers on the work practices requirements of Section 104.6.

104.7.1 Compliance When Using an Emissions Control System

An owner or operator of industrial cleaning solvent operations using an ECS shall:

- (a) Develop, maintain, and comply with an operations and maintenance plan, in accordance with manufacturer recommendations where available, if using an ECS to comply with Section 104.5(c). Such plan shall:
 - (1) Identify monitoring devices, monitoring frequencies, and key system operating parameters, i.e., those needed to ensure that good operation and engineering practices are associated with operation of the ECS, such as temperature, pressure, and/or flow rate.
 - (2) Include schedules for inspection, schedules for anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.
 - (3) Include a monitoring plan to ensure proper operation of the ECS using the key operating parameters identified.
 - (4) Include provisions for minimizing emissions during periods of startup, shutdown, and malfunction.
 - (5) Determine the control efficiency of the ECS used to comply with Section 104 through manufacturer design specifications or performance testing. The following reference materials may assist in determining the control efficiency of the ECS:

- (A) “Guidelines for Determining Capture Efficiency,” EPA Office of Air Quality Planning and Standards, January 9, 1995.
 - (B) EPA Test Methods 1–4 in 40 CFR Part 60, Appendices A–1 through A–3, to determine flow rates.
 - (C) “Method 204—Criteria for and Verification of a Permanent or Temporary Total Enclosure,” at 40 CFR Part 51, Appendix M; or, as applicable, EPA Test Methods 204A, 204B, 204C, or 204D.
 - (D) “Method 18—Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,” at 40 CFR Part 60, Appendix A–6.
 - (E) “Method 25—Determination of Total Gaseous Nonmethane Organic Emissions as Carbon,” at 40 CFR Part 60, Appendix A–7, or, as applicable, EPA Test Methods 25A or 25B.
- (b) Install, calibrate, operate, and maintain monitoring devices on an ECS used to comply with Section 104 according to manufacturer specifications and the operations and maintenance plan.
 - (c) Operate the monitoring devices required by paragraph (b) of this section at all times an ECS operates.

104.8 REGISTRATION REQUIREMENTS

An owner or operator of industrial cleaning solvent operations shall comply with the registration requirements of this section, as indicated below.

- (a) Except as provided in paragraph (d) of this section, an owner or operator of industrial cleaning solvent operations shall comply with the following registration requirements:
 - (1) No later than September 29, 2024, or 45 days after becoming subject to any requirements in Section 104, whichever is later, submit a registration application to the Control Officer in the manner and form prescribed that includes, at a minimum, the following information:
 - (A) Name, email address, and telephone number of the owner or operator and the Responsible Official;
 - (B) Company name and address (and source name and address, if different);

- (C) Projected maximum emissions of VOC (in tons per calendar year) from industrial cleaning solvent operations at the stationary source;
 - (D) Calculations to support the values reported in paragraph (a)(1)(C) of this section;
 - (E) Type of ECS used to comply with Section 104, if any;
 - (F) Copy of the ECS operations and maintenance plan developed to comply with Section 104.7.1, if required;
 - (G) A declaration signed by the Responsible Official under penalty of perjury that the statements and information in the registration are true, accurate, and complete. Signature on the declaration statement shall subject the Responsible Official to liability for perjury under NRS 199.145; and
 - (H) Other information as required by the Control Officer.
- (2) Submit an updated registration to the Control Officer within 60 days of a material change.
- (b) The Control Officer may require updated information after the initial registration to determine that the source continues to operate below the applicability threshold in Section 104.2(a).
 - (c) Owners or operators may submit a revised registration application with reduced projected maximum emissions from industrial cleaning solvent operations at the stationary source if less than 3.0 tons of VOC were emitted and reported in each of the previous three consecutive calendar years.
 - (d) In lieu of complying with the registration requirements of Section 104.8, but by the deadlines established in paragraph (a)(1), a stationary source regulated by a minor source permit, an authority to construct permit, or a Part 70 operating permit shall apply for a permit revision to incorporate Section 104 requirements in accordance with the requirements in Sections 12.1, 12.4, and 12.5.

104.9 NOTIFICATION, RECORDKEEPING, AND REPORTING REQUIREMENTS

An owner or operator of industrial cleaning solvent operations shall comply with the notification, recordkeeping, and reporting requirements of this section, as indicated below. The Control Officer may deny exemption use or applicability status upon finding that the industrial cleaning solvent operation does not meet the eligibility criteria for exemption(s) or applicability, the stationary source has a poor regulatory compliance history, or the

RACT emissions standard does not provide comparable emission reductions to Section 104.

104.9.1 Notification Requirements

- (a) Owners or operators using a performance test to determine the control efficiency of an ECS to comply with Section 104.5(c) shall comply with the following requirements and with the compliance dates in Section 104.10:
 - (1) Conduct a performance test within 180 days of initial operation of the ECS or September 29, 2024, whichever is later.
 - (2) Submit a performance testing protocol to the Control Officer in accordance with department guidelines containing test, reporting, and notification schedules, test protocols, and anticipated test dates at least 45 days, but no more than 90 days, before the anticipated test date.
 - (3) Submit a report to the Control Officer in accordance with department guidelines describing the results of a performance test within 60 days of completing the test.
- (b) Owners or operators relying on the exemption in Section 104.4(a) shall submit a notice to the Control Officer that identifies the exemption claimed by the owner or operator within 30 days of the applicable compliance date in Section 104.10.

104.9.2 Recordkeeping Requirements

An owner or operator of industrial cleaning solvent operations shall comply with the following recordkeeping requirements:

- (a) Owners or operators required to comply with Section 104 shall, at a minimum:
 - (1) Maintain records to document eligibility for applicability thresholds or for any exemption claimed under Section 104.4.
 - (2) Retain all records for a period of five years from their creation.
 - (3) Make records available and producible onsite to the Control Officer's authorized representative upon request and without prior notice during the owner or operator's hours of operation.
 - (4) Each month, record the type and amount of VOC-containing material used in the previous month. The owner or operator may track the actual use of VOC-containing material or use purchase

and inventory records (assuming that all purchases not retained in inventory are used).

- (5) Maintain a list of VOC-containing material used that includes, at a minimum:
 - (A) Material name and manufacturer;
 - (B) VOC content of each VOC-containing material, listed as lb/gal or g/L of VOC; and
 - (C) Product data sheet or technical data sheet with specific mixing instructions and the VOC content, as applied, of VOC-containing material requiring dilution.
- (6) Maintain a record of calendar year emission calculations.
- (b) Owners or operators using an ECS to comply with Section 104.5 shall:
 - (1) Maintain a record of monitoring of the key system operating parameters specified in the operations and maintenance plan.
 - (2) Record and maintain monitoring data collected to comply with Section 104.7.1(b).
- (c) Owners or operators required to comply with Sections 104.6 and 104.7(c)–(d) shall maintain inspection and training logs.

104.9.3 Reporting Requirements

- (a) Owners or operators subject to Section 104.2(a) shall complete and submit to the Control Officer an annual emissions inventory for VOCs in the manner and form prescribed.
- (b) The inventory must be submitted to and received by the department on or before March 31 of each year (or other specified date upon prior notice from the Control Officer), and shall include emission factors and calculations used to determine emissions in the previous calendar year.
- (c) The inventory shall include, at a minimum:
 - (1) Actual annual emissions of VOC (in tons per calendar year) for the previous calendar year from industrial cleaning solvent operations at the stationary source; and
 - (2) Calculations to support the values reported in paragraph (c)(1) of this section.

- (d) Any information submitted pursuant to this section shall contain a certification by the Responsible Official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the information in the statement or inventory is true, accurate, and complete.

104.10 COMPLIANCE DATES

- (a) Except as provided in paragraphs (c)–(e) of this section, an owner or operator of existing industrial cleaning solvent operations shall comply with the requirements in Section 104 by September 29, 2024, or by the date the industrial cleaning solvent operations commence normal operations or meet the applicability criteria in Section 104.2, whichever of the three dates is later.
- (b) An owner or operator of new industrial cleaning solvent operations shall comply with Section 104 upon commencing normal operation.
- (c) An owner or operator of existing industrial cleaning solvent operations may use industrial cleaning solvents from their existing inventory that do not meet the requirements of Section 104.5 until April 2, 2025, or 12 months after first becoming subject to Section 104.5, whichever is later. Beginning on the compliance date specified in paragraph (a) of this section, the owner or operator shall not purchase any industrial cleaning solvent that does not comply with the emissions standards in Sections 104.5(a) or (b) unless the emissions from such solvent(s) are controlled in accordance with the requirements of Section 104.5(c).
- (d) An owner or operator of existing industrial cleaning solvent operations who elects to comply with Section 104.5 by installing a new ECS shall comply with Section 104.5(c) no later than September 24, 2025.
- (e) The Control Officer may establish an alternative compliance date for meeting Section 104.5 not later than April 2, 2027, considering the technical feasibility and time needed to comply, through issuance of a minor source permit or an authority to construct permit, or by revising a Part 70 operating permit. The filing of a complete application for a minor source permit, authority to construct permit, or Part 70 significant permit revision requesting an alternative compliance date stays the compliance date in paragraph (a) of this section until the proposed alternative compliance date, or until the Control Officer denies the request or issues the minor source permit, authority to construct permit, or revised Part 70 operating permit.

History: Adopted March 19, 2024.

**SECTION 105: VOC EMISSIONS CONTROL FOR METAL SOLVENT DEGREASER
OPERATIONS**

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105.1 PURPOSE

Section 105 implements Control Technique Guidelines Reasonably Available Control Technology (CTG RACT) requirements for metal solvent degreasing operations as required by Section 182(b)(2)(A) of the Clean Air Act (the Act) under Title 42, Section 7511a of the U.S. Code (42 U.S.C. 7511a).

105.2 APPLICABILITY

- (a) Except as provided under Section 105.4, Section 105 is applicable to any owner or operator of a stationary source with projected maximum emissions of volatile organic compounds (VOC) equal to or greater than 3.0 tons per calendar year from metal solvent degreasing operations when the stationary source is 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) Except as provided in Section 105.4, Sections 105.5(c), 105.6(c), or 105.7(c) (as applicable for degreasing operations) and Sections 105.8–105.11 are applicable to any owner or operator of a stationary source with projected maximum emissions of VOC less than 3.0 tons per calendar year from metal solvent degreasing operations when the stationary source is 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.
- (c) Section 105 does not apply to metal solvent degreasing operations that:
 - (1) Use less than 500 gallons (1,892 L) of cleaning solvent per calendar year.
 - (2) Use only vapor-phase solder reflow units.

- (3) Have a vapor-air interface area of 1.0 ft² (0.09 m²) or less, with a maximum solvent capacity of 1.0 gal (3.8 L) or less, when conducting vapor degreasing operations.

105.3 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 Clean Air Act (the Act), or common usage, in that order of priority.

“Cleaning material” or “cleaning solvent” means a material used during cleaning activities or cleaning operations to remove residue or other unwanted materials from surfaces.

“Cold cleaner” means a batch-loaded metal solvent degreaser whose solvent is kept below its boiling point.

“Conveyorized degreaser” means a degreaser that is continuously loaded by means of a conveyor system. The solvent may be boiling or nonboiling.

“Cover” means a lid, top, or portal cover that shields the solvent cleaning machine’s openings from air disturbances when in place and is designed to be easily opened and closed without disturbing the vapor zone. Air disturbances include, but are not limited to, lip exhausts, ventilation fans, and general room drafts. Types of covers include, but are not limited to, sliding, biparting, and rolltop covers.

“Emissions Control System (ECS)” means the combination of an emissions capture device and an add-on emissions control device that reduces VOC emissions and that is designed and operated in accordance with good engineering practice.

“Existing metal solvent degreasing operations” means metal solvent degreasing operations for which an owner or operator began actual construction or reconstruction before April 2, 2024, or first constructed and operated on or after April 2, 2024, and subsequently modified such that the metal solvent degreasing operations became subject to Section 105 after the modification.

“Freeboard height” means, for a cold cleaner, the distance from the liquid solvent level in the degreaser tank to the lip of the tank. For a vapor degreaser, it means the distance from the solvent vapor level in the tank to the lip of the tank.

“Freeboard ratio” means the freeboard height divided by the width of the degreaser.

“Material change” means a change in owner or operator, a change in location, a change in compliance method, a change to a different ECS, or an increase in either the stationary source’s projected maximum emissions or its annual actual emissions of VOC above the projected maximum emissions.

“Metal solvent degreaser” means a tank, drum, or other container in which metal objects are exposed to a solvent or solvent vapors to remove contaminants. For the purpose of this rule, it includes only cold cleaners, open top vapor degreasers, and conveyORIZED degreasers.

“Metal solvent degreasing operations” means the operation of one or more metal solvent degreasers at a stationary source, including ancillary activities such as storing and disposal of solvent.

“New metal solvent degreasing operations” means metal solvent degreasing operations for which an owner or operator began actual construction or reconstruction on or after April 2, 2024.

“Open top vapor degreaser” means a batch-loaded degreaser whose solvent is heated to its boiling point, creating a solvent vapor zone.

“Projected maximum emissions” means the highest annual rate, in tons per year, at which the stationary source is projected to emit VOC based on anticipated production, throughput, heat input, or material utilization rates that does not include emission reductions from add-on controls.

“Refrigerated chiller” means a second set of freeboard condenser coils located slightly above the primary condenser coils that creates a cold air blanket above the vapor zone.

“Solvent” means any substance containing an organic compound (or combination of organic compounds) that is liquid at atmospheric pressure and ambient temperature and is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or other additive used for a similar purpose. It does not include substances used as fuel, antiseptics, or anesthetics.

“Solvent carryout” means solvent carried out of a degreaser that adheres to or is entrapped in the part being cleaned.

“Vapor-air interface” means the area of contact between the solvent vapors and any air that is contiguous with the air outside the degreaser. The area of the vapor-air interface shall be calculated as the product of the lengths between internal solvent cleaner walls behind the condensing coils.

“Vapor-phase solder reflow unit” means a device in which parts are immersed in VOC-rich vapor generated by boiling a liquid for heating to melt or soften solder connections of electronic components.

105.4 EXEMPTIONS

Unless and until the Control Officer objects to an owner or operator’s use of an exemption in accordance with Section 105.10, metal solvent degreasing operations that meet the criteria in this section are exempt from one or more requirements of Section 105 if the

owner or operator complies with the notification, recordkeeping, and reporting requirements in Section 105.10, as applicable.

- (a) Sections 105.5–105.9 (related to emissions standards, compliance obligations, and registration requirements) and Sections 105.10.1(a), 105.10.2, and 105.10.3 (related to testing notification, recordkeeping, and reporting requirements) do not apply when VOC emissions from the metal solvent degreasing operations are controlled by RACT emissions standard(s) at least as stringent as Section 105 under another applicable SIP-approved section of the AQRs.

105.5 EMISSIONS STANDARDS FOR COLD CLEANERS

An owner or operator of a cold cleaner shall meet the following requirements.

- (a) Equipment and operation specifications:
 - (1) Assure that solvent spray is a fluid stream (not a fine, atomized, or shower-type spray) and occurs at a pressure that does not cause excessive splashing.
 - (2) Equip with drainage recycling so whatever solvent drains off parts removed from the cleaner will return to the cleaner.
 - (A) If the solvent volatility is greater than 32 mm Hg measured at 100°F (37.8°C), the recycling of solvent must occur under the cover while draining unless the cleaner cannot be fitted with internal recycling drainage capacity.
 - (B) If the internal recycling facility cannot be fitted, an external facility shall be used.
 - (3) If the solvent volatility is greater than 15 mm Hg measured at 100°F (37.8°C), or if the solvent is agitated or heated, ensure the cover is designed so the operator can easily operate it with one hand.
- (b) Emission control requirements:
 - (1) Use at least one of the following if the solvent volatility is greater than 32 mm Hg measured at 100°F (37.8°C) or the solvent is heated above 120°F (48.9°C):
 - (A) Freeboard that gives a freeboard ratio of 0.75 or more;
 - (B) Water cover (solvent must be insoluble in and heavier than water); or

- (C) An equivalent system of control or ECS, such as a refrigerated chiller or carbon adsorption.
- (c) Work practice requirements:
 - (1) Dispose of waste, or transfer waste solvent to another party, so that no greater than 20% by weight of waste solvent evaporates into the atmosphere.
 - (2) Store waste solvent in covered, nonabsorbent, nonleaking containers.
 - (3) Employ a cover that remains closed except during parts entry and removal.
 - (4) Drain cleaned parts until dripping ceases (at least 15 seconds).

105.6 EMISSIONS STANDARDS FOR OPEN TOP VAPOR DEGREASERS

An owner or operator of an open top vapor degreaser shall meet the following requirements.

- (a) Equipment and operation specifications:
 - (1) Equip with a cover that the operator can easily open and close without disturbing the vapor zone, and that completely covers the solvent tank when work is not performed in the degreaser.
 - (2) Equip with the following safety switches:
 - (A) Condenser flow switch and thermostat to shut off sump heat if condenser coolant is either not circulating or too warm;
 - (B) Spray safety switch to shut off spray pump if vapor level drops more than 4 inches (10.2 cm) below the bottom condenser coil to prevent spraying above the vapor level; and
 - (C) Vapor level control thermostat that shuts off sump heat if the vapor zone rises above the design level.
 - (3) Use sprays that have a pressure low enough to prevent splashing outside the tank, provide a continuous liquid flow (rather than a fine atomized or shower-type spray), and are located below the vapor-air interface.
 - (4) Maintain exhaust ventilation at or below 65 cubic feet per minute per square foot (cfm/ft²) of degreaser area unless necessary to

meet Occupational Safety and Health Administration (OSHA) or control device requirements.

(b) Emissions control requirements:

(1) Use one or more of the following:

- (A) Freeboard with freeboard ratio of 0.75 or more (if the degreaser opening is more than 10 ft², use powered or mechanically assisted cover);
- (B) Refrigerated chiller;
- (C) Enclosed design so the cover or door opens only when the dry part enters or exits the degreaser;
- (D) Carbon adsorption system with ventilation greater than or equal to 50 cfm/ft² of air/vapor interface area (if cover is open) that is exhausting less than 25 ppm of solvent by volume averaged over one complete adsorption cycle; or
- (E) Other ECS demonstrated to have equivalent or better performance than any requirement in paragraphs (b)(1)(A)–(D) of this section.

(c) Work practice requirements:

- (1) Employ a cover that remains closed except during parts entry and removal.
- (2) Minimize solvent carryout using the following measures:
 - (A) Rack parts so that entrainment of solvent is avoided and full drainage is accomplished.
 - (B) Move parts in and out of the degreaser at a vertical speed of less than 11 ft (3.4 m) per minute.
 - (C) Degrease the workload in the vapor zone until condensation ceases (at least 30 seconds).
 - (D) Tip out any pools of solvent on the cleaned parts before removal.
 - (E) Dry parts within the degreaser above the vapor zone until visually dry (at least 15 seconds).
 - (F) Removal of the part(s) should not cause the vapor level to drop more than 4 inches (10 cm).

- (3) Prohibit degreasing of porous or absorbent materials, such as cloth, leather, wood, or rope.
- (4) Avoid workloads that occupy more than half of the degreaser's open top area.
- (5) Avoid spraying above the vapor level.
- (6) Repair solvent leaks immediately or shut down the degreaser.
- (7) Dispose of waste, or transfer waste solvent to another party, so that no more than 20% by weight of waste solvent evaporates into the atmosphere.
- (8) Store waste solvent in covered, nonabsorbent, nonleaking containers.
- (9) Avoid using ventilation fans near the degreaser opening except as necessary for workplace safety.
- (10) Avoid visually detectable water in the solvent exiting the water separator.

105.7 EMISSIONS STANDARDS FOR CONVEYORIZED DEGREASERS

An owner or operator of a conveyORIZED degreaser shall meet the following requirements.

- (a) Equipment and operation specifications:
 - (1) Equip and maintain downtime covers for closing off entrances and exits of the degreaser immediately after the conveyor and exhaust are shut down until the degreaser is restarted.
 - (2) Equip with a drying tunnel or other means (such as rotating baskets) sufficient to prevent cleaned parts from carrying out solvent liquid or vapor.
 - (3) Minimize openings such that entrances and exits silhouette workloads so the average clearance between the largest parts and the edge of the degreaser opening is less than either 4 inches (10.2 cm) or 10% of the width of the opening.
 - (4) Maintain exhaust ventilation at or below 65 cfm/ft² of degreaser area unless necessary to meet OSHA or control device requirements.
 - (5) If using a vapor type of conveyORIZED degreaser, equip with the following safety switches:

- (A) Condenser flow switch and thermostat to shut off sump heat if condenser coolant is either not circulating or too warm;
 - (B) Spray safety switch to shut off spray pump if the vapor level drops more than 4 inches (10.2 cm) below the bottom condenser coil to prevent spraying above the vapor level; and
 - (C) Vapor level control thermostat that shuts off sump heat if the vapor zone rises above the design level.
- (b) Emissions control requirements:
 - (1) Use either a drying tunnel or another means (such as a rotating basket) to prevent cleaned parts from carrying out solvent liquid or vapor.
 - (2) Use at least one of the following if the degreaser has an air/solvent interface area or an air/vapor interface area of 20 ft² (1.9 m²) or more:
 - (A) Refrigerated chiller;
 - (B) Carbon adsorption system with ventilation greater than or equal to 50 cfm/ft² of air/vapor interface area (when downtime covers are open) and exhausting less than 25 ppm of solvent by volume averaged over a complete adsorption cycle; or
 - (C) Other ECS demonstrated to have equivalent or better performance than any requirement in paragraphs (b)(2)(A) or (B) of this section.
- (c) Work practice requirements:
 - (1) Minimize solvent carryout using the following measures:
 - (A) Rack parts so that entrainment of solvent is minimized and full drainage is accomplished.
 - (B) Move parts in and out of the degreaser at a vertical speed of less than 11 ft (3.4 m)/min.
 - (2) Dispose of waste, or transfer waste solvent to another party, so that no greater than 20% by weight of waste solvent evaporates into the atmosphere.

- (3) Store waste solvent in covered, nonabsorbent, nonleaking containers.
- (4) Avoid using ventilation fans near the degreaser opening except as necessary for workplace safety.
- (5) Avoid visually detectable water in the solvent exiting the water separator.
- (6) Repair solvent leaks immediately or shut down the degreaser.

105.8 COMPLIANCE OBLIGATIONS

To demonstrate compliance with the emissions standards in Section 105, an owner or operator of metal solvent degreasing operations shall:

- (a) Conduct periodic (at least quarterly) inspections to assure compliance with applicable work practice requirements in Sections 105.5–105.7.
- (b) Provide operator training to newly hired workers on the applicable work practice requirements in Sections 105.5–105.7.
- (c) Post the applicable work practice requirements in Sections 105.5–105.7 on or near the cleaner in a permanent and conspicuous manner.

105.8.1 Compliance When Using an Emissions Control System

An owner or operator of metal solvent degreasing operations using an ECS shall:

- (a) Develop, maintain, and comply with an operations and maintenance plan, in accordance with manufacturer recommendations where available, if using an ECS to comply with Sections 105.5(b), 105.6(b), and/or 105.7(b). Such plan shall:
 - (1) Identify monitoring devices, monitoring frequencies, and key system operating parameters, i.e., those needed to ensure that good operation and engineering practices are associated with operation of the ECS, such as temperature, pressure, and/or flow rate.
 - (2) Include schedules for inspection, schedules for anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.
 - (3) Include a monitoring plan to ensure proper operation of the ECS using the key operating parameters identified.

- (4) Include provisions for minimizing emissions during periods of startup, shutdown, and malfunction.
- (5) Determine the control efficiency of the ECS, excluding chillers, used to comply with Section 105 through manufacturer design specifications or performance testing. The following reference materials may assist in determining the control efficiency of the ECS:
 - (A) "Guidelines for Determining Capture Efficiency," EPA Office of Air Quality Planning and Standards, January 9, 1995.
 - (B) EPA Test Methods 1–4 in 40 CFR Part 60, Appendices A–1 through A–3, to determine flow rates.
 - (C) "Method 204—Criteria for and Verification of a Permanent or Temporary Total Enclosure," at 40 CFR Part 51, Appendix M; or, as applicable, EPA Test Methods 204A, 204B, 204C, or 204D.
 - (D) "Method 18—Measurement of Gaseous Organic Compound Emissions by Gas Chromatography," at 40 CFR Part 60, Appendix A–6.
 - (E) "Method 25—Determination of Total Gaseous Nonmethane Organic Emissions as Carbon," at 40 CFR Part 60, Appendix A–7, or, as applicable, EPA Test Methods 25A or 25B.
- (b) Install, calibrate, operate, and maintain monitoring devices on an ECS used to comply with Section 105 according to manufacturer specifications and the operations and maintenance plan.
- (c) Operate the monitoring devices required by paragraph (b) of this section at all times an ECS operates.

105.9 REGISTRATION REQUIREMENTS

An owner or operator of metal solvent degreasing operations shall comply with the registration requirements of this section, as indicated below.

- (a) Except as provided in paragraph (d) of this section, an owner or operator of metal solvent degreasing operations shall comply with the following registration requirements:
 - (1) No later than August 29, 2024, or 45 days after becoming subject to any requirements in Section 105, whichever is later, submit a registration application to the Control Officer in the manner and

form prescribed that includes, at a minimum, the following information:

- (A) Name, email address, and telephone number of the owner or operator and the Responsible Official;
 - (B) Company name and address (and source name and address, if different);
 - (C) Type of metal degreaser(s) used;
 - (D) Projected maximum emissions of VOC (in tons per calendar year) from metal solvent degreasing operations at the stationary source;
 - (E) Calculations to support the values reported in paragraph (a)(1)(D) of this section;
 - (F) Type of ECS used to comply with Section 105, if any;
 - (G) Copy of the ECS operations and maintenance plan developed to comply with Section 105.8.1, if required;
 - (H) A declaration signed by the Responsible Official under penalty of perjury that the statements and information in the registration are true, accurate, and complete. Signature on the declaration statement shall subject the Responsible Official to liability for perjury under NRS 199.145; and
 - (I) Other information as required by the Control Officer.
- (2) Submit an updated registration to the Control Officer within 60 days of a material change.
- (b) The Control Officer may require updated information after the initial registration to determine that the source continues to operate below the applicability threshold in Section 105.2(a).
 - (c) Owners or operators may submit a revised registration application with reduced projected maximum emissions from metal solvent degreasing operations at the stationary source if less than 3.0 tons of VOC were emitted and reported in each of the previous three consecutive calendar years.
 - (d) In lieu of complying with the registration requirements of Section 105.9, but by the deadlines established in paragraph (a)(1), a stationary source regulated by a minor source permit, an authority to construct permit, or a Part 70 operating permit shall apply for a permit revision

to incorporate Section 105 requirements in accordance with the requirements in Sections 12.1, 12.4, and 12.5.

105.10 NOTIFICATION, RECORDKEEPING, AND REPORTING REQUIREMENTS

An owner or operator of metal solvent degreasing operations shall comply with the notification, recordkeeping, and reporting requirements of this section, as indicated below. The Control Officer may deny exemption use or applicability status upon finding that the metal solvent degreasing operation does not meet the eligibility criteria for exemption(s) or applicability, the stationary source has a poor regulatory compliance history, or the RACT emissions standard does not provide comparable emission reductions to Section 105.

105.10.1 Notification Requirements

- (a) Owners or operators using a performance test to determine the control efficiency of an ECS to comply with Section 105 shall comply with the following requirements and with the compliance dates in Section 105.11:
 - (1) Conduct a performance test within 180 days of initial operation of the ECS or August 29, 2024, whichever is later.
 - (2) Submit a performance testing protocol to the Control Officer in accordance with department guidelines containing test, reporting, and notification schedules, test protocols, and anticipated test dates at least 45 days, but no more than 90 days, before the anticipated test date.
 - (3) Submit a report to the Control Officer in accordance with department guidelines describing the results of a performance test within 60 days of completing the test.
- (b) Owners or operators relying on the exemption in Section 105.4(a) shall submit a notice to the Control Officer that identifies the exemption claimed by the owner or operator within 30 days of the applicable compliance date in Section 105.11.

105.10.2 Recordkeeping Requirements

An owner or operator of metal solvent operations shall comply with the following recordkeeping requirements.

- (a) Owners or operators required to comply with Section 105 shall, at a minimum:
 - (1) Maintain records to document eligibility for applicability thresholds or for any exemption claimed under Section 105.4.

- (2) Retain all records for a period of five years from their creation.
 - (3) Make records available and producible onsite to the Control Officer's authorized representative upon request and without prior notice during the owner or operator's hours of operation.
 - (4) Each month, record the type and amount of cleaning material used in the previous month. The owner or operator may track the actual use of cleaning material or use purchase and inventory records (assuming that all purchases not retained in inventory are used).
 - (5) Maintain a list of cleaning materials used that includes, at a minimum:
 - (A) Material name and manufacturer for each material used in a metal solvent degreaser;
 - (B) VOC content of each cleaning material, listed as lb/gal or g/L of VOC, along with density and mixed ratios for each component; and
 - (C) Initial boiling point of a cleaning material if a refrigerated freeboard chiller is used.
 - (6) Maintain a record of calendar year emission calculations.
- (b) Owners or operators subject to equipment and operation specification requirements in Sections 105.5–105.7 shall comply with the following:
 - (1) Maintain records showing that the degreaser complies with the applicable equipment specification requirements in Sections 105.5–105.7.
 - (c) Owners or operators using an ECS to comply with Section 105 shall comply with the following:
 - (1) Maintain a record of monitoring of the key system operating parameters specified in the operations and maintenance plan.
 - (2) Record and maintain monitoring data collected to comply with Section 105.8.1(b).
 - (d) Owners or operators required to comply with applicable work practice requirements in Sections 105.5–105.7 and compliance obligations in Section 105.8 shall maintain inspection and training logs.

105.10.3 Reporting Requirements

- (a) Owners or operators subject to Section 105.2(a) shall complete and submit to the Control Officer an annual emissions inventory for VOCs in the manner and form prescribed.
- (b) The inventory must be submitted to and received by the department on or before March 31 of each year (or other specified date upon prior notice from the Control Officer), and shall include emission factors and calculations used to determine emissions in the previous calendar year.
- (c) The inventory shall include, at a minimum:
 - (1) Actual annual emissions of VOC (in tons per calendar year) for the previous calendar year from metal solvent degreasing operations at the stationary source; and
 - (2) Calculations to support the values reported in paragraph (c)(1) of this section.
- (d) Any information submitted pursuant to this section shall contain a certification by the Responsible Official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the information in the statement or inventory is true, accurate, and complete.

105.11 COMPLIANCE DATES

- (a) Except as provided in paragraphs (c)–(d) of this section, an owner or operator of existing metal solvent degreasing operations shall comply with the requirements in Section 105 by August 29, 2024, or by the date the metal solvent degreasing operations first begin normal operations or meet the applicability criteria in Section 105.2, whichever of the three dates is later.
- (b) An owner or operator of new metal solvent degreasing operations shall comply with Section 105 upon commencing normal operations.
- (c) An owner or operator of existing metal solvent degreasing operations who elects to comply with Section 105 by installing a new ECS, including a carbon adsorber or refrigerated chiller, must comply with the emission control requirements of Sections 105.5(b), 105.6(b), or 105.7(b), as applicable for the type of metal solvent degreaser, no later than August 29, 2025.
- (d) The Control Officer may establish an alternative compliance date for meeting Sections 105.5–105.7 not later than April 2, 2027, considering

the technical feasibility and time needed to comply, through issuance of a minor source permit or an authority to construct permit, or by revising a Part 70 operating permit. The filing of a complete application for a minor source permit, authority to construct permit, or Part 70 significant permit revision requesting an alternative compliance date stays the compliance date in paragraph (a) of this section until the proposed alternative compliance date, or until the Control Officer denies the request or issues the minor source permit, authority to construct permit, or revised Part 70 operating permit.

History: Adopted March 19, 2024.

**SECTION 107: VOC EMISSIONS CONTROL FOR CUTBACK ASPHALT MANUFACTURING
AND USE**

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107.1 PURPOSE

Section 107 implements Control Technique Guidelines Reasonably Available Control Technology requirements (CTG RACT) for cutback asphalt operations as required by Section 182(b)(2)(A) of the Clean Air Act (the Act) under Title 42, Section 7511a of the U.S. Code (42 U.S.C. 7511a).

107.2 APPLICABILITY

- (a) Section 107 is applicable to any owner or operator of cutback asphalt operations with projected maximum emissions of volatile organic compounds (VOC) equal to or greater than 3.0 tons per calendar year from all worksites located in Clark County, Nevada.
- (b) A stationary source, regulated by a minor source permit, an authority to construct permit, or a Part 70 operating permit, that is subject to Section 107 shall apply for a permit revision to incorporate Section 107 requirements in accordance with the requirements in Sections 12.1, 12.4, and 12.5.
- (c) An owner or operator of cutback asphalt operations engaging in the following activities is exempt from the requirements of Section 107 except for the notification requirement in Section 107.6.1:
 - (1) Manufacturing or selling cutback asphalt in Clark County for shipment and use outside Clark County.
 - (2) Using asphalt solely as a penetrating prime coat.
 - (3) Conducting dust suppression operations.
 - (4) Performing maintenance operations.
 - (5) Using cutback asphalt materials exclusively in connection with any structure designed and used as a residential dwelling (e.g., residential driveway).
 - (6) Using cutback asphalt materials to pave an area smaller than 5,000 ft² (465 m²) per worksite.

107.3 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, Chapter 445B of the Nevada Revised Statutes (NRS), the Act, or common usage, in that order of priority.

“Asphalt” means a dark brown to black solid, liquid, or semisolid cementitious material composed primarily of bitumen that occurs naturally or is obtained as a residue of petroleum refining.

“ASTM methods” means methods developed and recommended by ASTM International, formerly the American Society for Testing and Materials.

“Cutback asphalt” means asphalt that has been liquefied by blending it with an organic solvent meeting the definition of a rapid cure type, medium cure type, or slow cure type under ASTM methods and is used for paving or repairing roads and surfaces.

“Cutback asphalt operations” means the manufacturing, sale, mixing, storing, or use of cutback asphalt.

“Dust suppression operations” means any light application of asphalts for the express purpose of controlling loose dust.

“Maintenance operations” means the use of cutback asphalt to fill potholes (i.e., a depression or hollow in a road of less than approximately 8 ft² (0.74 m²)) or cracks in paved surfaces, or for conducting emergency road repairs (i.e., an urgent need to return a road to a safe condition).

“Material change” means a change in the owner or operator, a change in compliance method, or an increase in either the cutback asphalt operator’s maximum emissions or annual actual emissions of VOC above the projected maximum emissions.

“Mixing” means the blending of petroleum solvent with asphalt cement to make cutback asphalt, or the blending of petroleum solvent, asphalt cement, water, and emulsifiers to make emulsified asphalt.

“Projected maximum emissions” means the highest annual rate, in tons per year, at which an owner or operator is projected to emit VOC based on anticipated production, throughput, heat input, or material utilization rates that does not include emission reductions from add-on controls.

“Rapid curing” means a cutback asphalt generally using highly volatile gasoline or naphtha as the solvent.

“Worksite” means a location where asphalt is manufactured, sold, mixed, used, and/or stored in Clark County.

107.4 EMISSIONS STANDARDS

- (a) An owner or operator of cutback asphalt operations shall not manufacture, sell, mix, store, or use cutback asphalt for the paving, construction, or maintenance of parking lots, driveways, streets, or highways unless the cutback asphalt contains 0.5% VOC or less by

volume (equivalent to 6.0 ml (0.2 oz) of oil distillate from a 200 ml (6.8 oz) sample at 500°F (260°C)), as verified using ASTM Method D402, "Standard Test Method For Distillation of Cutback Asphaltic Products"; or AASHTO T78, "Standard Method of Test for Cutback Asphaltic Products," all incorporated herein by reference.

- (b) An owner or operator of cutback asphalt operations shall not manufacture, sell, mix, store, or use rapid curing cutback asphalt for paving purposes in Clark County.

107.5 REGISTRATION REQUIREMENTS

An owner or operator of cutback asphalt operations shall comply with the registration requirements of this section, as indicated below.

- (a) No later than August 29, 2024, or 45 days after becoming subject to any requirements in Section 107, whichever is later, submit a registration application to the Control Officer in the manner and form prescribed that includes, at a minimum, the following information:
 - (1) Name, email address, and telephone number of the owner or operator and the Responsible Official;
 - (2) Company name and address (and source name and address, if different);
 - (3) Projected maximum emissions of VOC (in tons per year) from cutback asphalt operations from all worksites within a calendar year;
 - (4) Calculations to support the values reported in paragraph (a)(3) of this section;
 - (5) Name and address of each worksite, and the estimated dates when cutback asphalt operations will occur as used to determine the projected maximum emissions of VOC in paragraph (a)(3) of this section;
 - (6) Location of records required by Section 107.6.2, if different than the address reported in paragraph (a)(5) of this section; and
 - (7) Other information as required by the Control Officer.
- (b) Submit an updated registration to the Control Officer within 60 days of a material change.

- (c) The Control Officer may require updated information after the initial registration to determine that the source continues to operate below the applicability threshold in Section 107.2.
- (d) Owners or operators may submit a revised registration application with reduced projected maximum emissions from cutback asphalt operations if less than 3.0 tons of VOC were emitted and reported in each of the previous three consecutive calendar years.
- (e) By the deadlines established in paragraph (a) of this section, but in lieu of complying with the registration requirements in paragraphs (a)-(d) of this section, a stationary source regulated by a minor source permit, an authority to construct permit, or a Part 70 operating permit shall apply for a permit revision to incorporate Section 107 requirements in accordance with the requirements in Sections 12.1, 12.4, and 12.5.

107.6 NOTIFICATION, RECORDKEEPING, AND REPORTING REQUIREMENTS

An owner or operator shall comply with the notification, recordkeeping, and reporting requirements of this section, as indicated below. The Control Officer may deny an applicability status upon finding that the cutback asphalt operation does not meet the eligibility criteria, the operation has a poor regulatory compliance history, or the RACT emissions standard does not provide comparable emission reductions to Section 107.

107.6.1 Notification Requirements

Owners or operators relying on the applicability status in Section 107.2(c) shall submit a notice to the Control Officer that substantiates the claim by the owner or operator within 30 days of the applicable compliance date in Section 107.7.

107.6.2 Recordkeeping Requirements

An owner or operator of cutback asphalt operations shall comply with all the following:

- (a) Retain all required records for a period of five years from their creation.
- (b) Make records available and producible onsite to the Control Officer's authorized representative upon request and without prior notice during the owner or operator's hours of operation.
- (c) Maintain records, updated monthly, of the mixing, storage, or use of cutback asphalt, including:
 - (1) The percent VOC content of cutback asphalt mixed, stored, or used, and when mixing, the total percent VOC content of the mix.
 - (2) The quantity of cutback asphalt manufactured, sold, mixed, stored, or used during each month in the calendar year.

- (3) The name and location of the worksite(s) where the cutback asphalt was mixed, stored, or used.

107.6.3 Reporting Requirements

- (a) Owners or operators shall complete and submit to the Control Officer an annual emissions inventory for VOCs in the manner and form prescribed.
- (b) The annual emission inventory must be submitted to and received by the department on or before March 31 of each year (or other specified date, upon prior notice by the Control Officer).
- (c) The inventory shall include, at a minimum:
 - (1) Actual annual emissions of VOC (in tons per year) for the previous calendar year from cutback asphalt operations.
 - (2) Emission factors and calculations to support the values reported in paragraph (c)(1) of this section.
 - (3) Name and location of the worksite(s) where cutback asphalt was mixed, stored, or used the previous calendar year.
- (d) Any information submitted pursuant to this section shall contain a certification by the Responsible Official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the information in the statement or inventory is true, accurate, and complete.

107.7 COMPLIANCE DATES

- (a) The owner or operator of cutback asphalt operations shall comply with Section 107 by whichever date is later:
 - (1) August 29, 2024; or
 - (2) When the cutback asphalt operations commence normal operations or meet the applicability criteria in Section 107.2.
- (b) The Control Officer may establish an alternative compliance date for meeting Section 107 requirements not later than April 2, 2027, considering the technical feasibility and time needed to comply through the issuance of a minor source permit, an authority to construct permit, or a Part 70 operating permit.

- (1) The filing of a complete permit application requesting an alternative compliance date stays the compliance date in this section until:
 - (A) The Control Officer issues the applicable permit;
 - (B) The alternative compliance date being requested; or
 - (C) The Control Officer denies the request.

History: Adopted March 19, 2024