

### Air Pollution Control Board

San Diego County Air Pollution Control District

#### **AGENDA ITEM**

GOVERNING BODY

GREG COX First District

DIANNE JACOB Second District

DAVE ROBERTS Third District

RON ROBERTS Fourth District

\_\_\_\_

BILL HORN Fifth District

**DATE:** May 11, 2016 **AP01** 

**TO:** Air Pollution Control Board

SUBJECT: NOTICED PUBLIC HEARING - ADOPTION OF AMENDMENTS TO

RULE 11 – EXEMPTION FROM RULE 10 PERMIT REQUIREMENTS, AND AMENDMENTS TO RULE 66.1 – MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE

ORGANIC COMPOUNDS (DISTRICTS: ALL)

#### Overview

This is a request for the Air Pollution Control Board to adopt proposed amendments to Rule 11 - Exemptions from Rule 10 Permit Requirements. Rule 11 provides permit exemptions for equipment, operations, and processes that are negligible sources of air pollutant emissions. The proposed amendments will add a number of new permit exemptions, update the criteria for certain other exemptions, and improve clarity.

If the proposed amendments are adopted, approximately 49 existing permits may be retired by the permit holders due to new permit exemptions for a variety of equipment and processes. These new exemptions were added based upon updated manufacturer information, which showed negligible emissions from the subject equipment. In addition, an estimated 10 previously exempt diesel engines will be required to obtain permits due to the adoption of new state regulations. Affected facilities will have up to one year to submit new permit applications.

This is also a request for the Board to adopt corresponding amendments proposed for Rule 66.1 – Miscellaneous Surface Coating Operations and Other Processes Emitting Volatile Organic Compounds. Specifically, a proposed new exemption has been added for solvent cleaning operations (for the clean-up of products, equipment, and general work areas) using 550 gallons or less of solvent per year facility wide.

The proposed amendments to Rule 11 and Rule 66.1 were developed in collaboration with the U.S. Environmental Protection Agency and the California Air Resources Board, and with input from local facilities and the public. No significant concerns were raised and all known issues have been addressed. If the proposed amendments are adopted, staff will conduct additional outreach, including distribution of an advisory notice to further inform potentially affected sources. Additionally, the amended rules will be submitted to the U.S. Environmental Protection Agency through the California Air Resources Board for approval as part of the San Diego County portion of the State Implementation Plan for attaining and maintaining air quality

D4.0

SUBJECT: NOTICED PUBLIC HEARING - ADOPTION OF AMENDMENTS TO

RULE 11 – EXEMPTION FROM RULE 10 PERMIT REQUIREMENTS, AND AMENDMENTS TO RULE 66.1 – MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE

ORGANIC COMPOUNDS (DISTRICTS: ALL)

standards.

#### **Recommendation(s)**

#### AIR POLLUTION CONTROL OFFICER

- 1. Find that the adoption of the proposed amendments to Rule 11 and Rule 66.1 is categorically exempt from the provisions of the California Environmental Quality Act pursuant to California Code of Regulations, Title 14, Section 15061(b)(3), since it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.
- 2. Adopt the Resolution entitled RESOLUTION ADOPTING AMENDMENTS TO RULE 11 - EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS, OF REGULATION II, AND AMENDMENTS TO RULE 66.1 - MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE ORGANIC COMPOUNDS, OF REGULATION IV OF THE RULES AND REGULATIONS OF THE SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT.

#### **Fiscal Impact**

There is no fiscal impact associated with these recommendations. There will be no change in net General Fund cost and no additional staff years are required.

#### **Business Impact Statement**

Adopting the proposed amendments to Rule 11 and Rule 66.1 will not adversely impact the business community. The proposed amendments will add a number of new permit exemptions, update the criteria for certain other exemptions, and improve clarity. Businesses with previously exempt equipment now requiring permits will have up to one year to submit permit applications.

#### **Advisory Board Statement**

The Air Pollution Control District Advisory Committee voted unanimously in support of the Air Pollution Control District's proposed amendments to Rule 11 and Rule 66.1 at their meetings on October 14, 2015, and February 10, 2016, respectively.

#### **Background**

Air Pollution Control District (District) Rule 10 (Permits Required), requires all persons to obtain a written Permit to Operate before constructing or operating equipment that may emit air contaminants. Rule 11 (Exemptions from Rule 10 Permit Requirements) provides a list of equipment, operations, and processes that have negligible emissions, or that are preempted from permit requirements by state or federal law and thus are not subject to Rule 10 requirements. Over the years, Rule 11 has undergone several updates and was last amended on November 9, 2011 (APCB #1).

Since then, the District has received comments from affected businesses related to a variety of

D4.0 2

SUBJECT: NOTICED PUBLIC HEARING - ADOPTION OF AMENDMENTS TO

RULE 11 – EXEMPTION FROM RULE 10 PERMIT REQUIREMENTS, AND AMENDMENTS TO RULE 66.1 – MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE

ORGANIC COMPOUNDS (DISTRICTS: ALL)

equipment and operations that are negligible sources of air contaminants. In addition, changes in state law and the adoption of a new state Air Toxic Control Measure has affected permit requirements, necessitating changes to Rule 11.

Specifically, the proposed amendments will add several new exemptions from permit requirements for various equipment and operations including 3-D additive printing, ozone generators used in water purification applications, and low-emitting units with emissions of less than two pounds per day of each criteria pollutant. In addition, the proposed amendments will delete an exemption for engines that power construction cranes in long-term operations. These engines are now regulated by a state Air Toxic Control Measure, and requiring a permit will help ensure equipment owners/operators are informed of their specific requirements and will allow the District to evaluate and confirm ongoing compliance.

Related amendments to Rule 66.1, are also proposed to fully align that Rule's exemption thresholds with the permit exemption thresholds in proposed amended Rule 11. Specifically, a proposed new exemption has been added for solvent cleaning operations, including wipe cleaning, using 550 gallons or less of solvent per year, facility wide. Cleaning solvents used in total amounts at or below this threshold would be exempt from the volatile organic compound limits in Rule 66.1 and exempt from permit requirements pursuant to Rule 11.

District staff conducted two separate public workshops for Rule 11 and Rule 66.1 to discuss and receive comments on the proposed amendments, and further consulted with individual parties as necessary. No significant concerns were raised and all known issues have been addressed.

#### **Socioeconomic Impact Assessment**

State law requires the District to perform an assessment of the socioeconomic impacts when adopting, amending, or repealing a rule that will significantly affect air quality or emission limitations. Rule 11 is an administrative rule that specifies which sources are exempt from permit requirements; the Rule does not specify emission limits and the proposed rule amendments do not significantly affect air quality or emission limitations. Rule 66.1 limits volatile organic compound emissions from sources that are not already regulated under source-specific rules; however, the proposed amendments to Rule 66.1 only add an exemption which will not significantly affect air quality or emission limitations. Therefore, a socioeconomic impact assessment is not required and has not been prepared.

#### **Environmental Statement**

The California Environmental Quality Act (CEQA) requires environmental review of certain actions. District staff conducted a review of whether CEQA applies to the proposed amendments to Rule 11 and Rule 66.1. Rule 11 is an administrative rule that specifies which sources are exempt from permit requirements; the Rule does not specify emission limits and the proposed rule amendments do not significantly affect air quality or emission limitations. Rule 66.1 limits volatile organic compound emissions from sources that are not already regulated under source-specific rules; however, the proposed amendments to Rule 66.1 only add an exemption, which

D4.0 3

**SUBJECT:** 

NOTICED PUBLIC HEARING - ADOPTION OF AMENDMENTS TO RULE 11 – EXEMPTION FROM RULE 10 PERMIT REQUIREMENTS, AND AMENDMENTS TO RULE 66.1 – MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE ORGANIC COMPOUNDS (DISTRICTS: ALL)

will not significantly affect air quality or emission limitations. As a result, District staff determined that adoption of the proposed amendments is exempt from the provisions of CEQA pursuant to California Code of Regulations, Title 14, Section 15061(b)(3), since it can be seen with certainty that there is no possibility that the activity in question may have a significant adverse effect on the environment.

#### Linkage to the County of San Diego Strategic Plan

Today's proposed actions support the Sustainable Environments Initiative in the County of San Diego's 2016–2021 Strategic Plan with an objective to provide and promote services that increase consumer and business confidence. The proposed amendments to Rule 11 and Rule 66.1 will help ensure that insignificant sources of air pollutant emissions are not subject to permits and associated requirements and thus will increase business confidence while preserving the environment.

Respectfully submitted,

SARAH E. AGHASSI

Sarah Agli

Deputy Chief Administrative Officer

ROBERT J. KARD
Air Pollution Control Officer

Nobest land

#### ATTACHMENT(S)

Attachment A – Resolution Adopting Amendments to Rule 11 – Exemptions from Rule 10 Permit Requirements, of Regulation II, and Amendments to Rule 66.1 – Miscellaneous Surface Coating Operations and Other Processes Emitting Volatile Organic Compounds, of Regulation IV of the Rules and Regulations of the San Diego County Air Pollution Control District

Attachment B - Workshop Reports

Attachment C - Rule 11 Change Copy

Attachment D - Rule 66.1 Change Copy

#### SUBJECT: NOTICED PUBLIC HEARING - ADOPTION OF AMENDMENTS TO

RULE 11 – EXEMPTION FROM RULE 10 PERMIT REQUIREMENTS, AND AMENDMENTS TO RULE 66.1 – MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE

ORGANIC COMPOUNDS (DISTRICTS: ALL)

#### AGENDA ITEM INFORMATION SHEET

REQ	UIRES	FOUR	<b>VOTES:</b>	[]	Yes	[X]	No			
WRI	TTEN I	DISCLO	OSURE PER	COUN	ТҮ СН	ARTEI	R SECTION	ON 1000	.1 REQU	JIRED
[]	Yes	[X]	No							
Nove	mber 9,	2011 (1	VANT BOAL  ), Amendment  ) – Adoption	nt of Rul	le 67.16	and Re	lated Ame	ndment	to Rule 1	1
BOA N/A	RD PO	LICIES	S APPLICAI	BLE:						
BOA N/A	RD PO	LICY S	STATEMEN	TS:						
MAN N/A	NDATO	RY CO	MPLIANCE	E:						
	CLE A IBER(S		NUMBER(S	S) AND	CONTI	RACT A	AND/OR	REQUI	SITION	
ORI	GINAT	ING DI	EPARTMEN	T: AIR	POLLU	TION (	CONTROL	L DISTR	ICT	
ОТН	ER CO	NCUR	RENCES(S)	: N/A						
CON	TACT	PERSC	<b>ON</b> (S):							
ROB	ERT KA	ARD				ROBE	ERT REID	ER		
Name						Name				
	586-27	00					586-2640			
Phon						Phone				
Robe	rt.Kard(	@sdcou	nty.ca.gov			Rober	t.Reider@	sdcounty	.ca.gov	
E-ma	il					E-mail	1			

D4.0 5

Resolution No.: 16-046

Meeting Date: 5/11/16 (AP1)

RESOLUTION ADOPTING AMENDMENTS TO RULE 11 – EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS, OF REGULATION II AND AMENDMENTS TO RULE 66.1 – MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE ORGANIC COMPOUNDS, OF REGULATION IV OF THE RULES AND REGULATIONS OF THE SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

On motion of Member Horn, seconded by Member Cox, the following resolution is adopted:

WHEREAS, the San Diego County Air Pollution Control Board (Board), pursuant to Section 40702 of the Health and Safety Code, adopted Rules and Regulations of the Air Pollution Control District of San Diego County; and

WHEREAS, said Board now desires to amend said Rules and Regulations; and

WHEREAS, notice has been given and a public hearing has been held relating to the amendment of said Rules and Regulations pursuant to Section 40725 of the Health and Safety Code and Section 51.102 of the Code of Federal Regulations; and

WHEREAS, pursuant to Section 40727 of the Health and Safety Code, the San Diego County Air Pollution Control Board makes the following findings:

- (1) (Necessity) The adoption of proposed amendments to Rule 11 and related amendments to Rule 66.1 are necessary because changes in state law and adoption of new state Air Toxic Control Measures have affected permit requirements;
- (2) (Authority) The adoption of proposed amendments to Rule 11 and related amendments to Rule 66.1 are authorized by Health and Safety Code Section 40702;
- (3) (Clarity) Proposed amendments to Rule 11 and Rule 66.1 can be easily understood by persons directly affected by them;
- (4) (Consistency) The adoption of proposed amendments to Rule 11 and Rule 66.1 are in harmony with, and not in conflict with or contrary to, existing statutes, court decisions, and state and federal regulations;
- (5) (Non-duplication) The adoption of proposed amendments to Rule 11 and Rule 66.1 will not duplicate existing District, state, or federal requirements;
- (6) (Reference) The adoption of proposed amendments to Rule 11 and Rule 66.1 are necessary to comply with state law;

WHEREAS, the Board further finds pursuant to Health and Safety Code Section 40001 that the adoption of proposed amendments to Rule11 and Rule 66.1 will facilitate the attainment of ambient air quality standards; and

WHEREAS, the Board further finds that an analysis comparing proposed amendments to Rule 11 and Rule 66.1 with applicable requirements of federal and local regulations is not required pursuant to Health and Safety Code Section 40727.2 because the proposed amendments do not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements; and

WHEREAS, the Board further finds that an incremental cost-effectiveness analysis pursuant to Health and Safety Code Section 40920.6(a) is not required for proposed amendments to Rule 11 and Rule 66.1; and

WHEREAS, the Board further finds that an assessment of the socioeconomic impacts of the proposed amendments to Rule 11 and Rule 66.1 is not required pursuant to Health and Safety Code Section 40728.5 as the proposed amended rules will not significantly affect air quality or emissions limitations.

**NOW THEREFORE IT IS RESOLVED AND ORDERED** by the San Diego County Air Pollution Control Board that the Rules and Regulations of the Air Pollution Control District of San Diego County be, and hereby are amended as follows:

1. Proposed amended Rule 11 is to read as follows:

#### RULE 11. EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS

(Effective 1/1/69: Rev. Adopted & Effective 10/17/95

Rev. Adopted & Effective 7/30/96`

Rev. Adopted & Effective 5/21/97

Rev. Adopted & Effective 11/15/00

Rev. Adopted & Effective 4/25/07

Rev. Adopted 11/09/11 & Effective 05/09/12

Rev. Adopted (date of adoption)

#### INDEX OF EXEMPTION CATEGORIES AS LISTED IN SECTION (d)

		PAGE
(1)	Mobile Sources	6
(2)	Combustion and Heat Transfer Equipment	6
(3)	Structures and Structural Modifications	8
(4)	Laboratory Equipment and Related Operations	8
(5)	Replacement of Equipment	9
(6)	Plant Support Equipment	10

(7)	Metallurgical Processing Equipment – General	11
(8)	Metallurgical, Glass, and Ceramic Processing Equipment – Using Furnaces, Kilns, and Ovens	12
(9)	Abrasive Blasting Equipment	13
(10)	Machining Equipment	13
(11)	Printing and Reproduction Equipment	14
(12)	Food Processing and Food Preparation Equipment	15
(13)	Plastics, Foam, and Rubber Processing Equipment and Operations	15
(14)	Mixing, Blending, and Packaging Equipment	16
(15)	Coating and Adhesive Application Equipment and Operations	16
(16)	Solvent Application Equipment and Operations	18
(17)	Storage and Transfer Equipment	19
(18)	Drycleaning, Laundry Equipment, and Fabric Related Operations	20
(19)	Miscellaneous Equipment and Operations	21
(20)	Registered Equipment	25

#### RULE 11. EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS

#### (a) APPLICABILITY

- (1) This rule is applicable to any article, machine, equipment, or other contrivance which would otherwise be subject to Rule 10.
- (2) This rule shall not exempt equipment, operations, or processes described in Section (d) from meeting all other applicable requirements of these Rules and Regulations, and State and federal regulations, including the National Emission Standards for Hazardous Air Pollutants (NESHAP) and the New Source Performance Standards (NSPS).
- (3) This rule shall not apply to any equipment, operation, or process that violates Rule 50 or Rule 51 as determined by the Air Pollution Control Officer. When the Air Pollution Control Officer makes such a determination and written notification is given to the owner or operator, the equipment, operation, or process may thereafter be subject to Rule 10 for a specified time as determined by the Air Pollution Control Officer.
- (4) This rule shall not apply to any equipment, operation, or process described in Subsections (d)(2) through (d)(19), excluding agricultural sources, that emits more than 100 pounds per day of any one of the following criteria air pollutants: particulate matter (PM10), oxides of nitrogen (NOx), volatile organic compound (VOC), oxides of sulfur (SOx), carbon monoxide (CO), or lead (Pb).
- (5) Except for equipment specified in Subsection (d)(20)(iii), Section (d) of this rule shall not apply to any equipment, operation, or process that
  - (i) emits or may emit toxic air contaminants, as defined in Rule 1200, and
  - (ii) has emissions of toxic air contaminants that, in the absence of any emission control device or limitation on material usage or production, may be expected to exceed any standard specified in Rule 1200 (d)(1)(i), (d)(2), or (d)(3) as determined by the Air Pollution Control Officer. This provision shall not apply to any equipment, operation, or process for which construction or modification, as applicable, commenced prior to November 15, 2000, unless such equipment, operation, or process is subsequently modified in such a manner that increases emissions of one or more toxic air contaminants.

In the event the Air Pollution Control Officer makes a preliminary determination that any standard specified in Rule 1200 (d)(1)(i), (d)(2), or (d)(3) may be exceeded, the Air Pollution Control Officer shall notify the owner or operator in writing and specify the information needed to make a final determination. If the Air Pollution Control Officer makes a final determination that emissions, in the absence of any emission control device or limitation on material usage or production, may be expected to exceed any standard specified in Rule 1200 (d)(1)(i), (d)(2), or (d)(3), the Air Pollution Control Officer shall notify the owner or operator in writing and include a statement that, as a result, Rule 11(d) does not apply and an Authority to Construct and Permit to Operate are therefore required.

#### (b) RESERVED

#### (c) **DEFINITIONS**

For the purposes of this rule, unless otherwise noted, the following definitions shall apply:

- (1) "Abrasive Blasting Cabinet" means the same as defined in Rule 2.
- (2) "Abrasive Blasting Room or Booth" means a structure that includes abrasive blasting equipment, a dust collector and/or recycling system for recovering spent abrasive. The operator blasts from within this structure and the emissions from abrasive blasting operations are vented through a control device. The abrasive blasting room or booth definition does not apply to temporary enclosures including, but not limited to, those at shipyards or inside ships.
- (3) "Additive Manufacturing (3-D Printing)" means a process of joining materials to create objects from 3-D model data, usually layer upon layer, as opposed to subtractive manufacturing methodologies. Additive manufacturing processes include, but are not limited to, Direct Metal Laser Sintering, Selective Laser Melting, Selective Laser Sintering, and Direct Laser Melting.
- (4) "Agricultural Source" means any equipment, operation, or process, or aggregation thereof, used in the production of crops, or raising of fowl or animals and located on contiguous property under common ownership or control that meets any of the criteria identified in Section 39011.5 of California Health and Safety Code, as it exists on (date of adoption).
- (5) "Biotechnology" means the use of living organisms and/or biological processes often combined with chemical processes to develop products used in a variety of fields such as medicine, agriculture, and food production. Biotechnology industry includes, but is not limited to, medicinal drug manufacturing, peptide synthesis and DNA synthesis.
- (6) "Brake Horsepower Rating" means the maximum continuous brake horsepower output rating of the internal reciprocating combustion engine as specified by the engine manufacturer and listed on the engine nameplate or in other documentation establishing the maximum continuous brake horsepower as approved by the Air Pollution Control Officer.
  - (7) "CFR" means Code of Federal Regulations.
- (8) "Designated Workstation" means an assigned area within the stationary source where a specified operation is conducted.

- (9) "Digital Printing Operation" means an operation that uses a printing device guided by a computer-driven machine to transfer an electronic image to a substrate through the use of inks, toners, or other graphic arts materials. Digital printing operation also includes associated surface preparation, solvent cleaning, and the cleaning of application equipment.
  - (10) "Exempt Compounds" means the same as defined in Rule 2.
- (11) "First-Article Deliverable Product" means the first product that is produced using research and development equipment and that is delivered to a potential intracompany or external customer for approval. First-article deliverable product shall not exceed one unit of each product per customer unless necessary in order for the customer to obtain statistically significant data required to make a decision on the approval of a new product.
- (12) "Green Material" means waste material that includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste. Green material does not include food material, biosolids, mixed solid waste, material processed from commingled collection, wood containing lead-based paint or wood preservative, mixed construction or mixed demolition debris.
- (13) "Hazardous Air Pollutant (HAP)" means an air contaminant identified in the Federal Clean Air Act, Title 1, Section 112 (b).
- (14) "Hot Melt Adhesive" means a thermoplastic adhesive that melts at temperatures above 180°F (82°C), does not contain organic solvents, and sets rapidly upon cooling.
- (15) "Industrial Wastewater Treatment" means the treatment of spent process water prior to discharging into municipal wastewater system or disposal. Industrial wastewater treatment includes, but is not limited to, dewatering, pH adjustment, precipitation, sludge processing, and gravity separation and/or filtration of the wastewater.
- (16) "Large Commercial Digital Printing Operation" means a commercial digital printing operation where the print capacity of any individual printer that uses solvent based inks is 1,000 ft<sup>2</sup>/hr or higher; or an operation where the print capacity of any individual printer that uses water-based or UV inks is 10,000 ft<sup>2</sup>/hr or higher.
  - (17) "Major Stationary Source" means the same as defined in Rule 20.1.
- (18) "Military Tactical Support Equipment" means any equipment owned by the U.S. Department of Defense or the National Guard and used in combat, combat support, combat service support, tactical or relief operations, or training for such operations.
- (19) "Operating Day" means any calendar day during which the specified equipment is operated, or specified operations occur.

- (20) "Organic Solvent" means any substance that is liquid at standard conditions and contains an organic compound or combination of organic compounds, and that is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or for other similar purposes. For the purpose of this definition, a reagent is not considered an organic solvent.
- (21) "Pilot Plant Facility" means a trial assembly of small-scale reaction and processing equipment that is the intermediate stage between laboratory experiment and full-scale operation in the development of a new product and/or process.
  - (22) "Portable Emission Unit" means the same as defined in Rule 20.1.
- (23) "Preservative Oils and Compounds" means materials which do not contain solids, and are applied to prevent corrosion and/or to provide lubrication.
- (24) "Process Heater" means any combustion equipment fired with liquid and/or gaseous fuel that transfers heat from the combustion gases to water or process streams. Heaters used for swimming pools, spas, and/or therapy pools shall be considered process heaters. This definition does not include any combustion equipment where the material being heated is in direct contact with the products of combustion, such as furnaces or kilns, or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.
- (25) "Research and Development (R&D) Equipment" means equipment that is used to conduct research and develop new or improved processes and/or products, where such equipment is operated by technically trained personnel under the supervision of a research director, and may not be used to manufacture products or byproducts for sale or exchange for commercial profit, other than the first-article deliverable product.
- (26) "Reclaimed Water" means wastewater that has been treated to remove solids and certain impurities to meet the standards specified in California Code of Regulations Title 22, Division 4, Chapter 3.
- (27) "Stationary Internal Combustion Engine" means a spark or compression ignited, reciprocating internal combustion engine that is not a portable emission unit.
  - (28) "Stationary Source" means the same as defined in Rule 2.
- (29) "Thermal Spraying Operation" means one or more of several processes in which metallic or nonmetallic surfacing materials are deposited in a molten or semi-molten condition on a substrate to form a coating. The surfacing material may originate in the form of powder, rod, or wire before it is heated, prior to spraying and deposition. Thermal spraying operations include: detonation gun spraying, flame spraying, high-velocity oxyfuel spraying, plasma spraying, and twin-wire electric arc spraying.
  - (30) "Toxic Air Contaminant" means the same as defined in Rule 2.
  - (31) "Volatile Organic Compound (VOC)" means the same as defined in Rule 2.

- (32) "Volatile Organic Liquid" means any organic liquid either having a Reid Vapor Pressure (RVP) greater than 3 pounds per square inch if the American Society for Testing Material International (ASTM) RVP test method is applicable, or having a true vapor pressure greater than 3 pounds per square inch absolute at 100°F if the ASTM RVP test is not applicable.
- (33) "Volatile Organic Solvent" means an organic solvent with an initial boiling point of less than 400°F (204°C).
- (34) "Wet Screening Operation" means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

## (d) EQUIPMENT, OPERATIONS, OR PROCESSES NOT REQUIRING A PERMIT TO OPERATE

Except as otherwise specified in Subsections (a)(2) through (a)(5), any equipment, operation, or process that is listed below in Subsections (d)(1) through (d)(20), and that meets the stated exemption provision, parameter, requirement, or limitation, is exempt from the requirements of Rule 10. Such equipment, operation, or process shall not be exempt from any otherwise applicable standards in these Rules and Regulation, or applicable State or federal regulations, unless specified as exempt by that rule or regulation.

Any person claiming such an exemption shall provide documentation sufficient to substantiate the applicability of the stated exemption provision, parameter, requirement, or limitation at the request of the Air Pollution Control Officer.

#### (1) MOBILE SOURCES

- (i) Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge, that is used primarily to provide propulsion, but which may also supply heat, mechanical, hydraulic, or electrical power to that same vehicle, train, ship, boat, or barge. This exemption does not apply to equipment located onboard floating dry docks or equipment used for dredging operations.
- (ii) Railway, road, and runway sweepers used respectively for cleaning rail tracks, roadways, and runways, provided the maximum manufacturer's output rating of any auxiliary sweeper engine is 200 brake horsepower or less.

#### (2) COMBUSTION AND HEAT TRANSFER EQUIPMENT

(i) Any reciprocating internal combustion engine with a brake horsepower rating of less than 50.

- (ii) Any engine mounted on, within, or incorporated into any motor vehicle, train, ship, boat, or barge, that is used exclusively to load or unload cargo. For the purposes of this exemption, cargo shall not include the removal or relocation of sand, rock, silt, soil, or other materials from dredging operations.
  - (iii) Any gas turbine engine that has:
    - (A) an output power rating of less than 0.3 megawatt (MW), or
    - (B) a maximum gross heat input rating at International Standards Organization (ISO) Standard Day Conditions of less than 1 million British thermal units (BTU) per hour.

This exemption does not apply to any gas turbine operating on waste-derived gaseous fuel.

- (iv) Any boiler, process heater, or steam generator with a manufacturer's maximum gross heat input rating of less than:
  - (A) 1 million BTU per hour fired with any fuel, or
  - (B) 5 million BTU per hour fired exclusively with natural gas and/or liquefied petroleum gas.

This exemption does not apply to reciprocating internal combustion or gas turbine engines.

- (v) Air heaters with a manufacturer's maximum gross heat input rating of less than 20 million BTU per hour fired exclusively with natural gas and/or liquefied petroleum gas and installed in conjunction with combustor testing in gas turbine test cells.
  - (vi) Portable aircraft engine test stands constructed before November 4, 1976.
  - (vii) Back-pack power blowers.
  - (viii) Orchard or citrus grove heaters.
- (ix) Any oven having an internal volume of 27 cubic feet (0.765 cubic meter) or less.
- (x) Curing or baking ovens in which no volatile organic solvents or materials containing volatile organic solvents are introduced.
  - (xi) Any oven used exclusively for the curing, softening, or annealing of plastics.

- (xii) Any oven that is an integral part of a process for which a Permit to Operate is not required pursuant to this rule.
- (xiii) Any portable internal combustion engine or gas turbine engine used exclusively in conjunction with military tactical support equipment. Such engines shall not be subject to the limitations of Subsections (a)(3) or (a)(4) of this rule. For the purposes of this subsection, portable means carried or moved from one location within a stationary source to another location within the same stationary source, or from one stationary source to another stationary source, in the normal course of operations. Indicia of portability shall include, but are not limited to, wheels, skids, carrying handles, or a dolly, trailer, or vessel.
- (xiv) Internal combustion or gas turbine engines used exclusively for purposes of educating students in the operation, maintenance, repair, and rebuilding of such engines provided that each engine or turbine is operated less than 20 hours per calendar year.
- (xv) Auxiliary internal combustion reciprocating engines mounted on any authorized emergency vehicle as specified in Section 27156.3 of the California Vehicle Code.

#### (3) STRUCTURES AND STRUCTURAL MODIFICATIONS

- (i) Equipment used exclusively in support of any structure designed for and used exclusively as a dwelling for not more than four families.
- (ii) Structural modifications that cannot change the quality, nature, or quantity of air contaminant emissions.

#### (4) LABORATORY EQUIPMENT AND RELATED OPERATIONS

- (i) Laboratory testing equipment, and quality control testing equipment, including associated wipe cleaning, used exclusively for chemical and physical analysis, or quality control.
- (ii) Laboratory equipment and laboratory operations conducted at secondary schools, colleges, or universities and used exclusively for instruction or research purposes.
  - (iii) Vacuum-producing devices used in laboratory or R&D operations.
  - (iv) Hoods, stacks, or ventilators used in laboratory or R&D operations.
- (v) Research and development equipment, including associated wipe cleaning.

- (vi) Equipment used to manufacture the following products, provided that the total uncontrolled VOC emissions from all operations specified below do not exceed 5 tons per calendar year:
  - (A) biotechnology pharmaceutical products for exclusive use in federal Food and Drug Administration (FDA) approved clinical trials, or
  - (B) biomedical devices and diagnostic kits for exclusive use in FDA approved clinical trials and laboratory failure analysis testing, or
  - (C) bioagricultural products for exclusive use in field testing required to obtain FDA, Environmental Protection Agency (EPA), United States Department of Agriculture (USDA) and/or California Environmental Protection Agency (Cal-EPA) approval.

All data and/or records necessary to demonstrate the applicability of this exemption shall be maintained on-site for three years and made available to the District upon request.

(vii) Any temporary equipment installed in a pilot plant facility, provided that the total emissions increase from all such temporary equipment does not exceed 10 pounds per day of VOCs. For the purposes of this exemption, temporary equipment means equipment located at a pilot plant facility for a period not exceeding 90 days in any consecutive 12-month period excluding construction and installation periods. It shall be the responsibility of a person claiming this exemption to maintain daily records necessary for the District to determine its applicability.

#### (5) REPLACEMENT OF EQUIPMENT

Subject to the limitations and requirements stated in this Subsection (d)(5), identical replacement equipment and like-kind replacement equipment as listed below are exempt from the requirements of Rule 10(a). The provisions of this Subsection (d)(5) shall not apply to replacement of equipment pursuant to other requirements of these Rules and Regulations; or replacement of equipment subject to air contaminant control standards specified for replacement equipment; or replacement of equipment in whole or part, that in sum would constitute reconstruction or modification under NSPS or District Regulation X - Standards of Performance for New Stationary Sources, or would constitute a major stationary source or replacement of any or stationary or portable compression ignition reciprocating internal combustion engine; or rim seal replacements for bulk gasoline floating roof tanks subject to the Best Available Control Technology (BACT) requirements of Rule 61.1.

(i) Identical replacement in whole or part of any article, machine, equipment or other contrivance for which a Permit to Operate has previously been granted for such equipment. Identical means the same manufacturer, model number, and type.

In order to claim the applicability of Subsection (d)(5)(i) for portable equipment (other than a diesel-fueled portable engine), written notification of the proposed equipment replacement and information identifying the manufacturer, model number, serial number, and type of the item used as a replacement, and information detailing the expected use of the equipment being replaced, must be submitted to the District prior to such replacement.

- (ii) Like-kind replacement in whole or part of any article, machine, equipment, or other contrivance where a Permit to Operate has previously been granted for such equipment, and the Air Pollution Control Officer determines that the replacement equipment meets the following requirements:
  - (A) is identical in function, and
  - (B) is similar in design, and
  - (C) the actual air contaminant emissions are the same in nature, and
  - (D) has a capacity, production rate, and actual air contaminant emissions that are equal to or less than those of the currently permitted equipment.

In order to claim the applicability of Subsection (d)(5)(ii) and prior to replacing any equipment, written notification in the form of an application for permit revision, the information required to make the determinations listed above, and the fees specified in Rule 40 must be submitted to the District.

#### (6) PLANT SUPPORT EQUIPMENT

The exemptions listed in this Subsection (d)(6) shall not apply to any combustion equipment associated with plant support equipment unless the combustion equipment is also exempt pursuant to Subsection (d)(2) of this rule.

- (i) Vacuum cleaning devices used exclusively for housekeeping purposes.
- (ii) Equipment used exclusively for comfort air conditioning or comfort ventilation systems, and not designed or used to remove air contaminants generated by or released from specific equipment.
- (iii) Refrigeration units except those used as, or in conjunction with, air pollution control equipment.
  - (iv) Equipment used exclusively to compress or hold dry natural gas.
- (v) Vacuum-producing devices used in connection with other equipment not requiring a Permit to Operate pursuant to this rule.

- (vi) Equipment used exclusively for space heating, other than boilers.
- (vii) Water cooling towers and water cooling ponds used for evaporative cooling of water, including reclaimed water, utilized solely in heat transfer processes but not used for evaporative cooling of:
  - (A) process water (e.g., contaminated water or industrial wastewater), or
  - (B) water from barometric jets or barometric condensers.

#### (7) METALLURGICAL PROCESSING EQUIPMENT - GENERAL

- (i) Non-automated soldering equipment, such as handheld soldering irons and guns.
- (ii) Solder-screen processes and associated soldering ovens that use a process similar to silk-screening in order to apply the solder paste.
- (iii) Each solder leveler, hydrosqueegee, wave solder machine or drag solder machine that emits less than an average of 5 pounds of VOCs per operating day for each calendar month. The number of operating days per calendar month, monthly purchase records, and daily or monthly records of material usage shall be maintained on-site for three years and be made available to the District upon request.
- (iv) Brazing and welding equipment, including arc welding equipment and laser welding.
  - (v) Molds used for the casting of metals.
- (vi) Foundry sand mold forming equipment. This exemption does not apply if heat, sulfur dioxide, or VOCs are used.
- (vii) Forming equipment used exclusively for forging, rolling, or drawing of metals.
- (viii) Thermal spraying operations where materials sprayed contain no cadmium, chromium, copper, lead, manganese or nickel, and provided the maximum amount of material sprayed is less than 20 pounds per day at the stationary source.
- (ix) Tumblers used for the cleaning or deburring of metal products without abrasive blasting.
  - (x) Shell-core and shell-mold manufacturing machines.
- (xi) Extrusion equipment used exclusively for extruding metals or minerals. This exemption does not apply to coking extrusion equipment or processes that manufacture products containing greater than 1% asbestos by weight.

- (xii) Shot peening operations where only steel shot is employed and no surface material such as scale, rust, or old paint is removed.
- (xiii) Chemical milling of titanium or niobium (columbium) and/or their alloys using nitric and/or hydrofluoric acid at milling bath temperatures below 110°F (43°C).
- (xiv) Equipment used for anodizing, plating, polishing, stripping, or etching, if the VOC content of the aqueous material does not exceed 10% by weight. This exemption does not apply to acid chemical milling, chrome plating, chromic acid anodizing, chromate conversion coating processes, or the stripping of chromium. This exemption also does not apply to copper etching or copper plating operations which use formaldehyde, ammonium hydroxide, ammonium chloride, or solutions of nitric, hydrofluoric, and/or hydrochloric acids which contain more than 17% acid concentration by weight.
- (xv) Oil quenching tanks that use less than 20 gallons per year of make-up oil. Monthly purchase records and daily or monthly usage records of all materials added must be maintained on-site to claim applicability of this exemption.
- (xvi) Salt bath quenching tanks where no chromium containing compounds are added to the tank.
- (8) METALLURGICAL, GLASS, AND CERAMIC PROCESSING EQUIPMENT USING FURNACES, KILNS, AND OVENS
  - (i) Crucible furnaces, pot furnaces, or induction furnaces, each with a maximum rated capacity of less than 450 cubic inches of any molten metal.
  - (ii) Crucible furnaces, pot furnaces, or induction furnaces each with a maximum rated capacity of 2,500 cubic inches or less, or 950 pounds or less, and where
    - (A) no sweating or distilling is conducted, and
    - (B) only non-ferrous metals, except lead and yellow brass, are poured or held in a molten state.

Records of the types of all metal poured from such furnaces shall be maintained on-site for three years and be made available to the District upon request. This exemption does not apply if alloying elements of arsenic, beryllium, cadmium, chromium, lead, and/or nickel are utilized in such furnaces.

(iii) Equipment used exclusively for the sintering of glass or metals (excluding lead), where no coke or limestone is used.

- (iv) Equipment used exclusively for heating metals immediately prior to forging, pressing, rolling, or drawing.
- (v) Any oven used exclusively for heat treating glass or metal if the materials are not heated to a molten state, and the oven is heated exclusively by natural gas, liquefied petroleum gas, and/or electricity.
- (vi) Atmosphere generators and vacuum producing devices used in connection with metal heat treating processes.
  - (vii) Die casting machines.
- (viii) Kilns used exclusively for firing ceramic ware, heated exclusively with natural gas, liquefied petroleum gas, and/or electricity.

#### (9) ABRASIVE BLASTING EQUIPMENT

The exemptions listed in this Subsection (d)(9) shall not apply to any combustion equipment associated with abrasive blasting equipment unless the associated combustion equipment is also exempt pursuant to Subsection (d)(2) of this rule.

- (i) Abrasive blasting equipment using a suspension of abrasive in water.
- (ii) Abrasive blasting cabinets that are vented through a control device into the building where such cabinets are located.
- (iii) Robotically-operated enclosed abrasive blasting equipment that emits less than 5 pounds of particulate matter per day, operates at a negative pressure, and is vented through a control device into the building where it is located.
- (iv) Abrasive blasting equipment or pots with a manufacturer's sand capacity rating of less than 100 pounds (45.4 kg), or 1 cubic foot or less. This exemption does not apply to pots used in an abrasive blasting room or booth, or to abrasive blasting cabinets.

#### (10) MACHINING EQUIPMENT

- (i) Equipment used for buffing, polishing, carving, cutting, deburring, drilling, machining, routing, shearing, sanding, sawing, surface grinding, or turning of: ceramic artwork, ceramic precision parts, glass, leather, metal, rubber, fiberboard, masonry, or non-fiberglass reinforced plastic. This exemption does not apply to tire buffers.
  - (ii) Wet-jet devices used to cut fiberglass reinforced plastic.

- (iii) Portable handheld equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of fiberglass reinforced plastic, when not used at a designated workstation, booth, or room.
- (iv) Equipment used for carving, cutting, drilling, surface grinding, planing, routing, sanding, sawing, shredding, or turning of wood.
- (v) Tub grinders and trommel screens used for processing green material. This exemption does not apply to any associated combustion equipment unless such equipment is also exempt pursuant to Subsection (d)(2) of this rule.
- (vi) Equipment used for the pressing or storing of sawdust, wood chips, or wood shavings.
- (vii) Equipment used exclusively to mill or grind coatings or molding compounds where all materials introduced are in a paste form and no volatile organic solvents are used.
- (viii) Equipment used for buffing, polishing, carving, cutting, deburring, drilling, machining, routing, shearing, sanding, sawing, or surface grinding of fiberglass or calcium silicate parts that are exclusively vented through a control device that exhausts inside an enclosed building where such equipment is located.

#### (11) Printing and Reproduction Equipment and Operations

- (i) Any graphic arts operation or group of graphic arts operations located at a stationary source, that emit less than an average of 15 pounds of VOCs per operating day for each calendar month from all such operations. All records necessary to calculate average daily VOC emissions, such as emission factors or mix ratios, VOC content of each material used, number of operating days per month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.
  - (ii) Inkjet and laser printing equipment.
- (iii) Digital printing operations where the print capacity of any individual printer which uses solvent based inks is less than 1,000  $\rm ft^2/hr$ , or an operation where the print capacity of any individual printer which uses water-based or UV inks is less than 10,000  $\rm ft^2/hr$ .
- (iv) Large commercial digital printing operations, provided that the records specified in Rule 67.16(f) for these operations are maintained.
  - (v) Ink cartridge filling, refilling, and/or refurbishing operations.

#### (12) FOOD PROCESSING AND FOOD PREPARATION EQUIPMENT

- (i) Equipment used exclusively to grind, blend, or package tea, cocoa, spices, dried flowers, or roasted coffee.
- (ii) Equipment located at eating establishments that is used for preparing food for human consumption at the same establishment. This exemption does not apply to boilers or coffee roasting equipment.
- (iii) Coffee roasting equipment with a maximum capacity of 11 pounds (5 kg) or less.
- (iv) Any bakery oven that is located at a stationary source where the combined rated heat input capacity of all bakery ovens, excluding ovens subject to Subsection (d)(12)(v) below, is less than 2 million BTU per hour.
  - (v) Any bakery oven used exclusively to bake non-yeast-leavened products.
  - (vi) Equipment used to crush and/or ferment grapes to produce wine.
- (vii) Equipment used to brew beer at breweries that produce less than 100,000 barrels (3.1 million gallons) of beer per calendar year and associated equipment cleaning. This exemption does not apply to boilers or silos.
  - (viii) Smokehouses used for preparing food.

#### (13) PLASTICS, FOAM, AND RUBBER PROCESSING EQUIPMENT OR OPERATIONS

- (i) Extrusion equipment used exclusively for extruding rubber products or plastics where no organic additives are present.
- (ii) Equipment used for compression molding and/or injection molding of plastics.
- (iii) Mixers, roll mills, and calenders for rubber or plastics, where no material in powder form is added and no volatile organic solvents are used.
  - (iv) Equipment used exclusively for conveying and storing plastic materials.
- (v) Foam manufacturing or foam application operations that emit less than an average of 5 pounds of VOCs per operating day for each calendar month. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.

- (vi) Plastic manufacturing or fabrication operations, including reinforced plastic fabrication operations using epoxy that emit less than an average of 5 pounds of VOCs per operating day for each calendar month. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.
- (vii) Polyester resin operations using less than 20 gallons of polyester resin materials per month. Daily or monthly records of material usage shall be maintained on-site for three years and be made available to the District upon request.
  - (viii) Hot wire cutting of expanded polystyrene foam.

#### (14) MIXING, BLENDING, AND PACKAGING EQUIPMENT

- (i) Dry batch mixers with a rated working capacity of 0.5 cubic yards or less, where material is added in a dry form prior to the introduction of a subsequent liquid fraction or where no liquid fraction is added.
- (ii) Wet batch mixers with a rated working capacity of 1 cubic yard or less, where no volatile organic solvents are used.
- (iii) Equipment used exclusively for the manufacture of water emulsions of asphalt, greases, oils, or waxes.
  - (iv) Equipment used exclusively for the packaging of lubricants or greases.
- (v) Equipment used at ambient temperatures exclusively for mixing and blending materials to make water-based adhesives.
- (vi) Any coating and/or ink manufacturing operations located at a stationary source that emit less than an average of 15 pounds of VOCs per operating day for each calendar month from all such operations. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.

#### (15) COATING AND ADHESIVE APPLICATION EQUIPMENT AND OPERATIONS

(i) Powder coating operations where less than 0.5 gallons per day of any surface preparation or cleaning material containing VOCs are used. Monthly purchase and daily or monthly usage records of surface preparation and cleaning materials shall be maintained on-site for three years and made available to the District upon request. This exemption does not apply to metallizing gun operations.

- (ii) Application equipment and processes used exclusively to apply coatings and/or adhesive materials to stationary structures and/or their appurtenances at the site of installation, to portable buildings including mobile homes at the site of installation, to pavement, or to curbs. This exemption does not apply to application equipment and processes where coatings or adhesive materials are applied in off-site shops or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles.
- (iii) Any coating or adhesive materials application operation (portable or stationary) where 20 gallons or less of liquid coatings or adhesive materials are applied per consecutive 12-month period. Monthly purchase records and daily or monthly usage records of all coatings or adhesive materials applied must be maintained on-site for three years to claim applicability of this exemption. The volume of materials applied using non-refillable handheld aerosol spray containers shall not be included when determining the applicability of this exemption.
- (iv) Any coating or adhesive materials application operation (portable or stationary) where the VOC emissions from the application of liquid coatings or adhesive materials are 150 pounds or less per consecutive 12-month period. All records necessary to calculate VOC emissions, such as VOC content of each coating or adhesive material applied and daily or monthly usage records of such materials must be maintained on-site for three years to claim applicability of this exemption. The volume or VOC content of materials applied using non-refillable handheld aerosol spray containers shall not be included when determining the applicability of this exemption.
- (v) Chromate conversion coating processes where coatings are applied exclusively by brush, roller, or marking pen.
- (vi) Coating operations that exclusively use non-refillable handheld aerosol spray containers.
- (vii) The application of coatings outside of a defined application station that are necessary to cover minor imperfections or repair minor mechanical damage incurred prior to intended use.
- (viii) Coating operations located at primary or secondary schools and used exclusively for instruction.
- (ix) Coating operations located at schools (i.e., primary, secondary, or schools of higher education) and used exclusively for student theatrical productions or art instruction.
- (x) Liquid surface coating operations that exclusively use hand-held brushes to apply wet fastener primer coatings from containers that are 8 ounces or less in size.

- (xi) Liquid surface coating operations that exclusively use air brushes with a coating capacity of 2 ounces or less.
  - (xii) Hot melt adhesive application equipment.
- (xiii) The application of coatings outside of a designated workstation that is necessary for the maintenance of stationary equipment.

#### (16) SOLVENT APPLICATION EQUIPMENT AND OPERATIONS

- (i) Cold solvent cleaning or stripping operations and/or vapor degreasing operations that exclusively utilize water-based materials with a VOC content that does not exceed 50 grams per liter, as applied. For the purposes of this exemption, a water-based cleaning solvent is any solvent that consists only of water and VOC and does not contain exempt compounds.
  - (ii) Cold solvent cleaning dip tanks, vapor degreasers, and paint stripping tanks:
    - (A) with a liquid surface area of 1 square foot or less, or
    - (B) with a maximum capacity of 1 gallon or less.
- (iii) Cold solvent cleaning remote reservoirs with a sink cross-sectional area of 1 square foot (0.09 square meters) or less.
- (iv) Batch-type waste solvent recovery stills for on-site recovery of waste solvent with a maximum solvent usage of 350 gallons per day, provided the still is equipped with a device that shuts off the heating system if the solvent vapor condenser is not operating properly.
  - (v) Metal inspection tanks that:
    - (A) have a liquid surface area of less than 5 square feet, or
    - (B) do not use volatile organic solvents, or
  - (C) are not equipped with spray type flow devices or a means of solvent agitation.
- (vi) Metal inspection spraying operations where no materials applied contain volatile organic compounds.
  - (vii) Cold solvent degreasers used exclusively for educational purposes.
- (viii) Golf grip application stations that exclusively use liquid materials with an initial boiling point of 450°F (232°C), or greater.

- (ix) Surface preparation or solvent cleaning, including wipe cleaning:
  - (A) for quality control or quality assurance purposes, or
  - (B) using non-refillable handheld aerosol spray containers, or
  - (C) for routine janitorial maintenance, including graffiti removal or
  - (D) performed in conjunction with welding of 5XXX series aluminum structures for Navy ships and in accordance with quality assurance standards for such structures, or
  - (E) not associated with any permitted operation, provided:
    - (1) the cleaning materials have a VOC content of 25 grams per liter (0.21 lbs/gal), or less, as used, or
    - (2) the uncontrolled VOC emissions from all such cleaning operations located at the stationary source do not exceed 3,650 pounds per consecutive 12-months, or the total purchase or usage of solvents for such cleaning operations does not exceed 550 gallons per consecutive 12-months. The volume of materials applied from operations specified in Subsections (d)(16)(ix)(A) through (E)(1) above shall not be included when determining the applicability of this exemption. All data and/or records necessary to demonstrate that this exemption is applicable shall be maintained on-site for three years and made available to the District upon request.
- (x) Asbestos mastic removal operations using organic solvents provided the total VOC vapor pressure of the solvent is 0.2 mm Hg or less, at 20°C (68°F).

#### (17) STORAGE AND TRANSFER EQUIPMENT

- (i) Stationary equipment used exclusively to store and/or transfer liquid organic compounds that are not volatile organic liquids.
- (ii) Stationary storage tanks for volatile organic liquids with a capacity of less than 250 gallons and associated equipment used exclusively to transfer materials into such tanks.
- (iii) Equipment used exclusively to store and/or transfer organic solvents that are not used as fuels.
- (iv) Equipment used exclusively to store and/or transfer natural gas, butane, or propane when not mixed with other volatile organic liquids, other than odorants.

- (v) Equipment used exclusively to store and/or transfer fuels that are used exclusively as a source of fuel for wind machines used for agricultural purposes.
- (vi) Mobile transport, delivery, or cargo tanks on vehicles used for the delivery of volatile organic liquids. This exemption does not apply to asphalt tankers used to transport and transfer hot asphalt used for roofing applications.
- (vii) Equipment used to transfer fuel to and from amphibious ships for maintenance purposes, provided total annual transfers do not exceed 60,000 gallons per year at a stationary source.
- (viii) Equipment used exclusively to store and/or transfer liquid soaps, liquid detergents, vegetable oils, fatty acids, fatty esters, fatty alcohols, or waxes, and wax emulsions.
- (ix) Pressurized tanks used to store inorganic or halogenated organic gases and associated equipment used exclusively to transfer materials into such tanks.

#### (18) DRYCLEANING, LAUNDRY EQUIPMENT, AND FABRIC RELATED OPERATIONS

The exemptions listed in this Subsection (d)(18) shall not apply to any operation that uses perchloroethylene (perc) as a dry cleaning solvent.

- (i) Non-immersion dry cleaning equipment that uses water or exempt compounds as the cleaning solvent, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter.
  - (ii) Lint traps used exclusively in conjunction with dry cleaning tumblers.
- (iii) Wastewater processing units associated with dry cleaning operations using halogenated compounds, provided the concentration of halogenated compounds in the water being evaporated in the unit does not exceed 400 parts per million (by weight).
- (iv) Laundry dryers, extractors, or tumblers used for fabrics cleaned only with solutions of bleach or detergents, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter. This exemption does not apply to equipment used for previously VOC-laden materials such as rags, cloths, etc.
- (v) Industrial wet cleaning equipment that uses water or exempt compounds as the cleaning solvent, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter. This exemption does not apply to equipment cleaning VOC-laden materials such as rags, cloths, etc.
- (vi) Equipment, including dryers, used exclusively for printing, dyeing, stripping, or bleaching of textiles, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter.

(vii) Industrial laundering equipment that uses liquid carbon dioxide as the cleaning solvent, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter.

#### (19) MISCELLANEOUS EQUIPMENT AND OPERATIONS

- (i) Air pollution control equipment used exclusively to reduce
  - (A) emissions from any article, machine, equipment, process, or contrivance not required to have a Permit to Operate; or
  - (B) emissions generated during the draining and degassing of stationary floating roof gasoline storage tanks provided that a written authorization from the Air Pollution Control Officer to conduct the draining and degassing is obtained pursuant to Rule 61.1.
- (ii) Repairs or maintenance not involving structural changes to any equipment for which a Permit to Operate has been granted.
- (iii) Roofing kettles (used to heat asphalt), each with a capacity of 85 gallons or less.
- (iv) Paper shredders and disintegrators, each with a maximum throughput capacity not to exceed 600 pounds per hour, either as rated by the manufacturer or as stated in writing by the manufacturer for the current configuration, and the associated conveying systems and baling equipment.
  - (v) Alkaline chemical milling equipment:
    - (A) used exclusively for the cleaning of internal combustion engine parts, or
    - (B) for which construction or installation commenced prior to March 27, 1990.
  - (vi) Portable conveyors (belt or screw type) where there is no screening.
  - (vii) Fire extinguishing equipment using halons.
  - (viii) Equipment used exclusively for the purposes of:
    - (A) flash-over fire fighting training, or
    - (B) hand-held fire extinguisher training operations.

- (ix) Equipment used exclusively for bonding lining to brake shoes, where no volatile organic solvents are used.
- (x) Equipment used exclusively to liquefy or separate oxygen, nitrogen, or the inert gases from air.
- (xi) Any operation producing or blending materials for use in cosmetic, pharmaceutical or biotechnology products and/or manufacturing cosmetic, pharmaceutical or biotechnology products by chemical processes, that emit less than an average of 15 pounds of uncontrolled VOC per operating day for each calendar month from all phases of all such operations located at a single stationary source. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.
  - (xii) Equipment used for hydraulic or hydrostatic testing.
- (xiii) Ethylene oxide sterilizing processes that use less than 5 pounds of ethylene oxide per calendar year. Purchase records and records of monthly ethylene oxide usage shall be maintained on-site for three years and be made available to the District upon request.
  - (xiv) Sterilizers or autoclaves using only steam or hydrogen peroxide.
  - (xv) Nail salon operations.
- (xvi) Equipment used exclusively for the melting or applying wax where no volatile organic solvents are used.
  - (xvii) Aerosol can puncturing or crushing operations that use:
    - (A) a closed loop recovery system that emits no air contaminants, or
    - (B) a recovery system that vents all emissions through a properly operated and maintained carbon canister, provided not more than 500 cans are processed through the equipment per day. Throughput records of the number of cans processed shall be maintained on-site for three years and be made available to the District upon request.
- (xviii) Any article, machine, equipment, or contrivance that emits airborne radioactive materials in concentrations above the natural radioactive background concentration in air in the form of dusts, fumes, smoke, mists, liquids, vapors, or gases. This exemption does not apply to incinerators or boilers.

Atomic energy development and radiation protection are controlled by the State of California to the extent it has jurisdiction thereof, in accordance with the

advice and recommendations made to the Governor by the Advisory Council on atomic energy development and radiation protection. Such development and protection are fully regulated by the Nuclear Regulatory Commission to the extent that such authority has not been delegated to the states.

- (xix) Any other piece of equipment or operation not covered by other subsections that has an uncontrolled emission rate of each criteria pollutant of 2 pounds or less per day, or of 75 pounds or less per year. All data and/or records necessary to demonstrate that this exemption is applicable shall be maintained on-site for three years and made available to the District upon request.
- (xx) Equipment approved for use by the EPA for recovering and/or recycling chlorofluorocarbons (CFCs) or alternative fluorocarbons.
- (xxi) Municipal wastewater treatment facilities, municipal water reclamation facilities, and municipal wastewater pump stations each with a design throughput capacity of less than one million gallons of wastewater per day.
  - (xxii) Industrial wastewater treatment that:
    - (A) does not use processes designed to remove or destroy VOCs, or
    - (B) if such processes are used, the uncontrolled VOC emissions do not exceed an average of 5 pounds per day from all such treatment at the stationary source.
- (xxiii) Sludge processing operations at municipal wastewater treatment facilities each with a design throughput capacity of less than one million gallons of wastewater per day.
- (xxiv) Smoke generating equipment in training sessions conducted by government agencies for the purpose of certifying persons to evaluate visible emissions for compliance with State law or District Rules and Regulations.
- (xxv) Smoke generating equipment used for training military personnel and smoke generating equipment used for the testing of military equipment by the Department of Defense.
- (xxvi) Agricultural sources at a stationary source that, in aggregate, produce actual emissions less than one-half of any applicable emission threshold for a major source in the District. For the purposes of determining permitting applicability, fugitive emissions, except fugitive dust emissions, are included in determining aggregate emissions. This exemption shall not apply to an agricultural source required to obtain a Title V permit pursuant to Regulation XIV (Title V Operating Permits).

- (xxvii) Fuel cells used in power and/or heat generating equipment that are certified under California Air Resources Board's Distributed Generation Program or meet the emission standards of that program.
- (xxviii) Operations that exclusively use preservative oils and compounds; lubricants, including solid film lubricants; greases or waxes.
- (xxix) Ozone generators with a generation capacity of less than 1,000 grams of ozone per hour.
- (xxx) Site assessment for soil and/or groundwater remediation projects, provided that all of the following conditions are met:
  - (A) the sole purpose of the site assessment is to determine the extent of the contamination and the VOC concentrations in the soil and/or groundwater in order to design the appropriate collection and control equipment for the remediation project; and
  - (B) the site assessment is conducted for no more than 30 cumulative days within a calendar year. A record of the number of operating days must be maintained with the equipment for the duration of the site assessment; and
  - (C) the collected soil, vapor or groundwater is routed through emission control equipment.

This exemption does not apply to any associated combustion equipment unless such equipment is also exempt pursuant to Subsection (d)(2) of this rule.

- (xxxi) Soil, sediment, air or groundwater monitoring, and installation of associated wells, performed to meet the requirements of other regulatory agencies.
- (xxxii) Any underground building ventilation system, sub-slab depressurization system, or soil/vapor intrusion mitigation associated with soil, vapor or groundwater that is not required to be remediated by any other regulatory agency.
- (xxxiii) Additive manufacturing (3-D printing) equipment.
- (xxxiv) Except as otherwise provided in Subsection (d)(16)(x), asbestos removal equipment and operations subject to 40 CFR Part 61, Subpart M National Emission Standards for Asbestos.
- (xxxv) Wet screening operations.

#### (20) REGISTERED EQUIPMENT

- (i) Any portable equipment that is registered in accordance with District Rule 12.1. This exemption does not apply to any equipment while in use for screening of soils in contaminated soil remediation projects.
  - (ii) Any emission unit registered in accordance with District Rule 12.
- (iii) Any portable equipment registered in accordance with the Statewide Portable Equipment Registration Program adopted pursuant to California Health and Safety Code Section 41750, et seq., except in circumstances specified in that program (California Code of Regulations, Title 13, §2451 and §2457).
- (e) RESERVED
- (f) RESERVED
- (g) TEST METHODS

The following test methods will be used for compliance verification purposes.

- (1) The VOC content of coating and adhesive materials containing more than 50 grams of VOC per liter shall be determined by the Environmental Protection Agency (EPA) Reference Method 24 (40 CFR Part 60, Appendix A, Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings), September 1995, or by the South Coast Air Quality Management District (SCAQMD) Method 304-91 (Determination of Volatile Organic Compounds in Various Materials), February 1996.
- (2) The VOC content of surface preparation or cleaning materials containing 50 grams of VOC per liter or less, subject to the requirements of Subsection (d)(16)(i) and (ix), shall be determined by SCAQMD Method 313-91 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), February 1997, or by SCAQMD Method 308-91 (Quantitation of Compounds by Gas Chromatography), February 1993.
- (3) The initial boiling point of materials subject to this rule shall be determined in accordance with ASTM Standard Test Method D1078-11 (Standard Test Method for Distillation Range of Volatile Organic Liquids), or its most current version.
- (4) Calculation of total VOC vapor pressure for materials subject to this rule shall be conducted in accordance with the District's "SD 1, Procedures for Estimating the Vapor Pressure of VOC Mixtures," June 2004. If the vapor pressure of the liquid mixture, as calculated by this procedure, exceeds the limits specified, the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-10 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), or its most current version.

- (5) Reid Vapor Pressure pursuant to Subsections (c)(32) and (d)(17) of this rule shall be measured in accordance with ASTM Standard Test Method D323-08(2014) (Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)), or its most current version.
- (6) Concentration of halogenated compounds in water pursuant to Subsection (d)(18)(iii) shall be measured in accordance with EPA Publication SW-846 Test Method 8021B (Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and Electrolytic Conductivity Detectors), July 2014.

#### (h) COMPLIANCE SCHEDULE

Any person operating existing equipment previously exempt from Rule 10 permit requirements pursuant to the version of Rule 11 existing prior to (date of adoption), and that is no longer exempt from Rule 10 permit requirements pursuant to this rule, shall submit an application for a permit to operate such equipment by (one year from date of adoption).

2. Proposed amended Rule 66.1 is to read as follows:

# RULE 66.1 MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE ORGANIC COMPOUNDS (Adopted 2/24/10, Rev. Adopted (date of adoption))

#### (a) APPLICABILITY

- (1) This rule is applicable to all surface coating, solvent cleaning or other operations or processes that may result in emissions of VOCs and are not subject to or exempt from, the following rules:
  - 67.0.1 Architectural Coatings;
  - 67.2 Dry Cleaning Equipment Using Petroleum Based Solvents;
  - 67.3 Metal Parts and Products Coating Operations;
  - 67.4 Metal Container, Metal Closure and Metal Coil Coating Operations:
  - 67.5 Paper, Film and Fabric Coating Operations;
  - 67.6.1 Cold Solvent Cleaning and Stripping Operations;
  - 67.6.2 Vapor Degreasing Operations;
  - 67.9 Aerospace Coating Operations;
  - 67.10 Kelp Processing and Bio-Polymer Manufacturing Operations;
  - 67.11 Wood Products Coating Operations;
  - 67.12.1 Polyester Resin Operations;
  - 67.15 Pharmaceutical and Cosmetic Manufacturing Operations;
  - 67.16 Graphic Arts Operations;
  - 67.18 Marine Coating Operations;
  - 67.19 Coatings and Printing Inks Manufacturing Operations;
  - 67.20.1 Motor Vehicle and Mobile Equipment Coating Operations;
  - 67.21 Adhesive Materials Application Operations;

- 67.24 Bakery Ovens;
- 61.1 through 61.8 Vapor Recovery Rules;
- 68 through 69.4.1 Rules Regulating Combustion Sources.
- (2) Section (g) of this rule is applicable to any manufacturer, seller or supplier of any coating, coating component, solvent cleaning material, or any other VOC containing material that is used in an operation that may be subject to this rule.

#### (b) EXEMPTIONS

- (1) This rule shall not apply to the following:
- (i) Surface coatings, surface preparation or solvent cleaning materials applied using hand-held non-refillable aerosol spray containers.
- (ii) Any surface coating operation where 20 gallons or less of surface coatings are applied per consecutive 12-month period. To claim applicability of this exemption monthly coating usage records shall be maintained on site for three years and made available to the District upon request.
- (iii) Any surface coating or other VOC emitting operation where the total VOC emissions, excluding emissions from cleaning or surface preparation materials, are 150 lbs or less per consecutive 12-month period. To claim applicability of this exemption all records necessary to calculate VOC emissions shall be maintained on site for three years and made available to the District upon request.
  - (iv) The use of pesticides, including insecticides, rodenticides or herbicides.
- (v) Research and development operations or testing for quality control or quality assurance purposes.
- (vi) Operations involved in the manufacture of biotechnology pharmaceutical and bio-agricultural products that are exempt from the District permit to operate requirements by Rule 11, Section (d).
- (vii) Laboratory operations located at secondary schools, colleges, or universities and used exclusively for instruction.
  - (viii) Touch-up operations.
    - (ix) Stripping of cured inks, coatings and adhesives.
    - (x) Digital printing operations.
  - (xi) Any solvent cleaning, including wipe cleaning, or surface preparation of electrical or electronic components, medical devices, laser optics or precision optics components.

- (xii) Surface preparation or solvent cleaning, including wipe cleaning, for quality control or quality assurance purposes.
- (xiii) Surface preparation or solvent cleaning, including wipe cleaning, for routine janitorial maintenance, including graffiti removal.
- (ix) Any solvent cleaning, including wipe cleaning, performed in conjunction with welding of 5XXX series aluminum structures for Navy ships and in accordance with quality assurance standards for such structures.
- (2) Subsection (d)(2) and Section (f) shall not apply to:
- (i) Any cleaning or surface preparation operation, including wipe cleaning, necessary to achieve the required purity of surfaces for precision welding or thermal spray operations used in the manufacture of gas turbine engines, provided that the combined total amount of such cleaning materials used for these operations at the stationary source does not exceed 50 gallons per consecutive 12 months.
- (ii) Any surface preparation or solvent cleaning, including wipe cleaning, associated with a coating operation, provided the use of such cleaning materials does not exceed 20 gallons per consecutive 12 months or the VOC emissions from such cleaning materials do not exceed 150 lbs per consecutive 12 months.
- (iii) Any surface preparation or solvent cleaning, including wipe cleaning, not associated with a coating operation, where the combined total amount of cleaning materials used at the stationary source does not exceed 550 gallons per consecutive 12 months or the total VOC emissions from all such cleaning materials used at the stationary source do not exceed 3,650 lbs per consecutive 12 months.

To claim the applicability of the exemptions in Subsections (b)(2), all records of monthly purchase or usage of cleaning materials, their VOC content, vapor pressure, or any other data necessary to calculate VOC emissions, as applicable, shall be maintained on site for three years and made available to the District upon request.

#### (c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

- (1) "Aerospace Component" means any raw material, partial or completed fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle, including mockups, test panels and prototypes, and associated electrical and electronic components.
- (2) "Air-Dried Coating" means any coating that is not heated above 90°C (194°F) for the purpose of curing or drying.

- (3) "Baked Coating" means any coating that is cured or dried in an oven where the oven air temperature exceeds 90°C (194°F).
- (4) "Biotechnology" means the use of living organisms and/or biological processes often combined with chemical processes to develop products used in a variety of fields such as medicine, agriculture, and food production. Biotechnology industry includes, but is not limited to, medicinal drug manufacturing, peptide synthesis and DNA synthesis.
- (5) "Coating" means a material which can be applied as a thin layer to a substrate, and which either dries or cures to form a continuous solid film or impregnates a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, lacquers, and stains but exclude adhesives.
- (6) "Digital Printing Operation" means an operation that uses a printing device guided by a computer-driven machine to transfer an electronic image to a substrate through the use of inks, toners, or other graphic materials. Digital printing operations also include associated surface preparation, solvent cleaning, and the cleaning of application equipment.
- (7) "Dip Coat" means a coating application method accomplished by dipping an object into the coating material.
- (8) "Electrical Components" means internal components such as wires, windings, stators, rotors, magnets, contacts, relays, energizers, and connections in an apparatus that generate or transmit electrical energy including, but not limited to, generators, transformers, and electric motors.
- (9) "Electronic Components" means components or assemblies of components including, but not limited to, circuit card assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the cabinet in which the components are to be housed.
- (10) "Electrostatic Spray" means a coating application method accomplished by charging atomized paint particles for deposition by electrostatic attraction.
  - (11) "Exempt Compound" means the same as defined in Rule 2.
- (12) "Existing Operation or Process" means a surface coating operation or other process emitting VOCs for which a complete application for an Authority to Construct in San Diego County was submitted before (date of adoption). Wipe cleaning operations that are exempt from permit requirements per Rule 11 before (date of adoption), are considered existing operations.
- (13) "Flow Coat" means a coating application method accomplished by flowing a stream of coating over an object.

- (14) "Hand Application Method" means a coating application method accomplished by applying a coating by manually held, non-mechanically operated equipment. Such equipment includes, but is not limited to, paintbrushes, hand rollers, rags and sponges.
- (15) "High-Volume Low-Pressure (HVLP) Spray" means a coating application method which uses pressurized air at a permanent pressure between 0.1 and 10.0 psig, not to exceed 10.0 psig, measured at the air cap of the coating application system.
- (16) "Low-Solids Coating" means a coating containing one pound of solids or less per gallon of material, as supplied.
- (17) "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 disease or other conditions or in the cure, mitigation, treatment, or prevention of disease, or is intended to affect the structure or any function of the body. For the purposes of Subsection (d)(2) of this rule, a medical device also includes any associated manufacturing or assembly apparatus (e.g., molds, medical device parts, or sub-components).
- (18) "New Operation or Process" means a surface coating operation or other process emitting VOCs for which a complete application for an Authority to Construct in San Diego County was submitted on or after (date of adoption).
- (19) "Organic Solvent" means any substance containing an organic compound or combination of organic compounds which is liquid at atmospheric pressure and ambient temperature and which is used as a reactant, diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or for other similar purposes.
- (20) "Operation" means any process that includes one or more pieces of equipment linked by the process flow and resulting in a product that cannot be made if any piece of equipment is removed or not functioning.
- (21) "Precision Optics Components" means the components used to create high resolution images in optical devices.
- (22) "Research and Development Operation" means a small scale operation for the purpose of creating new or improved processes or products, that is conducted by technically trained personnel under the supervision of a research director, and may not be used to manufacture products or byproducts for sale or exchange for commercial profit, other than the first-article deliverable product.
- (23) "Roll Coat" means a coating application method accomplished by rolling a coating onto a flat surface using a roll applicator.
  - (24) "Solvent" means any organic solvent.

- (25) "Source" means any article, machine, equipment, contrivance, operation or a group of such articles, machines, equipment, contrivances or operations that emits or may emit volatile organic compounds.
- (26) "Solvent Cleaning" means the removal of uncured adhesives, inks, coatings, and other contaminants such as dirt, soil, and grease from parts, products, tools, machinery, equipment or general work area. For the purposes of this rule, solvent cleaning does not include the cleaning of soiled textile materials or the use of solvent for regeneration.
- (27) "Surface Preparation" means the cleaning of surfaces by utilizing cleaning materials containing VOCs prior to coating, further treatment, sale or intended use.
- (28) "Surface Coating" or "Surface Coating Operation" means all steps involved in the application, drying and curing of coatings.
- (29) "Touch-up Operation" means the portion of a surface coating operation which is incidental to the main coating process but necessary to cover minor imperfections or minor mechanical damage incurred prior to intended use.
  - (30) "Volatile Organic Compound (VOC)" means the same as defined in Rule 2.
- (31) "VOC Content per Volume of Coatings, Less Water and Exempt Compounds" means the weight of VOC per combined volume of VOC and coating solids and is calculated by the equation provided in Rule 2.
- (32) "VOC Content per Volume of Cleaning Material or Low-Solids Coating" means the weight of VOC per volume of cleaning material or low-solids coating and is calculated by the equation provided in Rule 2.
- (33) "Wipe Cleaning" means a method of surface preparation or solvent cleaning that is not conducted in a container but performed by physically rubbing the surface with a material such as a rag, paper, sponge or cotton swab moistened with a cleaning material.

#### (d) STANDARDS

(1) Surface Coating and Other Operations

A person shall not conduct any surface coating or other operation, excluding surface preparation and solvent cleaning operations that may result in emissions of volatile organic compounds unless one of the following requirements is satisfied:

- (i) VOC emissions from such operation are less than 5 tons per calendar year, excluding emissions from cleaning operations; or
- (ii) VOC emissions are reduced by air pollution control equipment in compliance with all the applicable requirements of Section (e); or

- (iii) a surface coating operation is conducted by using air-dried coatings with a VOC content not higher than 420 grams/liter (3.5 lbs/gal) of coating, less water and exempt compounds, as applied, or by using baked coatings with a VOC content not higher than 360 grams/liter (3.0 lbs/gal) of coating, less water and exempt compounds, as applied.
- (2) Surface Preparation and Solvent Cleaning Operations

A person shall not conduct a surface preparation or solvent cleaning operation, including wipe cleaning but excluding cleaning of coating application equipment, unless:

- (i) the total VOC vapor pressure of cleaning material is 8 mm Hg at 20°C (68°F) or less, or
- (ii) for Aerospace Components, not associated with a surface coating operation, 45 mm Hg at 20°C (68°F) or less; or
- (iii) the VOC content of cleaning material complies with the following limits expressed as either grams of VOC per liter of material (g/L) or pounds of VOC per gallon of material (lb/gal), as used:

CATEGORY	VOC LIMITS	
	g/L	lb/gal
General	50	0.42
Aerospace Components	200	1.7
Ultra-High Purity Chemical Manufacturing	840	7.0

- (3) Application Equipment for Surface Coating Operations.
  - (i) Coating Application Methods.

No surface coatings shall be applied unless one of the following application methods is used:

- (A) Hand application method, or
- (B) Dip coat, or
- (C) Roll coat, or
- (D) Flow coat, or
- (E) Electrostatic spray, or
- (F) High-volume low-pressure (HVLP) spray. Facilities using HVLP spray shall have available on site pressure gauges in proper operating

conditions to measure air pressure at the air cup, or have manufacturer's information regarding the correlation between the air cap pressure and the handle inlet pressure, or

- G) Other coating application methods that are demonstrated to have a transfer efficiency equal at a minimum to one of the above application methods, and which are used in such a manner that the parameters under which they were tested are permanent features of the method. Such coating application methods shall be approved in writing by the Air Pollution Control Officer prior to use.
- (ii) Cleaning of Coating Application Equipment

A person shall not use VOC containing materials for the cleaning of coating application equipment used in operations subject to this rule unless:

- (A) The cleaning material contains 50 grams or less of VOC per liter of material; or
- (B) The cleaning material is flushed or rinsed through the application equipment in a contained manner that will minimize evaporation into the atmosphere; or
- (C) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or its parts and provided that the cleaned equipment or its parts are drained to the container until dripping ceases; or
- (D) A system is used that totally encloses the component parts being cleaned during the washing, rinsing, and draining processes.

# (e) CONTROL EQUIPMENT

- (1) In lieu of complying with the provisions of Section (d) of this rule, an owner/operator may use an air pollution control system which:
  - (i) Has been installed in accordance with an Authority to Construct; and
  - (ii) Has a combined emissions capture and control device efficiency of at least 85% by weight.
- (2) A person electing to use control equipment pursuant to Subsection (e)(1) shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance plan for the proposed emission control device and emission collection system and receive approval prior to operation of the control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. Such plan shall:

- (i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(ii), such as temperature, pressure and/or flow rate; and
- (ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed record keeping practices regarding the key system operating parameters.
- (3) Upon approval by the Air Pollution Control Officer, a person subject to the requirements of Section (e) shall implement the Operation and Maintenance plan and shall comply thereafter with the provisions of the approved plan.

#### (f) RECORD KEEPING REQUIREMENTS

- (1) Any person conducting operations subject to this rule shall maintain a current list of each coating, solvent, or other VOC containing material in use, which provides the VOC content and all other data necessary to evaluate compliance, including but not limited to:
  - (i) Manufacturer name and identification for each material containing VOCs; and
  - (ii) For coatings, other than low-solid coatings, the VOC content expressed in grams per liter (lbs/gal), less water and exempt compounds, as applied and mix ratio of components, if applicable; and
    - (iii) Actual oven drying temperature, if applicable; and
  - (iv) For surface preparation and cleaning materials or for low-solid coatings, the VOC content expressed in grams per liter (lbs/gal) of cleaning material or low-solids coating as used, and density and mix ratio of components, if applicable; and
  - (v) For other materials containing VOCs, other than surface coatings, surface preparation or cleaning materials, the VOC concentration per weight or volume of material.
  - (2) In addition, any person conducting operations subject to this rule shall:
    - (i) Maintain monthly records of the amount of each coating used; and
  - (ii) Maintain monthly inventory, purchasing or dispensing records for each surface preparation and cleaning material or other VOC containing materials used.
- (3) In addition, any person using control equipment pursuant to Section (e) of this rule shall maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan pursuant to Subsection (e)(2). Such records shall be

sufficient to document continuous compliance with Subsection (e)(1)(ii) during periods of emission producing activities.

(4) All records shall be retained onsite for at least three years and made available to the District upon request.

#### (g) MANUFACTURER AND SUPPLIER INFORMATION

Any person, who manufactures, sells, offers for sale, or supplies to users in San Diego County any coating, coating component, solvent cleaning material, or any other VOC containing material that is used in an operation that may be subject to this rule shall provide the following information to customers:

- (1) The manufacturer's name and identification of each coating or coating component, surface preparation material, equipment cleaning material or any other material containing VOCs; and
- (2) The VOC content of coatings, as supplied, expressed in grams per liter or pounds per gallon, less water and exempt compounds; and
- (3) The VOC content of low-solid coatings, as supplied, surface preparation or solvent cleaning materials or any other materials containing VOCs in grams per liter or pounds per gallon; and
- (4) Any other necessary information enabling a user to comply with the requirements of Section (d) of this rule.

#### (h) TEST METHODS

When more than one test method or set of test methods are specified in this Section, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

- (1) The VOC content of coatings containing more than 50 grams of VOC per liter of material shall be determined by the Environmental Protection Agency (EPA) Reference Method 24 (40 CFR Part 60, Appendix A, Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings), September 1995, or by the South Coast Air Quality Management District (SCAQMD) Method 304-91 (Determination of Volatile Organic Compounds in Various Materials), February 1996.
- (2) The VOC content of solvents or coatings containing 50 grams of VOC per liter of material or less shall be determined by the SCAQMD Method 313-91 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), February 1997, SCAQMD Method 308-91 (Quantitation of Compounds by Gas Chromatography), February 1993.

- (3) The content of methyl acetate, acetone and parachlorobenzotrifluoride shall be determined in accordance with the ASTM Test Method D6133-02 (2014) (Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate or t-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph), or its most current version.
- (4) Measurements of exempt compound content, except for those determined in accordance with Subsection (g)(3), shall be conducted in accordance with the SCAQMD Test Method 303-91 (Determination of Exempt Compounds), August 1996.
- (5) Calculation of total VOC vapor pressure for materials subject to Subsection (d)(2) of this rule shall be conducted in accordance with the District's "Procedures for Estimating the Vapor Pressure of VOC Mixtures", dated June 2004. If the vapor pressure of the liquid mixture, as calculated by this procedure, exceeds the limits specified in Subsection (d)(2), the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-10 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), or its most current version.
- (6) Measurements of transfer efficiency pursuant to Subsection (d)(3)(i)(G) of this rule shall be conducted in accordance with the SCAQMD "Spray Equipment Transfer Efficiency Test Procedure for Equipment User," May 1989. The equivalency of coating application equipment pursuant to Subsection (d)(3)(i)(G) shall be determined by the SCAQMD "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns," September 2002.
- (7) The overall control efficiency of air pollution control equipment operated pursuant to Subsection (e)(1)(ii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Test Methods 25A and/or 18 (40 CFR Part 60, Appendix A), both dated September 1996, and in accordance with a protocol approved by the Air Pollution Control Officer.
- (8) Capture efficiency of an emission collection system pursuant to Subsection (e)(1)(ii) shall be determined according to EPA Test Method 204 and 204A through 204F (40 CFR Part 51, Appendix M), as applicable, dated June 1997, and technical document, "Guidelines for Determining Capture Efficiency," dated January 1995. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as approved by the Air Pollution Control Officer may be used as indicators of the performance of the emission control system.
- (9) Other test methods which are determined to be equivalent to the test methods specified in this rule and approved, in writing, by the Air Pollution Control Officer, California Air Resources Board, and EPA may be used in place of the test methods specified in this rule.

#### (i) COMPLIANCE SCHEDULE

- (1) All new operations or processes subject to this rule shall comply with all applicable requirements upon initial startup.
- (2) All existing operations or processes subject to this rule shall comply with all applicable requirements no later than (one year after date of adoption).
- (3) The owner or operator of an existing operation that chooses to comply with the rule by installing air pollution control equipment pursuant to Section (e) of this rule shall:
  - (i) By (6 months after date of adoption), submit to the Air Pollution Control Officer an application for an Authority to Construct and a Permit to Operate an air pollution control system as specified in Section (e).
  - (ii) By (18 months after date of adoption), comply with all applicable rule requirements.

IT IS FURTHER RESOLVED AND ORDERED that proposed amendments to Rule 11 of Regulation II and Rule 66.1 of Regulation IV shall take effect on May 11, 2016.

APPROVED AS TO FORM AND LEGALITY COUNTY COUNSEL

BY: Paula Forbis

SENIOR DEPUTY

The foregoing Resolution was passed and adopted by the Air Pollution Control District, County of San Diego, State of California, on this 11<sup>th</sup> day of May, 2016, by the following vote:

AYES:

Cox, Jacob, D. Roberts, R. Roberts, Horn

STATE OF CALIFORNIA) County of San Diego)<sup>SS</sup>

I hereby certify that the foregoing is a full, true and correct copy of the Original Resolution entered in the Minutes of the San Diego County Air Pollution Control Board.

DAVID HALL

Clerk of the Air Pollution Control Board

Elizabeth Miller, Deputy

STEELS OF SUPERIOR OF SUPERIOR

Resolution No. 16-046

Meeting Date: 05/11/16 (AP1)

# AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO

# PROPOSED AMENDMENTS TO RULE 11 – EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS

#### WORKSHOP REPORT

A workshop notice on the proposed amendments to Rule 11 – Exemptions from Rule 10 Permit Requirements, was mailed to all Permit and Registration Certificate holders in San Diego County. Notices were also mailed to all economic development corporations and chambers of commerce in San Diego County, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and other interested parties.

The workshop was held on June 9, 2014, and was attended by 60 people. Oral and written comments were received before, during, and after the workshop. The comments and Air Pollution Control District (District) responses are as follows:

### 1. WORKSHOP COMMENT

The proposed definition in Subsection (c)(6) for brake horsepower rating specifies that if the engine nameplate is not available, supporting documentation establishing the maximum continuous brake horsepower output rating will be accepted. It should be clarified that in order to obtain this exemption, the District must approve the supporting documentation submitted.

# **DISTRICT RESPONSE**

The District agrees and is proposing to revise Subsection (c)(6) to state that the District must approve the supporting documentation establishing the maximum continuous brake horsepower output rating in order for the exemption to apply.

#### 2. WORKSHOP COMMENT

The definition in Subsection (c)(11) for first-article deliverable product states that it shall not exceed one unit of each product per customer. In the ultra-high purity chemical products industry, a company engaged in Research and Development (R&D) may need to provide more than one unit of a product in order for the customer to obtain statistically significant data required to make a decision on the approval of a new product. The District should revise this definition to allow for more than one unit as a first-article deliverable product.

#### **DISTRICT RESPONSE**

The District agrees. The District acknowledges that some industries involved in R&D may need to provide more than one unit sample to the customer in the development of a product. The District has added proposed language specifying that the first-article deliverable shall not exceed

one unit of product unless necessary in order for the customer to obtain statistically significant data required to make a decision on the approval of a new product.

# 3. WORKSHOP COMMENT

The proposed definition in Subsection (c)(23) for preservative oils and compounds states that these materials may be applied to cables and exterior surfaces to prevent corrosion and/or provide lubrication. Preservative oils are also used onboard ships for interior voids and tanks that cannot be preserved with a coating. The District should consider replacing the existing definition with the one in Rule 67.3 - Metal Parts and Products Coating Operations. This definition will relate to a broader range of applications and still meet the intent of the Rule 11 exemption.

# **DISTRICT RESPONSE**

The District agrees. The proposed definition of "Preservative Oils and Compounds" has been replaced as suggested.

#### 4. WORKSHOP COMMENT

The proposed definition in Subsection (c)(25) for Research and Development was changed from defining R&D "equipment" to defining R&D "operations." The proposed changes could be confusing to existing R&D facilities and may have unintended consequences. It is recommended that the original language of this definition be maintained.

#### **DISTRICT RESPONSE**

The District agrees. The proposed changes have been deleted.

#### 5. WORKSHOP COMMENT

The exemption for auxiliary sweeper engine brake horsepower (bhp) in amended Subsection (d)(1)(ii) is proposed to be reduced from 200 bhp or less to less than 50 bhp. These auxiliary sweeper engines are subject to the ARB Truck and Bus Regulation, and should not be regulated by the District.

#### **DISTRICT RESPONSE**

The District agrees. The proposed changes have been deleted.

Subsection (d)(2)(v) exempts certain air heaters installed in conjunction with combustor testing in gas turbine test cells. This exemption should be expanded to include the associated flares. The flares are installed as a safety precaution to divert mixed gas from the engines and ensure there are no liquid droplets in the lines prior to testing. The flares are also used to vent any unburned fuel from the turbine test cells in the event of an unplanned engine shutdown. Emissions from these flares have been estimated to be less than 10 pounds per year of  $NO_x$ .

#### **DISTRICT RESPONSE**

The District disagrees. It has been determined that these flares are an integral part of a permitted operation and as such cannot be exempt and must be included in the engine test cell Permit to Operate. The emissions must also be included with the facility wide emissions for the purposes of New Source Review and Rule 1200 (if applicable).

# 7. WORKSHOP COMMENT

Please clarify why existing Subsection (d)(2)(vii), exemption for portable pile drivers and construction cranes, is being proposed for deletion.

#### **DISTRICT RESPONSE**

Existing Subsection (d)(2)(vii) has been in Rule 11 for more than 22 years. ARB has since developed regulations for these engines and the District is proposing to regulate these engines as any other engine on a construction site.

#### 8. WORKSHOP COMMENT

Subsection (d)(2)(xiv) exempts portable internal combustion engines or gas turbine engines used exclusively in conjunction with military tactical support equipment. At times, these engines are sent to a contractor for re-work, i.e., to overhaul or make modifications per military contract. These engines would then undergo intermittent performance testing not to exceed 20 hours a year per engine. Would the re-work performed on these engines be exempt under this Subsection?

#### **DISTRICT RESPONSE**

Yes, engines used exclusively in conjunction with military tactical support equipment, and any associated re-work performed on those engines, would be exempt under Subsection (d)(2)(xiv).

Amended Subsection (d)(4)(vi) exempts operations that make biotechnology products and devices, or agricultural products for Federal Food and Drug Administration (FDA) clinical trials, provided the VOC emissions do not exceed 2,000 pounds per year. The FDA considers operations that develop clinical trial materials to be R&D. In addition, the South Coast Air Quality Management District (SCAQMD) also considers these operations to be R&D and exempt from permit requirements, without any emissions limitations or recordkeeping requirements. This amendment puts biotechnology companies within the District's jurisdiction at a competitive disadvantage to companies in other jurisdictions. The District should consider removing Subsection (d)(4)(vi) in its entirety, or at a minimum, that this subsection be returned to the language as it currently exists.

# **DISTRICT RESPONSE**

The District agrees. The proposed amendments to Subsection (d)(4)(vi) have been deleted. It should be clarified that records (e.g., purchase records) will still need to be maintained to substantiate the exemption.

# 10. WORKSHOP COMMENT

Subsection (d)(5)(ii) for like-kind replacement requires facilities to submit to the District an application for permit revision prior to replacing any equipment. This puts a burden on large facilities that do frequent routine maintenance and replacement. The District should add language to exempt such replacements.

#### **DISTRICT RESPONSE**

The District agrees that facilities making like-kind replacements in some cases should not be required to submit applications for permit revision each and every time a replacement is made. If the like-kind replacement is not listed on the equipment description of the Permit to Operate, then an application is not required. Facilities should contact the District's Compliance Division if there are any doubts about whether or not a particular replacement requires a permit application to be submitted. The District will be working with industry to develop a guidance document for like-kind replacements.

#### 11. WORKSHOP COMMENT

Subsection (d)(7)(iv) exempts welding equipment. The District should consider adding laser welding to this exemption. Laser welding is a welding technique used to join multiple pieces of metal through the use of a laser.

The District agrees and is proposing to revise Subsection (d)(7)(iv) to include laser welding.

#### 12. WORKSHOP COMMENT

Subsection (d)(9)(ii) exempts abrasive blasting cabinets that are vented through a control device into the building where such cabinets are located. The District should also exempt those cabinets that are vented to a dust collector control device located outside of the building.

# **DISTRICT RESPONSE**

The District disagrees. Requiring a Permit to Operate for dust collector control devices not vented into a building will help ensure that the control device is in proper working order at all times.

#### 13. WORKSHOP COMMENT

The proposed deletion of Subsection (d)(10)(v) would require all tub grinders and trommel screens to obtain a Permit to Operate. The District should consider not requiring permits for this previously exempt equipment until more emission and cost information data is obtained.

#### **DISTRICT RESPONSE**

Tub grinders and trommel screens are a source of PM emissions and depending on the material being processed can violate the visible emissions standards of District Rule 50 - Visible Emissions. The District is proposing to amended Subsection (d)(10)(v) to exempt the processing of green material, which is less prone to visible emissions and has added the definition for "green material" to Section (c) – Definitions. It should be noted that exempt equipment must still comply with all applicable District rules and regulations.

# 14. WORKSHOP COMMENT

Subsection (d)(10)(viii) exempts equipment used for machining of fiberglass parts as long as the equipment is vented through a control device into the building where such equipment is located. The District should also exempt equipment that is vented to a dust collector control device located outside of the building.

The District disagrees. Requiring a Permit to Operate for dust collector control devices not vented into a building will help ensure that the control device is in proper working order at all times.

#### 15. WORKSHOP COMMENT

Subsection (d)(10)(viii) exempts equipment used for machining of fiberglass parts as long as the equipment is vented through a control device into the building where such equipment is located. Calcium silicate is used in high temperature insulation and is machined in the same equipment as the fiberglass parts. The District should consider adding the machining of calcium silicate to this exemption.

# **DISTRICT RESPONSE**

The District agrees and is proposing to amend Subsection (d)(10)(viii) as suggested. It should be noted that the calcium silicate machined should not contain any crystalline silica, a very potent carcinogen.

# 16. WORKSHOP COMMENT

Subsection (d)(12)(iii) exempts coffee roasting equipment with a manufacturer's rating of 15 pounds per hour or less. To be more consistent with the coffee roasting industry, the District should replace the manufacturer's rating (in pounds per hour) with a maximum roasting capacity (in pounds and kilograms).

#### **DISTRICT RESPONSE**

The District agrees and is proposing to replace the manufacturer's rating of 15 pounds per hour or less with its equivalent maximum roasting capacity of 11 pounds (5 kg) or less.

#### 17. WORKSHOP COMMENT

Subsection (d)(12)(iv) exempts bakery ovens where the combined rated heat input of all bakery ovens is less than 2 million BTU per hour. This exemption should be clarified to state that the 2 million BTU per hour limit does not include ovens used exclusively to bake non-yeast leaven products. These ovens are already exempt under (d)(12)(v).

# **DISTRICT RESPONSE**

The District agrees and is proposing to amend Subsection (d)(12)(iv) as suggested.

Subsection (d)(12)(vii) exempts equipment used to brew beer at breweries that produce less than one million gallons of beer per year. This exemption has been in Rule 11 for over 17 years and it is outdated. The annual beer production limit should be raised to exempt breweries emitting less than 5 pounds of VOC per day. Production limits should also be expressed in barrels per year, the industry standard.

#### **DISTRICT RESPONSE**

The District agrees and is proposing to increase the production limit in Subsection (d)(12)(vii) from one million gallons to 100,000 barrels (3.1 million gallons) of beer per year.

# 19. WORKSHOP COMMENT

Subsection (d)(12)(vii) exempts equipment used to brew beer at breweries that produce less than one million gallons of beer per year. Brewery equipment must be cleaned on a regular basis to remove certain organic and mineral deposits and to assure sterilization. The materials used to clean and sterilize have a VOC content of less than 25 grams per liter and emissions from these operations are negligible. The District should explicitly exempt cleaning operations associated with brewing equipment.

#### **DISTRICT RESPONSE**

The District agrees and is proposing to increase the production limit in Subsection (d)(12)(vii) from one million gallons to 100,000 barrels (3.1 million gallons) of beer per year and include the associated equipment cleaning in the exemption.

#### 20. WORKSHOP COMMENT

The District should consider adding an exemption to Subsection (d)(12) for equipment used to ferment honey to produce mead, and for equipment used to press and/or ferment apples to produce hard cider. These operations have very low emissions.

### **DISTRICT RESPONSE**

The District is proposing to add an exemption to Subsection (d)(19)(xix) for low emitting units. This proposed exemption will apply to equipment or operations that have uncontrolled emissions of 2 pounds or less per day of any criteria pollutant. The equipment described will be exempt under this new proposed exemption.

The preamble to Subsection (d)(15) defines the word "Operation." This definition is not consistent with the definition of "process line" that has historically been used to define an operation. This new definition might work for small sources but will not work for larger facilities or military facilities. The District should reconsider this definition.

#### **DISTRICT RESPONSE**

The District agrees. The District has deleted the proposed preamble containing the definition of "Operation." It is very difficult to define "Operation" so that it applies to all facilities and all processes in the county. The District will continue to apply the definition of a process line on a case by case basis.

# 22. WORKSHOP COMMENT

The District proposed to amend Subsection (d)(15)(ii) to clarify that this exemption did not apply to the application of rubberized asphalt. It should be further clarified that the exemption does not apply to the equipment used in the application of the rubberized asphalt oil or binder. Will the District now be requiring a Permit to Operate for these operations?

#### **DISTRICT RESPONSE**

The District will not require rubberized asphalt oil or binder application equipment to obtain a Permit to Operate. The proposed language was only to clarify that the rubberized asphalt oil or binder is not considered an adhesive. This equipment is subject to District Rule 50 - Visible Emissions and Rule 51 - Nuisance. To avoid confusion, the District has deleted the proposed language in Subsection (d)(15)(ii) and instead has proposed to amend Subsection (a)(3) to state that a Permit to Operate may be required if any equipment, operation, or process is unable to comply with Rule 50 or Rule 51.

#### 23. WORKSHOP COMMENT

The District should add an exemption to Subsection (d)(15) for coating operations located at schools and used exclusively for theatrical productions. The usage of coatings and VOC emissions are negligible.

#### **DISTRICT RESPONSE**

The District agrees and is proposing to add Subsection (d)(15)(ix) as suggested exempting coating operations for theatrical purposes.

It is unclear that proposed amended Subsection (d)(16)(i) applies to both cold solvent cleaning operations subject to Rule 67.6.1, and vapor degreasing operations subject to Rule 67.6.2. The District should amend the exemption to clarify this.

# **DISTRICT RESPONSE**

The District agrees and is proposing to amend Subsection (d)(16)(i) as recommended.

#### 25. WORKSHOP COMMENT

The District should consider adding to Subsection (d)(16) the exemptions for solvent cleaning that are specified in Rule 66.1 Subsection (b)(2). In addition, the District should add a general exemption for cleaning materials with a VOC content of 50 grams per liter or less. Cleaning operations using these low VOC materials have been demonstrated to have negligible emissions and permits should not be required.

#### **DISTRICT RESPONSE**

The District agrees and is proposing to add to Subsection (d)(16)(ix) the exemptions for solvent cleaning operations that are specified in Rule 66.1. In addition, the District is proposing to include a general exemption for the use of cleaning materials with a VOC content of 25 grams per liter or less, not associated with a permitted operation. Permitted operations will have to maintain usage records of all such cleaning materials and count them towards any Permit to Operate emission limits.

#### 26. WORKSHOP COMMENT

Proposed Subsections (d)(16)(ix) and (d)(16)(x) were added to replace the existing exemption for solvent usage in wipe cleaning operations of 1,500 gallons/year or 5 tons/year of VOC emissions. These two new subsections came from Rule 66.1 and are very restrictive, especially for those solvent wipe cleaning operations that are not subject to Rule 66.1. These two subsections should be deleted and the original usage and emission exemption limits should be reinstated.

#### **DISTRICT RESPONSE**

The District agrees and is proposing to delete Subsections (d)(16)(ix) and (d)(16)(x). Instead, the District will propose a new exemption, Subsection (d)(16)(ix)(E)(2), for wipe cleaning operations with either a purchase limit of 550 gallons of cleaning materials or a VOC emission limit for such materials of 3,650 pounds per calendar year. The limits are the equivalent of 10 pounds per day of VOC emissions.

The purpose of Subsection (d)(17)(iii) is to ensure that only liquid fuel transfer operations require vapor recovery equipment. The problem is the exemption draws a false dichotomy by suggesting all organic liquids that are not fuels are solvents. "Organic solvent" has a specific definition in Rule 11 that does not include reagents. The District should replace the word "solvents" with "liquids" in this exemption. That would best convey the intent of the exemption.

#### **DISTRICT RESPONSE**

The District disagrees. Tank transfers and operations involving reagents (i.e., materials used for chemical reactions) should not be exempt from permit requirements because they could have the potential of emitting significant amount of VOCs and/or toxic air contaminants. The definition of "organic solvent" found in Subsection (c)(20) has been amended to clarify that reagents are not considered organic solvents.

#### 28. WORKSHOP COMMENT

Proposed Subsection (d)(18)(i) has been amended to remove the exemption for non-immersion dry cleaning equipment. The dry cleaning industry has been working with ARB over the last several years to allow the use of non-immersion dry cleaning equipment as an alternative to using perchloroethylene as a cleaning solvent. The District should continue to exempt this type of non-immersion equipment.

# **DISTRICT RESPONSE**

The District agrees and is proposing to maintain the exemption for non-immersion dry cleaning equipment as long as only water or exempt compounds are used as the cleaning solvents and the VOC content of detergents and additives used does not exceed 50 grams per liter.

# 29. WORKSHOP COMMENT

Subsection (d)(19)(xi) exempts pharmaceutical, cosmetic, or biotechnology product manufacturing operations that emit less than an average of 15 pounds of VOCs per operating day. The proposed changes could be confusing to existing biotechnology facilities and may have unintended consequences. It is recommended that the original language of this exemption be maintained.

#### **DISTRICT RESPONSE**

The District agrees. The existing language in Subsection (d)(19)(xi) has been restored as suggested.

The District should consider adding a generic exemption for low-emitting sources similar to that found in other air districts in California. Currently, to obtain an exemption for an emission unit or operation that is not included in a specific Rule 11 category, the facility must file an application for a Certificate of Exemption (COE). This can be a relatively resource-intensive process. Allowing the facility to maintain documentation on these low-emitting sources, would save both the facility and District time and resources.

#### **DISTRICT RESPONSE**

The District agrees. Proposed Subsection (d)(19)(xix) is being amended to exempt equipment or an operation that has an uncontrolled emission rate of 2 pounds or less per day of each criteria pollutant, or 75 pounds or less per year of each criteria pollutant. This exemption is being proposed to replace the existing COE process. A facility claiming an exemption for any low-emitting unit must maintain records to substantiate the exemption. A facility may be required to obtain a Permit to Operate if the equipment or operation emits toxic air contaminants. All existing COEs will be honored by the District.

# 31. WORKSHOP COMMENT

Existing Subsection (d)(19)(xxi) exempts both industrial and municipal wastewater treatment facilities. In the proposed amended rule this exemption would only apply to municipal wastewater treatment facilities. As a result, all industrial wastewater treatment facilities will now require a permit to operate. It is not clear if that was the District's intent. The proposed Rule 11 should retain the permit exemption for industrial wastewater treatment facilities.

#### **DISTRICT RESPONSE**

The District agrees. Proposed Subsection (d)(19)(xxii) will exempt industrial wastewater treatment that does not use processes designed to remove or destroy VOCs. Alternatively, if these processes are used, their total VOC emissions must be less than an average of 5 pounds per day from all such treatment at the stationary source. The District has also added a new proposed definition to Section (c) for "Industrial Wastewater Treatment" to clarify this exemption.

#### 32. WORKSHOP COMMENT

Proposed new Subsection (d)(19)(xxix) is for ozone generators with a generation capacity of less than 0.1 pounds of ozone per day. Since ozone reacts readily with water, the District should exempt all ozone generators, or at a minimum, those with a much higher ozone generation capacity.

The District agrees. The District proposes to exempt ozone generators with a generation capacity of less than 1,000 grams of ozone per hour. This exemption limit is the equivalent of 5 pounds per day of ozone emissions.

#### 33. WORKSHOP COMMENT

Proposed new Subsection (d)(19)(xxx) exempts site assessments for soil and/or groundwater remediation projects if various conditions are met. Does the "30 days in a calendar year" apply only for days when actual air emissions are occurring from the site assessment activities?

#### **DISTRICT RESPONSE**

Yes, the proposed "30 days in a calendar year" period is composed of only those days when actual testing is being conducted and the effluent gas stream from the sample collection site is vented to the emission control equipment.

#### 34. WORKSHOP COMMENT

The District should add a new exemption to Subsection (d)(19) for the monitoring of soil, sediment, air, or groundwater performed to meet the requirements of other regulatory agencies. The monitoring is performed several times a year and the emissions from these activities are negligible.

#### **DISTRICT RESPONSE**

The District agrees. Proposed new subsection (d)(19)(xxxi) has been added as suggested.

#### 35. WORKSHOP COMMENT

The District should add an exemption to Subsection (d)(19) for underground building ventilation and sub-slab depressurization systems associated with soil vapor and/or groundwater that are not required to be remediated by other regulatory agencies. These operations are not considered remediation and should not be required to obtain a permit to operate.

# **DISTRICT RESPONSE**

The District agrees. Proposed new subsection (d)(19)(xxxii) has been added as suggested.

The District should add an exemption for additive manufacturing (3-D printing) equipment. This process creates three-dimensional objects from a 3-D model or other electronic data source primarily through additive processes in which successive layers of material are laid down under computer control. The process emits weld gases, fumes and debris on a very small scale (in the immediate area where the laser is actively working) which are typical of welding.

#### **DISTRICT RESPONSE**

The District agrees. A proposed exemption for additive manufacturing (3-D printing) equipment has been added to Subsection (d)(19)(xxxiii) and a proposed definition for "Additive Manufacturing" has been added to Section (c) - Definitions. Emissions from additive manufacturing appear to be negligible based on information available to the District at this time. It should be noted that equipment exempt from permit requirements must still comply with all applicable District rules and regulations.

#### 37. ARB AND EPA COMMENTS

There were no official comments from ARB or EPA.

AO:jlm 03/18/15

#### AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO

# DRAFT PROPOSED AMENDMENTS TO RULE 11 – EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS

#### WORKSHOP REPORT

A workshop notice on the revised draft amendments to Rule 11 – Exemptions from Rule 10 Permit Requirements, was mailed to all Permit and Registration Certificate holders in San Diego County. Notices were also mailed to all economic development corporations and chambers of commerce in San Diego County, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and other interested parties.

An initial workshop was held on June 9, 2014. Oral and written comments on the revised draft proposal to Rule 11 were received before, during, and after the workshop. A workshop report was issued on March 18, 2015, which addressed comments received prior to that point.

A second workshop to discuss revised draft amendments to Rule 11 was held on June 19, 2015, and was attended by 35 people. Oral and written comments on the revised draft proposal were received before, during, and after the workshop. The comments and Air Pollution Control District (District) responses are as follows:

#### 1. WORKSHOP COMMENT

The District should consider including a definition for "Operation" in Section (c) – Definitions, to help the regulated community apply Rule 11 appropriately.

### **DISTRICT RESPONSE**

The District had proposed a definition for "Operation" and presented it during the previous Rule 11 workshop held on June 9, 2014. Industry representatives asked the District to reconsider that definition and it was subsequently deleted. It is very difficult to define "Operation" so that it applies to each of the thousands of facilities and processes in the county. The District will continue to apply the Rule 2 definition of "Process Line" on a case-by-case basis.

#### 2. WORKSHOP COMMENT

The District should change the proposed definition found in Subsection (c)(5) for "Biotechnology" to "Life Sciences" to better define that industry and make it consistent with California codes. The life sciences industry uses the North American classification system.

The District disagrees. There are a number of facilities in San Diego County that are not considered "Biotechnology" but would meet the definition of "Life Sciences". These facilities would be negatively impacted by changing the definition of "Biotechnology."

# 3. WORKSHOP COMMENT

Subsection (d)(2)(ix) exempts ovens having an internal volume of 27 cubic feet or less. Would this exemption apply to an oven that runs on natural gas or to one that runs on electricity? What if the oven, in theory, was being run on electricity but the electricity is being provided by an onlocation power source that is being run on fuel?

# **DISTRICT RESPONSE**

The exemption refers to ovens that run on both natural gas and electricity as long as the oven has an internal volume of 27 cubic feet or less. If the oven runs on electricity provided by an onlocation power source, then the power source (engine or generator) would be subject to permitting requirements if it has a brake horsepower rating of 50 or greater.

# 4. WORKSHOP COMMENT

The preamble of Subsection (d)(5) identifies certain equipment replacements that would require an application for permit revision to be submitted to the District prior to such replacement. Among these are "rim seal replacements for bulk gasoline floating roof tanks subject to the Best Available Control Technology (BACT) requirements of Rule 61.1." The District should consider allowing all rim seal replacements to be exempt from the requirement to submit an application.

#### **DISTRICT RESPONSE**

The District disagrees. Rule 61.1 (Receiving and Storing Volatile Organic Compounds (VOCs) at Plants and Bulk Terminals) requires that rim seals meet BACT requirements at the time of replacement. Requiring an application for permit revision ensures evaluation by the District and a finding that the rim seal replacement meets the most current BACT requirements.

#### 5. WRITTEN COMMENT

The District should substitute in Subsections (d)(5)(i) and (d)(5)(ii) the term "emissions unit" for undefined terms "article, machine, equipment, or other contrivance" that already appear verbatim within the defined term "emission unit" as defined in Rule 2.

The District disagrees. Subsection (d)(5) outlines exemptions from the requirements of Rule 10 – Permits Required, Section (a) – Authority to Construct. The language in Rule 11, Subsection (d)(5), and in Rule 10, Subsection (a), is consistent and changing it may cause confusion for the regulated community.

#### 6. WRITTEN COMMENT

In the previous Rule 11 Workshop Report (dated 3/18/15), District Response to Workshop Comment #10 regarding Subsection (d)(5)(ii) – like-kind replacements, the District clarified that "if the like-kind replacement is not listed on the equipment description of the Permit to Operate, then an application is not required." The District should provide clarity by adding specific language to Subsection (d)(5) to remove any doubt and alleviate the burden to both the regulated community and the District associated with case-by-case requests for guidance on whether a particular component or part replacement is exempt.

#### **DISTRICT RESPONSE**

The District disagrees and further clarifies herein that the permit description is only the first step in determining whether a particular like-kind replacement requires an application to be submitted. The Air Pollution Control Officer must also make the determination that the replacement is identical in function, similar in design, that the actual air contaminant emissions are the same in nature, and that the replacement has a capacity, production rate, and actual air contaminant emissions that are equal to or less than those of the currently permitted equipment. It should also be noted that Subsections (d)(2) through (d)(19), as specified in Rule 11 Subsection (a)(4), do not apply to any equipment, operation, or process that emits more than 100 pounds per day of any criteria pollutant. Thus, replacement equipment with emissions greater than 100 pounds per day of any criteria pollutant would not be exempt from Rule 10 requirements, regardless of whether it met the requirements of Subsection (d)(5).

#### 7. WRITTEN COMMENT

The proposed amendments to Subsection (d)(9)(iv) for abrasive blasting equipment now exempt "abrasive blasting pots". Deck blasters with abrasive hoppers that hold less than 100 lbs. are currently exempt from permit requirements. These deck blasters are not pots. Is the District's intention to now require permits for this type of equipment?

#### **DISTRICT RESPONSE**

It is not the District's intent to require permits for the equipment described. Proposed language was added to Subsection (d)(9)(iv) to exempt "abrasive blasting equipment or pots" and further clarify that the exemption does not apply to abrasive blasting cabinets.

Subsection (d)(10)(v) exempts tub grinders and trommel screens used for processing green material. If a tub grinder and trommel screen were used to process soil instead of green waste, would it still be exempt?

# **DISTRICT RESPONSE**

Tub grinders and trommel screens are usually found at landfills where the green material being processed may contain a small amount of soil. In such cases, tub grinders and trommel screens are normally exempt from permit requirements. However, depending on the material being processed and the nature and extent of resulting emissions, operation of tub grinders and trommel screens could result in a violation of the visible emissions standards of District Rule 50 – Visible Emissions or the nuisance prohibition of Rule 51 – Nuisance, in which case a permit may be conditionally required pursuant to proposed Subsection (a)(3). Additionally, if a tub grinder or trommel screen were used to process only soil, a permit to operate would be required.

#### 9. WORKSHOP COMMENT

Subsection (d)(11) lists exemptions for various printing and reproduction equipment and operations. Would this subsection apply to 3-D printing?

# **DISTRICT RESPONSE**

No. Subsection (d)(11) applies to graphic art operations and digital printing. Technically, 3-D printing is not "printing" in the traditional sense; it is a type of additive manufacturing process. A proposed exemption for 3-D printing was added in Subsection (d)(19)(xxxiii).

#### 10. WORKSHOP COMMENT

Proposed Subsection (d)(16)(ix)(B) exempts solvent preparation or solvent cleaning using non-refillable handheld aerosol spray containers. Was the District's intent to exempt all non-refillable handheld aerosol spray containers?

### **DISTRICT RESPONSE**

It was not the District's intent to exempt the use of all non-refillable handheld aerosol spray containers. Some District rules exempt these types of spray containers, while other District rules do not. During the permit application process, the entire operation is evaluated under New Source Review and Toxic New Source Review and depending on overall usage and emissions, a facility may be required to track or limit its aerosol usage.

Proposed Subsection (d)(16)(ix)(E)(2) exempts surface preparation or solvent cleaning not associated with a permitted operation provided certain conditions are met. One of the conditions is that the total purchase of solvents for such cleaning operations does not exceed 550 gallons per calendar year. A facility may purchase solvent in bulk at the end of the calendar year but not use it until sometime the following year. The District should allow for either actual usage or purchasing records.

#### **DISTRICT RESPONSE**

The District agrees and has revised proposed Subsection (d)(16)(ix)(E)(2) to allow the 550 gallon limit and the yearly VOC emissions limit to be calculated either through purchase or usage records per consecutive 12-months.

#### 12. WORKSHOP COMMENT

Subsection (d)(17)(i) exempts stationary equipment used exclusively to store and/or transfer liquid organic compounds that are not volatile organic liquids. If the transfer includes an in-line filtration for quality control, would this disallow the exemption?

#### **DISTRICT RESPONSE**

No. Using in-line filtration for quality control during the transfer or storage process would not disallow the exemption.

#### 13. WORKSHOP COMMENT

Subsection (d)(19)(xi) exempts pharmaceutical and biotechnology manufacturing operations with average uncontrolled VOC emissions of less than 15 pounds per operating day. Does this exemption apply to pilot plants? In addition, the District should consider adding language to clarify that this exemption applies to commercial operations.

#### **DISTRICT RESPONSE**

Pharmaceutical or biotechnology pilot plant operations are considered "Research and Development" as long as they meet the definition in Subsection (c)(25) for "Research and Development (R&D) Equipment." If the pilot plant operations do not meet this definition, then all non-R&D operations at a facility will be exempt from permit requirements under Subsection (d)(19)(xi) if the combined uncontrolled emissions for these non-R&D operations are less than 15 pounds per operating day. However, if uncontrolled VOC emissions are 15 pounds or greater, then all the non-R&D operations at a facility would be required to obtain a Permit to Operate and would be subject to Rule 67.15 – Pharmaceutical and Cosmetic Manufacturing Operations. The

District considers operations either R&D or manufacturing, so no additional language is necessary.

#### 14. WORKSHOP COMMENT

Proposed amended Subsection (d)(19)(xxi) for wastewater treatment facilities now applies only to municipal wastewater treatment facilities. A proposed new exemption was added as Subsection (d)(19)(xxii) for industrial wastewater treatment. Please explain the reason for these amendments.

# **DISTRICT RESPONSE**

Proposed language was added to Subsection (d)(19)(xxi) to clarify that the exemption applied only to municipal wastewater treatment facilities with a design throughput capacity of less than one million gallons of wastewater per day. Proposed new Subsection (d)(19)(xxii) was added to exempt industrial wastewater treatment facilities that do not use processes designed to remove or destroy VOCs, regardless of wastewater throughput. Alternatively, if these processes are used, the exemption applies if the total uncontrolled VOC emissions are an average of 5 pounds per day or less from all such treatment at the stationary source, regardless of wastewater throughput.

#### 15. WRITTEN COMMENT

Subsection (d)(19)(xxviii) would exempt operations that exclusively use preservative oils and compounds, lubricants, greases, or waxes. The District should clarify that solid film lubricants are also exempt under this subsection.

#### **DISTRICT RESPONSE**

The District agrees and has added language to clarify that solid film lubricants are also exempt under proposed Subsection (d)(19)(xxviii).

# 16. WRITTEN COMMENT

Subsection (d)(19)(xxix) would exempt ozone generators with a generation capacity of less than 1,000 grams of ozone per hour. Instead of this proposal, the District should consider exempting "Equipment used exclusively to generate ozone and associated ozone destruction equipment for the treatment of cooling tower water or for water or wastewater treatment or reuse processes". A similar exemption can be found in South Coast AQMD Rule 219 Subsection (d)(4).

The District disagrees. To minimize emissions and to ensure the ozone generation equipment is being operated and maintained properly, the District will require a Permit to Operate from those generators with a capacity of 1,000 grams of ozone per hour and greater.

# 17. WORKSHOP COMMENT

The District should provide a clear definition for "Marine Environment" as it applies to Rule 67.18 – Marine Coating Operations. Having this definition in either Rule 2 or Rule 67.18 would help facilities that apply coatings to piping that is located on piers and exposed to marine environment. Since there is no clear definition, piping located on piers currently falls under Rule 67.0 – Architectural Coatings. Using a marine coating for this type of application would allow the coating to last longer, saving money and time.

# **DISTRICT RESPONSE**

Rule 67.18 – Marine Coating Operations is not currently being revised. When the District proposes revising Rule 67.18, the District will work with the regulated community to develop a clear definition for "Marine Environment."

#### 18. WORKSHOP COMMENT

Will the District distribute a notice as to when this rule will be going before the Air Pollution Control Board for approval?

#### **DISTRICT RESPONSE**

The District will send out a notification to workshop participants with the date that Rule 11 is scheduled to go before the Air Pollution Control Board for approval. At this time, this rule will tentatively go before the Air Pollution Control Board in the first quarter of 2016, with an effective date of one year after approval.

# 19. EPA COMMENT

EPA recommends that Subsection (d)(19)(xxvi), for agricultural sources, be revised to apply to 50% of the major source threshold for all pollutants for which there is a National Ambient Air Quality Standard (NAAQS) (i.e., VOC,  $NO_x$ , CO,  $PM_{10}$ ,  $PM_{2.5}$ , Pb, and  $SO_x$ ). Additionally, the exemption should reference specifically the major stationary source definition as written in Rule 20.1 – New Source Review – General Provisions. Subsection (d)(19)(xxvi) should also make clear that the exemption does not apply to agricultural sources required to obtain a Title V permit.

The District agrees. The recommended language has been added to proposed Subsection (d)(19)(xxvi). Proposed amended Subsection (c)(17), definition of "Major Stationary Source", now references Rule 20.1.

# 20. ARB COMMENT

ARB has no official comments at this time.

AMO:jlm 10/07/15

#### AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO

# DRAFT PROPOSED AMENDMENTS TO RULE 66.1 – MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATIVE ORGANIC COMPOUNDS

#### WORKSHOP REPORT

A workshop notice on the draft proposed amendments to Rule 66.1 – Miscellaneous Surface Coating Operations and Other Processes Emitting Volatile Organic Compounds, was mailed to all Permit and Registration Certificate holders in San Diego County. Notices were also mailed to all economic development corporations and chambers of commerce in San Diego County, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and other interested parties.

The workshop was held on June 19, 2015, and was attended by 5 people. Oral and written comments were received before, during, and after the workshop. A summary of the comments received, and the Air Pollution Control District's (District) responses to these comments, are as follows:

# 1. WORKSHOP COMMENT

The District should maintain the existing exemption in Rule 66.1, Subsection (b)(1)(xi), for the solvent cleaning of laser optics and eliminate the proposed volatile organic compound (VOC) content limit, record keeping, and other requirements for such operations. The optic lenses used in laser operations are cleaned approximately once every week or two. The cleaning process consists of dropping two or three drops of isopropyl alcohol (IPA) from a dropper onto a lens tissue and wiping the lens. On a monthly basis, these operations use no more than one small dropper bottle of IPA. The burden of keeping records and the other proposed limits for this insignificant usage does not justify any real air quality benefit.

# **DISTRICT RESPONSE**

The District agrees and has modified the draft proposal to retain this exemption in Rule 66.1. The exemption is consistent with analogous rules in other California air districts and the EPA's Control Technique Guidelines for Industrial Cleaning Solvents, dated September 2006.

#### 2. WORKSHOP COMMENT

The current proposed draft of Rule 11 – Exemptions from Permit Requirements, exempts cleaning materials having a VOC content of 25 g/L, or less, if the use of such materials is not associated with a permitted operation. How does that proposed exemption affect the 550 gallons or less of cleaning material per consecutive 12 months usage exemption proposed in Rule 66.1, Subsection (b)(2)? How does the use of non-refillable handheld aerosol spray containers affect this 550-gallon exemption?

The use of cleaning materials having a VOC content of 25 g/L, or less, does not count towards the 550-gallon threshold when determining if a permit is required for general facility-wide wipe cleaning operations. However, once the 550-gallon threshold has been met and a permit is required, <u>all</u> emissions associated with a wipe cleaning operation, including emissions from the use of these low-VOC cleaning materials, will be counted towards the New Source Review (NSR) and Toxic NSR thresholds.

The use of non-refillable handheld aerosol spray containers is exempt under both Rule 11 and Rule 66.1, and does not count towards the 550-gallon threshold. However, if a Permit to Operate is required for an operation that is using aerosol spray containers, the District may consider these materials if there is an extremely high use of the aerosol spray containers.

# 3. WORKSHOP COMMENT

The proposed amendments to Subsection (b)(2) exempt facility-wide solvent cleaning and surface preparation operations from complying with the solvent cleaning material VOC content limits in Subsection (d)(2), if the combined cleaning material usage is 550 gallons or less. Does cleaning material usage associated with Research and Development (R&D) operations, for quality assurance or quality control (QA/QC) purposes, or from the use of acetone count toward the 550-gallon threshold?

#### **DISTRICT RESPONSE**

No, cleaning material usage associated with any operation exempt from Rule 66.1 under Subsection (b)(1) is not counted toward the 550-gallon threshold. These exempt operations include, but are not limited to, R&D and cleaning performed for QA/QC purposes. Similarly, the use of acetone is also not counted toward the 550-gallon threshold because acetone is an exempt compound and not considered a VOC.

# 4. WORKSHOP COMMENT

The District should allow facilities to maintain records for either the actual usage or purchase of cleaning materials in order to claim an exemption under Subsection (b)(2).

#### **DISTRICT RESPONSE**

The District agrees and usage or purchase records are already allowed. The last paragraph of existing Subsection (b)(2) allows facilities to maintain records of monthly purchases or usage of cleaning materials to claim any of the exemptions listed in that subsection.

The District should clarify in the definition of "medical device" that for the purposes of solvent cleaning or surface preparation, a medical device also includes any associated manufacturing or assembly apparatus. The associated apparatus come into contact with medical devices and must also achieve the same level of cleanliness. This cannot be achieved with a cleaning material that has 50 g/L VOC content. Also, is Rule 66.1 on a review cycle (e.g., every three or five years)?

#### **DISTRICT RESPONSE**

The District agrees that associated manufacturing or assembly apparatus should also be allowed to be cleaned with the same cleaning material as the medical device. To clarify this point, proposed language has been added to the definition of "medical device" found in Subsection (c)(17). Regardless, please note that the draft proposal has been modified to retain the exemption for medical devices. This exemption is consistent with analogous rules in other California air districts and the EPA's Control Technique Guidelines for Industrial Cleaning Solvents, dated September 2006.

Rule 66.1 is not subject to a specific review cycle. The current need for amendments to Rule 66.1 came about due to proposed revisions to the wipe cleaning permitting exemption thresholds in Rule 11 – Exemptions from Permit Requirements.

Finally, it should also be noted that if a permit is required for the manufacturing of the medical device, <u>all</u> emissions associated with the manufacturing operation, including emissions from the use of cleaning materials, will be counted towards the New Source Review (NSR) and Toxic NSR thresholds.

#### 6. WORKSHOP COMMENT

The District should clarify that solvent cleaning operations do not include the use of solvent to regenerate silica gel used in chemical purification processes.

# **DISTRICT RESPONSE**

The District agrees and has added proposed language to the definition of "solvent cleaning" found in Subsection (c)(26) to clarify this point. Nevertheless, the regeneration process emits VOCs and would be subject to Subsection (d)(1)(i) or (ii) – Surface Coating and Other Operations.

#### 7. WORKSHOP COMMENT

Is the laundering of VOC-laden materials such as rag, clothes, etc., considered solvent cleaning?

No, this type of operation is not considered a solvent cleaning operation. Proposed language has been added to the definition of "solvent cleaning" (Subsection (c)(26)) to clarify this point. Nevertheless, this type of operation emits VOCs and would be subject to Subsection (d)(1)(i) or (ii) – Surface Coating and Other Operations.

#### 8. WORKSHOP COMMENT

The District should consider adding a new solvent cleaning category for "Ultra-High Purity Chemical Manufacturing" with a VOC content limit of 840 g/L to Subsection (d)(2)(ii). Stainless steel containers (usually 1.2 or 1.9 liters) are used to supply ultra-high purity specialty chemicals to the semiconductor industry. The cleaning of these containers needs to meet a certain purity that cannot be achieved using a 50 g/L solvent cleaning material.

# **DISTRICT RESPONSE**

The District agrees and has added the recommended category and VOC content limit in a proposed amendment to Subsection (d)(2)(iii).

#### 9. EPA COMMENT

The exemptions in proposed Subsection (b)(2)(iii) and (iv) have been increased from 20 to 550 gallons per calendar year and 150 to 3,650 pounds per calendar year respectively, potentially relaxing the State Implementation Plan (SIP) and increasing emissions. Please either maintain the existing, smaller thresholds, or demonstrate that such revisions are consistent with Federal Clean Air Act (CAA) restrictions on SIP relaxations in CAA Section 110(l).

#### **DISTRICT RESPONSE**

These proposed changes are consistent with CAA 110(l) requirements because they will not interfere with attainment of national ambient air quality standards or emission reduction commitments, as explained below:

(a) The District has not enforced the lower thresholds for some cleaning operations in existing Rule 66.1 because: (1) they do not align with corresponding permit exemption thresholds in existing Rule 11 (Exemptions from Permits), which are higher; and (2) the District's enforcement resources are primarily focused on operations requiring a permit.

Under existing Rule 11, permits are required for solvent cleaning operations that are not associated with other permitted operations and that have uncontrolled VOC

emissions exceeding 5 tons per calendar year or when the purchased cleaning materials exceed 1,500 gallons per calendar year. In a separate rulemaking effort, those thresholds in Rule 11 are proposed to be tightened to 3,650 pounds and 550 gallons, respectively. Similarly, the thresholds in Rule 66.1 are now proposed at these same levels to ensure the alignment of prohibitory and permitting requirements for solvent cleaning operations.

- (b) The District has never assigned or accounted for emission reductions in a SIP based on the lower thresholds that apply to unpermitted cleaning operations. When Rule 66.1 was adopted and submitted into the SIP in 2010, the District claimed emissions reductions of 9 tons of VOC per year from permitted solvent cleaning operations. Those 9 tons per year were a result of evaluating 33 operations performing solvent cleaning associated with coating operations and one operation using more than 1,500 gallons for miscellaneous wipe cleaning, not associated with a coating operation. All 33 coating operations were already using compliant cleaning materials. The 9 tons per year VOC emission reductions came from the one facility that was using cleaning materials for a unique miscellaneous wipe cleaning operation. This facility came into compliance with Rule 66.1 by switching to a low vapor pressure cleaning material. It should be noted that this facility has since ceased all wipe cleaning activities in San Diego County.
- (c) The theoretical emissions impact of this proposed revision, assuming sources were complying with the existing lower thresholds, is extremely small. The District estimates there are fewer than a dozen solvent cleaning operations that will continue to be exempt from permit requirements (per proposed revisions to Rule 11) and also exempt from Rule 66.1. The emission reductions from these miscellaneous cleaning activities would be negligible because compliant cleaning materials are readily available and in use throughout the County (acetone or cleaning materials with a VOC content of less than 25 g/L). It would not be cost-effective to require a permit for these miscellaneous facility-wide wipe cleaning activities with negligible emission reductions.
- (d) The existing exemption thresholds were established in error. As discussed in items (a) and (b) above, Rule 66.1 was not intended to apply to activities that are exempt from permit requirements per Rule 11. The thresholds should have been aligned, as now proposed.
- Even with the proposed amendments, Rule 66.1 is more stringent than EPA's Control Technique Guidelines (CTG) for Industrial Cleaning Solvents (September 2006) because it applies to more sources. Rule 66.1 applies to miscellaneous VOC emitting operations (including solvent cleaning operations) that are not subject to any specific prohibitory rule. By contrast, the CTG applies to "industries that have to use organic solvent for cleaning unit operations such as mixing vessels (tanks), spray booths, and parts cleaners, where a facility emits at least 6.8 kg/day (15 lb/day) of VOC..." These types of cleaning operations, which make up the majority of the solvent

cleaning performed in the County, are already regulated under the District's source-specific prohibitory rules. Rule 66.1 addresses the additional, miscellaneous solvent cleaning operations and thus is more stringent than the CTG.

It should be further noted that any new permitting application for an operation that involves miscellaneous solvent cleaning with usage below the 550 gallon per year exemption level in Rule 66.1, would still be subject to NSR review. The 550 gallons per year solvent usage is equivalent to 10 pounds per day of VOC emissions (worst-case) which is the threshold for NSR, therefore the entire operation (including emissions from solvent cleaning use) would undergo a BACT determination and be subject to the VOC standards in the rule as appropriate.

#### 10. EPA COMMENT

The exemptions in current proposed Subsection (b)(2)(iii) and (iv) have been increased from 20 to 550 gallons per calendar year and 150 to 3,650 pounds per calendar year, respectively. Both of these provisions are based on calendar year usage. Consistent with national policy, we recommend revising these to a rolling 12-month basis.

#### **DISTRICT RESPONSE**

The District agrees. The "calendar year" reference in new proposed Subsection (b)(2)(ii) and (iii) has been changed to "consecutive 12 months".

# 11. ARB COMMENT

ARB has no official comments at this time.

AMO:jlm 01/06/16

#### **CHANGE COPY**

# RULE 11. EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS

(Effective 1/1/69: Rev. Adopted & Effective 10/17/95

Rev. Adopted & Effective 7/30/96`

Rev. Adopted & Effective 5/21/97

Rev. Adopted & Effective 11/15/00

Rev. Adopted & Effective 4/25/07

Rev. Adopted 11/09/11 & Effective 05/09/12

Rev. Adopted (date of adoption)

# INDEX OF EXEMPTION CATEGORIES AS LISTED IN SECTION (d)

	PAGE
(1)	Mobile Sources
(2)	Combustion and Heat Transfer Equipment
(3)	Structures and Structural Modifications
(4)	Laboratory Equipment and Related Operations
(5)	Replacement of Equipment 10
(6)	Plant Support Equipment
(7)	Metallurgical Processing Equipment – General
(8)	Metallurgical, Glass, and Ceramic Processing Equipment – Using Furnaces, Kilns, and Ovens
(9)	Abrasive Blasting Equipment
(10)	Machining Equipment
(11)	Printing and Reproduction Equipment
(12)	Food Processing and Food Preparation Equipment
(13)	Plastics, Foam, and Rubber Processing Equipment and Operations
(14)	Mixing, Blending, and Packaging Equipment
(15)	Coating and Adhesive Application Equipment and Operations
(16)	Solvent Application Equipment and Operations
(17)	Storage and Transfer Equipment
(18)	Drycleaning, Laundry Equipment, and Fabric Related Operations
(19)	Miscellaneous Equipment and Operations
(20)	Registered Equipment

#### RULE 11. EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS

#### (a) **APPLICABILITY**

- (1) This rule is applicable to any article, machine, equipment, or other contrivance which would otherwise be subject to Rule 10.
- (2) This rule is applicable to any equipment, operation, or process that is subject to the provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, the New Source Performance Standards (NSPS), 40 CFR 60, the Air Pollution Control District (District) Regulation X Standards of Performance for New Stationary Sources and/or Regulation XI National Emission Standards for Hazardous Air Pollutants.
- (232) This rule shall not exempt equipment, operations, or processes described in Section (d) from meeting all other applicable requirements of these Rules and Regulations, and State and federal regulations, including the National Emission Standards for Hazardous Air Pollutants (NESHAP) and the New Source Performance Standards (NSPS).
- (343) This rule shall not apply to any equipment, operation, or process that violates Rule 50 or Rule 51 as determined by the Air Pollution Control Officer. When the Air Pollution Control Officer makes such a determination and written notification is given to the owner or operator, the equipment, operation, or process may thereafter be subject to Rule 10 for a specified time as determined by the Air Pollution Control Officer.—If no additional violations of Rule 51 are determined over a 2-year period, a permit may no longer be required.
- (454) This rule shall not apply to any equipment, operation, or process described in Subsections (d)(2) through (d)(19), excluding agricultural sources, that emits more than 100 lbspounds per day of any one of the following criteria air pollutants: particulate matter (PM10), oxides of nitrogen (NOx), volatile organic compound (VOC), oxides of sulfur (SOx), carbon monoxide (CO), or lead (Pb).
- (5) This rule shall not apply to any equipment, operation, or process that is subject to the provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, the New Source Performance Standards (NSPS), 40 CFR 60, and the Air Pollution Control District (District) Regulation X Standards of Performance for New Stationary Sources and/or Regulation XI National Emission Standards for Hazardous Air Pollutants.
- ( $\underline{\bullet}\underline{5}$ ) Except for equipment specified in Subsection (d)(20)(iii), Section (d) of this rule shall not apply to any new or modified equipment, operation, or process that
  - (i) emits or may emit toxic air contaminants, as defined in Rule 1200, and

(ii) has emissions of toxic air contaminants that, in the absence of any emission control device or limitation on material usage or production, may be expected to exceed any standard specified in Rule 1200 (d)(1)(i), (d)(2), or (d)(3) as determined by the Air Pollution Control Officer. This provision shall not apply to any equipment, operation, or process for which construction or modification, as applicable, commenced prior to November 15, 2000, unless such equipment, operation, or process is subsequently modified in such a manner that increases emissions of one or more toxic air contaminants.

In the event the Air Pollution Control Officer makes a preliminary determination that any standard specified in Rule 1200 (d)(1)(i), (d)(2), or (d)(3) may be exceeded, the Air Pollution Control Officer shall notify the owner or operator in writing and specify the information needed to make a final determination. If the Air Pollution Control Officer makes a final determination that emissions, in the absence of any emission control device or limitation on material usage or production, may be expected to exceed any standard specified in Rule 1200 (d)(1)(i), (d)(2), or (d)(3), the Air Pollution Control Officer shall notify the owner or operator in writing and include a statement that, as a result, Rule 11(d) does not apply and an Authority to Construct and Permit to Operate are therefore required.

#### (b) **RESERVED**

# (c) **DEFINITIONS**

For the purposes of this rule, unless otherwise noted, the following definitions shall apply:

- (1) "Abrasive Blasting Cabinet" means an enclosure used to contain abrasive media that can only be entered through ports for gloved arms and hands when abrasive blasting is conducted the same as defined in Rule 2.
- (2) "Abrasive Blasting Room or Booth" means a structure that includes abrasive blasting equipment, a dust collector and/or recycling system for recovering spent abrasive. The operator blasts from within this structure and the emissions from abrasive blasting operations are vented through a control device. The abrasive blasting room or booth definition does not apply to temporary enclosures including, but not limited to, those at shipyards or inside ships.
- (3) "Additive Manufacturing (3-D Printing)" means a process of joining materials to create objects from 3-D model data, usually layer upon layer, as opposed to subtractive manufacturing methodologies. Additive manufacturing processes include, but are not limited to, Direct Metal Laser Sintering, Selective Laser Melting, Selective Laser Sintering, and Direct Laser Melting.
- (2<u>34</u>) "Agricultural Source" means any equipment, operation, or process, or aggregation thereof, used in the production of crops, or raising of fowl or animals and located on contiguous property under common ownership or control that meets any of the

criteria identified in Section 39011.5 of California Health and Safety Code, as it exists on (date of adoption).

- (45) "Biotechnology" means the use of living organisms and/or biological processes often combined with chemical processes to develop products used in a variety of fields such as medicine, agriculture, and food production. Biotechnology industry includes, but is not limited to, medicinal drug manufacturing, peptide synthesis and DNA synthesis.
- (3<u>5</u>6) "Brake Horsepower Rating" means the maximum continuous brake horsepower output rating of the internal reciprocating combustion engine as specified by the engine manufacturer and listed on the engine nameplate, if available. or in other supporting-documentation for de-rated engines establishing the maximum continuous brake horsepower as approved by the Air Pollution Control Officer.
  - (467) "CFR" means Code of Federal Regulations.
- ( $5\underline{+8}$ ) "**Designated Workstation**" means an assigned area within the stationary source where a specified operation is conducted.
- (<u>§9</u>) "Digital Printing Operation" means an operation that uses a printing device guided by a computer-driven machine to transfer an electronic image to a substrate through the use of inks, toners, or other graphic arts materials. Digital printing operation also includes associated surface preparation, solvent cleaning, and the cleaning of application equipment.
  - (6910) "Exempt Compounds" means the same as defined in Rule 2.
- (7<u>10</u>11) **"First-Article Deliverable Product"** means the first product that is produced using research and development equipment and that is delivered to a potential intracompany or external customer for approval. First-article deliverable product shall not exceed one unit of each product per customer <u>unless necessary in order for the customer to obtain statistically significant data required to make a decision on the approval of a new product.</u>
- (12) "Green Material" means waste material that includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste. Green material does not include food material, biosolids, mixed solid waste, material processed from commingled collection, wood containing lead-based paint or wood preservative, mixed construction or mixed demolition debris.
- (8<u>1113</u>) "Hazardous Air Pollutant (HAP)" means an air contaminant identified in the Federal Clean Air Act, Title 1, Section 112 (b).
- (9<u>1214</u>) "Hot Melt Adhesive" means a thermoplastic adhesive that melts at temperatures above 180°F (82°C), does not contain organic solvents, and sets rapidly upon cooling.

- <u>wastewater treatment</u> wastewater Treatment means the treatment of spent process water prior to discharging into municipal wastewater system or disposal. Industrial wastewater treatment includes, but is not limited to, dewatering, pH adjustment, precipitation, sludge processing, and gravity separation and/or filtration of the wastewater.
- (1316) "Large Commercial Digital Printing Operation" means a commercial digital printing operation where the print capacity of any individual printer that uses solvent based inks is 1,000 ft<sup>2</sup>/hr or higher; or an operation where the print capacity of any individual printer that uses water-based or UV inks is 10,000 ft<sup>2</sup>/hr or higher.
- ( $\frac{1014}{17}$ ) "Major Stationary Source" means the same as defined in Rule 20.1.
- (111518) "Military Tactical Support Equipment" means any equipment owned by the U.S. Department of Defense or the National Guard and used in combat, combat support, combat service support, tactical or relief operations, or training for such operations.
- (121619) "Operating Day" means any calendar day during which the specified equipment is operated, or specified operations occur.
- (13<u>17</u>20) "Organic Solvent" means any substance that is liquid at standard conditions and contains an organic compound or combination of organic compounds, and that is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or for other similar purposes. For the purpose of this definition, a reagent is not considered an organic solvent.
- (14<u>1821</u>) **"Pilot Plant Facility"** means a trial assembly of small-scale reaction and processing equipment that is the intermediate stage between laboratory experiment and full-scale operation in the development of a new product and/or process.
- (<del>1519</del>22) **"Portable Emission Unit"** means the same as defined in Rule 20.1.
- (2023) "Preservative Oils and Compounds" means materials which do not contain solids, that and are applied on areas that are not intended to be painted such as cables and exterior surfaces to prevent corrosion and/or to provide lubrication.
- (162124) "Process Heater" means any combustion equipment fired with liquid and/or gaseous fuel that transfers heat from the combustion gases to water or process streams. Heaters used for swimming pools, spas, and/or therapy pools shall be considered process heaters. This definition does not include any combustion equipment where the material being heated is in direct contact with the products of combustion, such as furnaces or kilns, or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.
- (17<u>22</u>) "Research and Development Equipment <u>Operations</u>" means equipment that is used to conduct research and develop<u>operations conducted to originate</u> new or improved <u>processes and/or products</u>, where such equipment is operated<u>that are performed</u> by

- technically trained personnel under the supervision of a research director, and is <u>may</u> not <u>be</u> used in theto manufacture of products <u>or byproducts</u> for sale or exchange for commercial profit, other than the first-article deliverable product. <u>This definition does not apply to apilot plant facility.</u>
- (25) "Research and Development (R&D) Equipment" means equipment that is used to conduct research and develop new or improved processes and/or products, where such equipment is operated by technically trained personnel under the supervision of a research director, and may not be used to manufacture products or byproducts for sale or exchange for commercial profit, other than the first-article deliverable product.
- (2326) "Reclaimed Water" means wastewater that has been treated to remove solids and certain impurities to meet the standards specified in California Code of Regulations Title 22, Division 4, Chapter 3.
- (182427) "Stationary Internal Combustion Engine" means a spark or compression ignited, reciprocating internal combustion engine that is not a portable emission unit.
- (1925/28) "Stationary Source" means the same as defined in Rule 2.
- (2629) "Thermal Spraying Operation" means one or more of several processes in which metallic or nonmetallic surfacing materials are deposited in a molten or semi-molten condition on a substrate to form a coating. The surfacing material may originate in the form of powder, rod, or wire before it is heated, prior to spraying and deposition. Thermal spraying operations include: detonation gun spraying, flame spraying, high-velocity oxyfuel spraying, plasma spraying, and twin-wire electric arc spraying.
- (<del>2027</del>30) "**Toxic Air Contaminant**" means the same as defined in Rule 2.
- (212831) "Volatile Organic Compound (VOC)" means the same as defined in Rule 2.
- (222932) "Volatile Organic Liquid" means any organic liquid either having a Reid Vapor Pressure (RVP) greater than 3 pounds per square inch if the American Society for Testing Material International (ASTM) RVP test method is applicable, or having a true vapor pressure greater than 3 pounds per square inch absolute at 100°F if the ASTM RVP test is not applicable.
- (233033) "Volatile Organic Solvent" means an organic solvent with an initial boiling point of less than  $400^{\circ}F$  (204°C).
- (34) "Wet Screening Operation" means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

# (d) EQUIPMENT, OPERATIONS, OR PROCESSES NOT REQUIRING A PERMIT TO OPERATE

Except as otherwise specified in Subsections (a)(2) through (a)(5), Aany equipment, operation, or process that is listed below in Subsections (d)(1) through (d)(20), and that meets the stated exemption provision, parameter, requirement, or limitation, is exempt from the requirements of Rule 10. Such equipment, operation, or process shall not be exempt from any otherwise applicable standards in these Rules and Regulation, or applicable State or federal regulations, unless specified as exempt by that rule or regulation.

Any person claiming such an exemption shall provide documentation sufficient to substantiate the applicability of the stated exemption provision, parameter, requirement, or limitation at the request of the Air Pollution Control Officer.

#### (1) MOBILE SOURCES

- (i) Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge, that is used primarily to provide propulsion, but which may also supply heat, mechanical, hydraulic, or electrical power to that same vehicle, train, ship, boat, or barge. This exemption does not apply to equipment located onboard floating dry docks or equipment used for dredging operations.
- (ii) Railway, road, and runway sweepers used respectively for cleaning rail tracks, roadways, and runways, provided the maximum manufacturer's output rating of any auxiliary sweeper engine is <u>less than 20050200</u> brake horsepower <u>or lessorless</u>.

#### (2) COMBUSTION AND HEAT TRANSFER EQUIPMENT

(i) Any reciprocating internal combustion engine with a brake horsepower rating of less than 50.

#### (ii) RESERVED

- (iiii) Any engine mounted on, within, or incorporated into any motor vehicle, train, ship, boat, or barge, that is used exclusively to load or unload cargo. For the purposes of this exemption, cargo shall not include the removal or relocation of sand, rock, silt, soil, or other materials from dredging operations.
  - (iviii) Any gas turbine engine that has:
    - (A) an output power rating of less than 0.3 megawatt (MW), or
    - (B) a maximum gross heat input rating at International Standards Organization (ISO) Standard Day Conditions of less than 1 million British thermal units (BTU) per hour.

This exemption does not apply to any gas turbine operating on waste-derived gaseous fuel.

- $(\underbrace{viv})$  Any boiler, process heater, or steam generator with a manufacturer's maximum gross heat input rating of less than:
  - (A) 1 million BTU per hour fired with any fuel, or
  - (B) 5 million BTU per hour fired exclusively with natural gas and/or liquefied petroleum gas.

This exemption does not apply to reciprocating internal combustion or gas turbine engines.

- (viv) Air heaters with a manufacturer's maximum gross heat input rating of less than 20 million BTU per hour fired exclusively with natural gas and/or liquefied petroleum gas and installed in conjunction with combustor testing in gas turbine test cells.
- (vii) Portable pile drivers and construction cranes that are routinely dismantled and transported to non-contiguous locations for temporary use. This exemption does not apply to diesel pile driving hammers.
- (viiivi) Portable aircraft engine test stands constructed before November 4, 1976.
- (ixvii) Back-pack power blowers.
- (<u>\*viii</u>) Orchard or citrus grove heaters.
- (xiix) Any oven having an internal volume of 27 cubic feet (0.765 cubic meter) or less.
- (xiix) Curing or baking ovens in which no volatile organic solvents or materials containing volatile organic solvents are introduced.
- (xiiixi) Any oven used exclusively for the curing, softening, or annealing of plastics.
- (xivxii) Any oven that is an integral part of a process for which a Permit to Operate is not required pursuant to this rule.
- (xvxiii) Any portable internal combustion engine or gas turbine engine used exclusively in conjunction with military tactical support equipment. Such engines shall not be subject to the limitations of Subsections (a)(3) or (a)(4) of this rule. For the purposes of this subsection, portable means carried or moved from one location within a stationary source to another location within the same stationary source, or from one

stationary source to another stationary source, in the normal course of operations. Indicia of portability shall include, but are not limited to, wheels, skids, carrying handles, or a dolly, trailer, or vessel.

(xvixiv) Internal combustion or gas turbine engines used exclusively for purposes of educating students in the operation, maintenance, repair, and rebuilding of such engines provided that each engine or turbine is operated less than 20 hours per calendar year.

(xviixv) Auxiliary internal combustion reciprocating engines mounted on any authorized emergency vehicle as specified in Section 27156.3 of the California Vehicle Code.

#### (3) STRUCTURES AND STRUCTURAL MODIFICATIONS

- (i) Equipment used exclusively in support of any structure designed for and used exclusively as a dwelling for not more than four families.
- (ii) Structural modifications that cannot change the quality, nature, or quantity of air contaminant emissions.

# (4) LABORATORY <u>EQUIPMENT</u> AND <u>RELATED</u> <u>RESEARCH AND</u> <u>DEVELOPMENT (R&D)</u> <u>RELATED</u> OPERATIONS

- (i) Laboratory testing equipment, and quality control testing equipment, including associated wipe cleaning, used exclusively for chemical and physical analysis, or quality control.
- (ii) Laboratory equipment and laboratory operations conducted at secondary schools, colleges, or universities and used exclusively for instruction or research purposes.
  - (#iii) Vacuum-producing devices used in laboratory or R&D operations.
  - (iiiiv) Hoods, stacks, or ventilators <u>used in laboratory or R&D operations</u>.
- (ivv) Research and development equipment operations equipment, including associated wipe cleaning.
  - (vi) Peptide and DNA synthesis operations.
- (vii) Equipment used to manufacture Operations conducted to make Equipment used to manufacture the following products, provided that the total uncontrolled VOC emissions from all operations specified below do not exceed 2,000 pounds 5 tons per calendar year:

- (A) biotechnology pharmaceutical products for exclusive use in federal Food and Drug Administration (FDA) approved clinical trials, or
- (B) biomedical devices and diagnostic kits for exclusive use in FDA approved clinical trials and laboratory failure analysis testing, or
- (C) bioagricultural products for exclusive use in field testing required to obtain FDA, Environmental Protection Agency (EPA), United States Department of Agriculture (USDA) and/or California Environmental Protection Agency (Cal-EPA) approval\_, and provided the uncontrolled emissions of VOCs from all such operations located at the stationary source do not exceed 5 tonsper calendar year.

All data and/or records necessary to demonstrate that this exemption is applicable, the applicability of this exemption shall be maintained on-site for 2three years and made available to the District upon request.

- (vii) Laboratory equipment and laboratory operations located at secondary schools, colleges, or universities and used exclusively for instruction.
- (vii<u>i</u>) Any temporary equipment installed in a pilot plant facility, provided that the total emissions increase from all such temporary equipment does not exceed 10 pounds per day of VOCs. For the purposes of this exemption, temporary equipment means equipment located at a pilot plant facility for a period not exceeding 90 days in any consecutive 12-month period excluding construction and installation periods. It shall be the responsibility of a person claiming this exemption to maintain daily records necessary for the District to determine its applicability.

#### (5) **REPLACEMENT OF EQUIPMENT**

Subject to the limitations and requirements stated in this Subsection (d)(5), identical replacement equipment and like-kind replacement equipment as listed below are exempt from the requirements of Rule 10(a). The provisions of this Subsection (d)(5) shall not apply to replacement of equipment pursuant to other requirements of these Rules and Regulations; or replacement of equipment subject to air contaminant control standards specified for replacement equipment; or replacement of equipment in whole or part, that in sum would constitute reconstruction or modification under NSPS or District Regulation X - Standards of Performance for New Stationary Sources, or would constitute a major stationary source or replacement of any or stationary or portable compression ignition reciprocating internal combustion engine; or rim seal replacements for bulk gasoline floating roof tanks subject to the Best Available Control Technology (BACT) requirements of Rule 61.1.

(i) Identical replacement in whole or part of any article, machine, equipment or other contrivance for which a Permit to Operate has previously been granted for such equipment. Identical means the same manufacturer, model number, and type.

In order to claim the applicability of Subsection (d)(5)(i) for portable equipment (other than a diesel-fueled portable engine), written notification of the proposed equipment replacement and information identifying the manufacturer, model number, serial number, and type of the item used as a replacement, and information detailing the expected use of the equipment being replaced, must be submitted to the District prior to such replacement.

- (ii) Like-kind replacement in whole or part of any article, machine, equipment, or other contrivance where a Permit to Operate has previously been granted for such equipment, and the Air Pollution Control Officer determines that the replacement equipment meets the following requirements:
  - (A) is identical in function, and
  - (B) is similar in design, and
  - (C) the actual air contaminant emissions are the same in nature, and
  - (D) has a capacity, production rate, and actual air contaminant emissions that are equal to or less than those of the currently permitted equipment.

In order to claim the applicability of Subsection (d)(5)(ii) and prior to replacing any equipment, written notification in the form of an application for permit revision, the information required to make the determinations listed above, and the fees specified in Rule 40 must be submitted to the District.

#### (6) PLANT SUPPORT EQUIPMENT

The exemptions listed in <u>this</u> Subsection (d)(6) shall not apply to any combustion equipment associated with plant support equipment unless the combustion equipment is also exempt pursuant to Subsection (d)(2) of this rule.

- (i) Vacuum cleaning devices used exclusively for housekeeping purposes.
- (ii) Equipment used exclusively for comfort air conditioning or comfort ventilation systems, and not designed or used to remove air contaminants generated by or released from specific equipment.
- (iii) Refrigeration units except those used as, or in conjunction with, air pollution control equipment.
  - (iv) Equipment used exclusively to compress or hold dry natural gas.
- (v) Vacuum-producing devices used in connection with other equipment not requiring a Permit to Operate pursuant to this rule.

- (vi) Equipment used exclusively for space heating, other than boilers.
- (vii) Water cooling towers and water cooling ponds used for evaporative cooling of water, <u>including reclaimed water</u>, <u>utilized solely in heat transfer processes</u> but not used for evaporative cooling of:
  - (A) process water (e.g., contaminated water or industrial wastewater), or
  - (B) water from barometric jets or barometric condensers.

#### (7) METALLURGICAL PROCESSING EQUIPMENT - GENERAL

- (i) Non-automated soldering equipment, such as handheld soldering irons and guns.
- (ii) Solder-screen processes and associated soldering ovens that use a process similar to silk-screening in order to apply the solder paste.
- (iii) Each solder leveler, hydrosqueegee, wave solder machine or drag solder machine that <u>usesemits</u> less than an average of <u>105</u> pounds of <u>any material containing</u> VOCs per operating day for each calendar month. The number of operating days per calendar month, monthly purchase records, and daily or monthly records of material usage shall be maintained on-site for <u>2three</u> years and be made available to the District upon request.
- (iv) Brazing and welding equipment, including arc welding equipment<u>and</u> laser welding.
  - (v) Molds used for the casting of metals.
- (vi) Foundry sand mold forming equipment. This exemption does not apply if heat, sulfur dioxide, or VOCs are used.
- (vii) Forming equipment used exclusively for forging, rolling, or drawing of metals.
- (viii) Metal and ceramic deposition Thermal spraying operations where all the materials sprayed contain no cadmium, chromium, copper, lead, manganese or nickel, and provided the maximum spray gun capacity amount of material sprayed is less than 20 pounds per day at the stationary source. This exemption does not apply when electric arc or flame spray guns are used in these operations.
- (ix) Tumblers used for the cleaning or deburring of metal products without abrasive blasting.

- (x) Shell-core and shell-mold manufacturing machines.
- (xi) Extrusion equipment used exclusively for extruding metals or minerals. This exemption does not apply to coking extrusion equipment or processes that manufacture products containing greater than 1% asbestos fiber by weight.
- (xii) Shot peening operations where only steel shot is employed and no surface material such as scale, rust, or old paint is removed.
- (xiii) Chemical milling of titanium or niobium (columbium) and/or their alloys using nitric and/or hydrofluoric acid at milling bath temperatures below 110°F (43°C).
- (xiv) Equipment used for anodizing, plating, polishing, stripping, or etching, if the VOC content of the aqueous material does not exceed 10% by weight. This exemption does not apply to acid chemical milling, chrome plating, chromic acid anodizing, chromate conversion coating processes, or the stripping of chromium. This exemption also does not apply to copper etching or copper plating operations which use formaldehyde, ammonium hydroxide, ammonium chloride, or solutions of nitric, hydrofluoric, and/or hydrochloric acids which contain more than 17% acid concentration by weight.
- (xv) Oil quenching tanks that use less than 20 gallons per year of make-up oil. Monthly purchase records and daily or monthly usage records of all materials added must be maintained on-site to claim applicability of this exemption.
- (xvi) Salt bath quenching tanks where no chromium containing compounds are added to the tank.

# (8) METALLURGICAL, GLASS, AND CERAMIC PROCESSING EQUIPMENT - USING FURNACES, KILNS, AND OVENS

- (i) Crucible furnaces, pot furnaces, or induction furnaces, each with a maximum rated capacity of less than 450 cubic inches of any molten metal.
- (ii) Crucible furnaces, pot furnaces, or induction furnaces each with a maximum rated capacity of 2,500 cubic inches or less, or 950 pounds or less, and where
  - (A) no sweating or distilling is conducted, and
  - (B) only non-ferrous metals, except lead and yellow brass, are poured or held in a molten state.

Records of the types of all metal poured from such furnaces shall be maintained on-site for 2three years and be made available to the District upon request. This exemption does not apply if alloying elements of arsenic, beryllium, cadmium, chromium, lead, and/or nickel are utilized in such furnaces.

- (iii) Equipment used exclusively for the sintering of glass or metals (excluding lead), where no coke or limestone is used.
- (iv) Equipment used exclusively for heating metals immediately prior to forging, pressing, rolling, or drawing.
- (v) Any oven used exclusively for heat treating glass or metal if the materials are not heated to a molten state, and the oven is heated exclusively by natural gas, liquefied petroleum gas, and/or electricity.
- (vi) Atmosphere generators and vacuum producing devices used in connection with metal heat treating processes.
  - (vii) Die casting machines.
- (viii) Kilns used exclusively for firing ceramic ware, heated exclusively with natural gas, liquefied petroleum gas, and/or electricity.

#### (9) ABRASIVE BLASTING EQUIPMENT

The exemptions listed in this Subsection (d)(9) shall not apply to any combustion equipment associated with abrasive blasting equipment unless the associated combustion equipment is also exempt pursuant to Subsection (d)(2) of this rule. The exemptions listed in this Subsection (d)(9) shall not also apply to abrasive blasting operations where asbestos containing materials are being removed.

- (i) <u>Abrasive Bblasting cleaning equipment using a suspension of abrasive in</u> water.
- (ii) Abrasive blasting cabinets that are vented through a control device into the building where such cabinets are located.
- (iii) Robotically-operated enclosed abrasive blasting equipment that emits less than 5 pounds of particulate matter per day, operates at a negative pressure, and is vented through a control device into the building where it is located.
- (iv) Abrasive blasting <u>equipment or pots</u> with a manufacturer's sand capacity rating of <u>less than</u> 100 pounds <u>or less (45.4 kg)</u>, or 1 cubic foot or less. <u>This exemption does not apply to pots used in an abrasive blasting room or booth, or to abrasive blasting cabinets.</u>

#### (10) MACHINING EQUIPMENT

- (i) Equipment used for buffing, polishing, carving, cutting, deburring, drilling, machining, routing, shearing, sanding, sawing, surface grinding, or turning of: ceramic artwork, ceramic precision parts, glass, leather, metal, rubber, fiberboard, masonry, or non-fiberglass reinforced plastic. This exemption does not apply to tire buffers.
  - (ii) Wet-jet devices used to cut fiberglass reinforced plastic.
- (iii) Portable handheld equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of fiberglass reinforced plastic, when not used at a designated workstation, booth, or room.
- (iv) Equipment used for carving, cutting, drilling, surface grinding, planing, routing, sanding, sawing, shredding, or turning of wood.
- (v) Tub grinders and trommel screens used for processing wood waste. This exemption does not apply to any associated combustion equipment unless such equipment is also exempt pursuant to Subsection (d)(2) of this rule.
- (v) Tub grinders and trommel screens used for processing green material.

  This exemption does not apply to any associated combustion equipment unless such equipment is also exempt pursuant to Subsection (d)(2) of this rule.
- (vi<u>v</u>) Equipment used for the pressing or storing of sawdust, wood chips, or wood shavings.
- (vii<u>vivii</u>) Equipment used exclusively to mill or grind coatings or molding compounds where all materials introduced are in a paste form and no volatile organic solvents are used.

(viiiviiviii) Drilling machines for Equipment used for buffing, polishing, carving, cutting, deburring, drilling, machining, routing, shearing, sanding, sawing, or surface grinding of fiberglass or calcium silicate parts that are exclusively vented through anintact bag filter a control device that exhausts inside the an fully-enclosed building where such equipment is located—and provided that the amount of fiberglass collected in the bag filter is below 500 pounds per calendar year per facility. Monthly records of all fiberglass collected in the bag filter shall be maintained on-site for 2 years and made available to the District upon request.

## (11) PRINTING AND REPRODUCTION EQUIPMENT AND OPERATIONS

(i) Any graphic arts operation or group of graphic arts operations located at a stationary source, that emit less than an average of 15 pounds of VOCs per operating

day for each calendar month from all such operations. All records necessary to calculate average daily VOC emissions, such as emission factors or mix ratios, VOC content of each material used, number of operating days per month, and daily or monthly records of material usage, shall be maintained on-site for 3three years and be made available to the District upon request.

- (ii) Inkjet and laser printing equipment.
- (iii) Digital printing operations as defined in Rule 67.16(c)(4) where a the print capacity of any individual printer which uses solvent based inks is less than 1.000 ft<sup>2</sup>/hr, or an operation where a the print capacity of any individual printer which uses water\_based or UV inks is less than 10,000 ft<sup>2</sup>/hr.
- (iv) Large commercial digital printing operations, as defined in Rule 67.16 (c)(13), provided that the records specified in Rule 67.16(f)(4) for these operations are maintained.
  - (v) Ink cartridge filling, refilling, and/or refurbishing operations.

#### (12) FOOD PROCESSING AND FOOD PREPARATION EQUIPMENT

- (i) Equipment used exclusively to grind, blend, or package tea, cocoa, spices, dried flowers, or roasted coffee.
- (ii) Equipment located at eating establishments that is used for preparing food for human consumption at the same establishment. This exemption does not apply to boilers or coffee roasting equipment.
- (iii) Coffee roasting equipment with a manufacturer's rating maximum capacity of 1511 pounds per hour (5 kg) or less.
- (iv) Any bakery oven that is located at a stationary source where the combined rated heat input capacity of all bakery ovens, excluding ovens subject to Subsection (d)(12)(v) below, is less than 2 million BTU per hour.
  - (v) Any bakery oven used exclusively to bake non-yeast-leavened products.
  - (vi) Equipment used to crush and/or ferment grapes to produce wine.
- (vii) Equipment used to brew beer at breweries that produce less than <del>one million gallons</del> 100,000 barrels (3.1 million gallons) of beer per <u>calendar</u> year and associated equipment cleaning. This exemption does not apply to boilers or silos.
  - (viii) Smokehouses used for preparing food.

#### (13) PLASTICS, FOAM, AND RUBBER PROCESSING EQUIPMENT OR OPERATIONS

- (i) Extrusion equipment used exclusively for extruding rubber products or plastics where no organic additives are present.
- (ii) Equipment used for compression molding and/or injection molding of plastics.
- (iii) Mixers, roll mills, and calenders for rubber or plastics, where no material in powder form is added and no volatile organic solvents are used.
  - (iv) Equipment used exclusively for conveying and storing plastic materials.
- (v) Foam manufacturing or foam application operations that emit less than an average of 5 pounds of VOCs per operating day for each calendar month. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for 2three years and be made available to the District upon request.
- (vi) Plastics manufacturing or fabrication operations, including reinforced plastic fabrication operations using *materials such as* epoxy-*and/or polyester resins*, that emit less than an average of 5 pounds of VOCs per operating day for each calendar month. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for 2three years and be made available to the District upon request.
- (vii) Polyester resin operations using less than 20 gallons of polyester resin materials per month. Daily or monthly records of material usage shall be maintained on-site for three years and be made available to the District upon request.
  - (vii<u>i</u>) Hot wire cutting of expanded polystyrene foam.

#### (14) MIXING, BLENDING, AND PACKAGING EQUIPMENT

(i) Dry batch mixers with a rated working capacity of 0.5 cubic yards or less, where material is added in a dry form prior to the introduction of a subsequent liquid fraction or where no liquid fraction is added.

- (ii) Wet batch mixers with a rated working capacity of 1 cubic yard or less, where no volatile organic solvents are used.
- (iii) Equipment used exclusively for the manufacture of water emulsions of asphalt, greases, oils, or waxes.
  - (iv) Equipment used exclusively for the packaging of lubricants or greases.
- (v) Equipment used at ambient temperatures exclusively for mixing and blending materials to make water-based adhesives.
- (vi) Any coating and/or ink manufacturing operations located at a stationary source that emit less than an average of 15 pounds of VOCs per operating day for each calendar month from all such operations. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for 3three years and be made available to the District upon request.

#### (15) COATING AND ADHESIVE APPLICATION EQUIPMENT AND OPERATIONS

For the purposes of this Subsection (d)(15), "Operation" means the coating of an individual substrate (e.g., wood or plastic or metal, etc.) or the application of an adhesive material.

- (i) Powder coating operations where less than 0.5 gallons per day of any surface preparation or cleaning material containing VOCs are used. Monthly purchase and daily or monthly usage records of surface preparation and cleaning materials shall be maintained on-site for 3three years and made available to the District upon request. This exemption does not apply to metallizing gun operations.
- (ii) Application equipment and processes used exclusively to apply coatings and/or adhesive materials to stationary structures and/or their appurtenances at the site of installation, to portable buildings including mobile homes at the site of installation, to pavement, or to curbs. This exemption does not apply to application equipment and processes where coatings or adhesive materials are applied in off-site shops or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles. This exemption does not apply to the application of rubberized asphalt.
- (iii) Any coating or adhesive materials application operation (portable or stationary) where 20 gallons or less of liquid coatings or adhesive materials are applied per consecutive 12-month period. Monthly purchase records and daily or monthly usage records of all coatings or adhesive materials applied must be maintained on-site for 3three years to claim applicability of this exemption. The volume of materials applied using non-refillable handheld aerosol spray containers shall not be included when determining the applicability of this exemption.

- (iv) Any coating or adhesive materials application operation (portable or stationary) at a stationary source—where the uncontrolled—VOC emissions from such operation—the application of liquid coatings or adhesive materials are 150 pounds or less per consecutive 12-month period, excluding surface preparation and cleanup-solvents. All records necessary to calculate VOC emissions, such as VOC content of each coating or adhesive material applied and daily or monthly usage records of such materials must be maintained on-site for 3three years to claim applicability of this exemption. The volume or VOC content of materials applied using non-refillable handheld aerosol spray containers shall not be included when determining the applicability of this exemption.
- (v) Chromate conversion coating processes where coatings are applied exclusively by brush, or rollers, or marking pen.
- (vi) Coating operations that exclusively use preservative oils and compounds as defined in Rule 67.9, lubricants, greases, or waxes containing no volatile organic solvents.
- (vii) Coating operations that exclusively use non-refillable handheld aerosol spray containers.
- (viii) The application of coatings outside of a defined application station that are necessary to cover minor imperfections or repair minor mechanical damage incurred prior to intended use.
- (ixviii) Coating application equipmentoperations located at primary or or secondary schools or in schools of higher education and used exclusively for instruction.
- (ix) Coating operations located at schools (i.e., primary, secondary, or schools of higher education) and used exclusively for student theatrical productions or art instruction.
- $(\underline{i}x)$  Liquid surface coating operations that exclusively use hand-held brushes to apply wet fastener primer coatings from containers that are 8 ounces or less in size.
- $(x\underline{i})$  Liquid surface coating operations that exclusively use air brushes with a coating capacity of 2 ounces or less.
  - (xiii) Hot melt adhesive application equipment.
- (xiiii) The application of coatings outside of a designated workstation that is necessary for the maintenance of stationary equipment.

#### (16) SOLVENT APPLICATION EQUIPMENT AND OPERATIONS

- (i) EquipmentCold solvent cleaning or stripping operations and/or vapor degreasing operations that used-exclusively utilize for surface preparation and eleaning if the VOC content of the aqueous material water-based eleaning solvent materials with a VOC content of that does not exceed 50 grams per liter, as applied. For the purposes of this exemption, a water-based cleaning solvent is any solvent that consists only of water and VOC and does not contain exempt compounds.
  - (ii) Cold solvent cleaning dip tanks, vapor degreasers, and paint stripping tanks:
    - (A) with a liquid surface area of 1 square foot or less, or
    - (B) with a maximum capacity of 1 gallon or less.
- (iii) Cold solvent cleaning remote reservoirs with a sink cross-sectional area of 1 square foot (0.09 square meters) or less.
- (iv) Batch-type waste solvent recovery stills for on-site recovery of waste solvent with a maximum solvent usage of 350 gallons per day, provided the still is equipped with a device that shuts off the heating system if the solvent vapor condenser is not operating properly.
  - (v) Metal inspection tanks that:
    - (A) have a liquid surface area of less than 5 square feet, or
    - (B) do not use volatile organic solvents, or
  - (C) are not equipped with spray type flow devices or a means of solvent agitation.
- (vi) Metal inspection spraying operations where no materials applied contain volatile organic compounds.
  - (vii) Cold solvent degreasers used exclusively for educational purposes.
- (viii) Golf grip application stations that exclusively use liquid materials with an initial boiling point of 450°F (232°C), or greater.
- (viii) Solvent wipe cleaning operations, not associated with any permitted operation, provided the solvent is applied from a container that minimizes emissions to the air, such as but not limited to, squeeze containers with narrow tips, spray bottles, or dispensers with press down caps; and the uncontrolled VOC emissions from all such operations located at the stationary source do not exceed 5 tons per calendar year, or the total purchase of solvents for such operations does not exceed

- 1,500 gallons per calendar year. All data and/or records necessary to demonstrate that this exemption is applicable, shall be maintained on-site for 2 years and made available to the District upon request.
  - (ix) Surface preparation or solvent cleaning, including wipe cleaning:
    - (A) for quality control or quality assurance purposes, or
    - (B) using non-refillable handheld aerosol spray containers, or
    - (C) for routine janitorial maintenance, including graffiti removal or
    - (D) performed in conjunction with welding of 5XXX series aluminum structures for Navy ships and in accordance with quality assurance standards for such structures, or
      - (E) not associated with any permitted operation, provided:
        - (1) the cleaning materials have a VOC content of 25 grams per liter (0.21 lbs/gal), or less, as used, or
        - (2) the uncontrolled VOC emissions from all such cleaning operations located at the stationary source do not exceed 3,650 pounds per calendar yearconsecutive 12-months, or the total purchase or usage of solvents for such cleaning operations does not exceed 550 gallons per calendar yearconsecutive 12-months. The volume of materials applied from operations specified in Subsections (d)(16)(ix)(A) through (E)(1) above shall not be included when determining the applicability of this exemption. All data and/or records necessary to demonstrate that this exemption is applicable, shall be maintained on-site for three years and made available to the District upon request.
- (ix) Surface preparation and solvent wipe cleaning operations, not associated with any permitted operation, provided:
  - (A) the VOC content of cleaning material is 50 grams/liter (0.42 lbs/gal), or less as used, and the total usage of solvents from all such operations at the stationary source does not exceed 3,000 gallons per consecutive 12-month period, or
  - (B) the total VOC vapor pressure of cleaning material is 8 mm Hg at 20°C (68°F) or less, and the uncontrolled VOC emissions from all such operations at the stationary source do not exceed 1,300 pounds per consecutive 12-month period.

All data and/or records necessary to demonstrate the applicability of this exemption shall be maintained on-site for three years and made available to the District upon request.

- (x) Surface preparation and solvent wipe cleaning of electrical or electronic components, medical devices, laser optics or precision optics components, and operations exempt from Rule 66.1(d)(2), provided:
  - (A) such operations are not associated with any permitted operation, and
  - (B) the uncontrolled VOC emissions from all such operations at the stationary source do not exceed 2,500 pounds per consecutive 12-month period.

All data and/or records necessary to demonstrate the applicability of this exemption shall be maintained on-site for three years and made available to the District upon request.

(x\(\frac{1}{2}\)) Asbestos mastic removal operations using organic solvents provided the total VOC vapor pressure of the solvent is 0.2 mm Hg or less, at 20°C (68°F).

#### (17) STORAGE AND TRANSFER EQUIPMENT

- (i) Stationary equipment used exclusively to store and/or transfer <u>liquid</u> organic compounds that are not volatile organic liquids.
- (ii) Stationary storage tanks for volatile organic liquids with a capacity of less than 250 gallons and associated equipment used exclusively to transfer materials into such tanks.
- (iii) Equipment used exclusively to store and/or transfer organic solvents that are not used as fuels.
- (iv) Equipment used exclusively to store and/or transfer natural gas, butane, or propane when not mixed with other volatile organic liquids, other than odorants.
- (v) Equipment used exclusively to store and/or transfer fuels that are used exclusively as a source of fuel for wind machines used for agricultural purposes.
- (vi) Mobile transport, delivery, or cargo tanks on vehicles used for the delivery of volatile organic liquids. This exemption does not apply to asphalt tankers used to transport and transfer hot asphalt used for roofing applications.
- (vii) Equipment used to transfer fuel to and from amphibious ships for maintenance purposes, provided total annual transfers do not exceed 60,000 gallons per year at a stationary source.

- (viii) Equipment used exclusively to store and/or transfer liquid soaps, liquid detergents, vegetable oils, fatty acids, fatty esters, fatty alcohols, or waxes, and wax emulsions.
- (ix) Pressurized tanks used to store inorganic or halogenated organic gases and associated equipment used exclusively to transfer materials into such tanks.

#### (18) DRYCLEANING, LAUNDRY EQUIPMENT, AND FABRIC RELATED OPERATIONS

The exemptions listed in this Subsection (d)(18) shall not apply to any operation that uses perchloroethylene (perc) as a dry cleaning solvent.

- (i) Non-immersion dry cleaning equipment. <u>Dry cleaning touch upoperations using hand held spray applicators.</u>
- (i) Non-immersion dry cleaning equipment that uses water or exempt compounds as the cleaning solvent, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter.
  - (ii) Lint traps used exclusively in conjunction with dry cleaning tumblers.
- (iii) Wastewater processing units associated with dry cleaning operations using halogenated compounds, provided the concentration of halogenated compounds in the water being evaporated in the unit does not exceed 400 parts per million (by weight).
- (iv) Laundry dryers, extractors, or tumblers used for fabrics cleaned only with solutions of bleach or detergents eontaining no volatile organic solvents, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter. This exemption does not apply to equipment used for previously VOC-laden materials such as rags, cloths, etc.
- (v) Equipment used for wet cleaning (using water as a cleaning agent), washing or drying articles fabricated from cloth, fabric, or glass, where no volatile organic solvents are employed in the process and none of the articles being cleaned have residues of volatile organic solvents. Professional Industrial wet cleaning equipment that uses water or exempt compounds as the cleaning solvent, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter. This exemption does not apply to equipment cleaning VOC-laden materials such as rags, cloths, etc.
- (vi) Equipment, including dryers, used exclusively for printing, dyeing, stripping, or bleaching of textiles where no volatile organic solvents are used, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter.

- (vii) <u>Professional</u><u>Industrial</u> <u>laundering</u> <u>equipment that uses liquid carbon</u> <u>dioxide as the cleaning solvent, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter.</u>
- (viii) Any dry cleaning, laundry or fabric related cleaning operation equipment listed above in Subsections (18)(iv), (18)(v), or (18)(vi) where the uncontrolled VOC emissions from all such operations at the stationary source do not exceed which does not emit more than an average of 5 pounds of VOCs per operating day for each calendar month. All records needed to calculate average daily VOC emissions, such as emission factors, VOC content of all materials used, number of operating days per calendar month, and daily or monthly records of material usage or purchase, shall be maintained on-site for 2three years and be made available to the District upon request.

#### (19) MISCELLANEOUS EQUIPMENT AND OPERATIONS

- (i) Air pollution control equipment used exclusively to reduce
  - (A) emissions from any article, machine, equipment, process, or contrivance not required to have a Permit to Operate; or
  - (B) emissions generated during the draining and degassing of stationary floating roof gasoline storage tanks provided that a written authorization from the Air Pollution Control Officer to conduct the draining and degassing is obtained pursuant to Rule 61.1.
- (ii) Repairs or maintenance not involving structural changes to any equipment for which a Permit to Operate has been granted.
- (iii) Roofing kettles (used to heat asphalt), each with a capacity of 85 gallons or less.
- (iv) Paper shredders and disintegrators, each with a <u>maximum throughput</u> capacity <u>not to exceed of 600</u> pounds per hour <u>or less</u>, <u>either as rated by the manufacturer or as stated in writing by the manufacturer for the current configuration</u>, and the associated conveying systems and baling equipment.
  - (v) Alkaline chemical milling equipment:
    - (A) used exclusively for the cleaning of internal combustion engine parts, or
    - (B) for which construction or installation commenced prior to March 27, 1990.
  - (vi) Portable conveyors (belt or screw type) where there is no screening.

- (vii) Fire extinguishing equipment using halons.
- (viii) Equipment used exclusively for the purposes of:
  - (A) flash-over fire fighting training, or
  - (B) hand-held fire extinguisher training operations.
- (ix) Equipment used exclusively for bonding lining to brake shoes, where no volatile organic solvents are used.
- (x) Equipment used exclusively to liquefy or separate oxygen, nitrogen, or the inert gases from air.
- (xi) Any pharmaceutical, cosmetic or biotechnology manufacturing or blending operation producing or blending materials for use in cosmetic or pharmaceutical products and/or manufacturing cosmetic or pharmaceutical products by chemical processes, that emit less than an average of 15 pounds of VOCs per operating day for each calendar month from all phases of all such operations located at a single stationary source. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for 3three years and be made available to the District upon request.
- (xi) Any operation producing or blending materials for use in cosmetic, pharmaceutical or biotechnology products and/or manufacturing cosmetic, pharmaceutical or biotechnology products by chemical processes, that emit less than an average of 15 pounds of *uncontrolled* VOCs per operating day for each calendar month from all phases of all such operations located at a single stationary source. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.
  - (xii) Equipment used for hydraulic or hydrostatic testing.
- (xiii) Ethylene oxide sterilizing processes that use less than 5 pounds of ethylene oxide per calendar year. Purchase records and records of monthly ethylene oxide usage shall be maintained on-site for 2three years and be made available to the District upon request.
  - (xiv) Sterilizers or autoclaves using only steam or hydrogen peroxide.
  - (xv) Nail salon operations.

- (xvi) Equipment used exclusively for the melting or applying wax where no volatile organic solvents are used.
  - (xvii) Aerosol can puncturing or crushing operations that use:
    - (A) a closed loop recovery system that emits no air contaminants, or
    - (B) a recovery system that vents all emissions through a properly operated and maintained carbon canister, provided not more than 500 cans are processed through the equipment per day. Throughput records of the number of cans processed shall be maintained on-site for 2three years and be made available to the District upon request.
- (xviii) Any article, machine, equipment, or contrivance that emits airborne radioactive materials in concentrations above the natural radioactive background concentration in air in the form of dusts, fumes, smoke, mists, liquids, vapors, or gases. This exemption does not apply to incinerators or boilers.

Atomic energy development and radiation protection are controlled by the State of California to the extent it has jurisdiction thereof, in accordance with the advice and recommendations made to the Governor by the Advisory Council on atomic energy development and radiation protection. Such development and protection are fully regulated by the Nuclear Regulatory Commission to the extent that such authority has not been delegated to the states.

- (xix) Any other piece of equipment or operation that the Air Pollution Control Officer determines to be a negligible source of air contaminants. This provision applies only to equipment or operations that have obtained a Certificate of Exemption in writing from the District. The Certificate of Exemption document must be maintained with the exempt equipment or be made readily available at all times and applies only to the specific equipment or operation described in the Certificate of Exemption document.
- (xix) Any other piece of equipment or operation not covered by other subsections that has an uncontrolled emission rate of each criteria pollutant of 2 pounds or less per day, or of 75 pounds or less per year. All data and/or records necessary to demonstrate that this exemption is applicable, shall be maintained on-site for three years and made available to the District upon request.
- (xx) Equipment approved for use by the EPA for recovering and/or recycling chlorofluorocarbons (CFCs) or alternative fluorocarbons.
- (xxi) <u>Municipal Wwastewater treatment facilities, municipal</u> water reclamation facilities, and <u>municipal</u> wastewater pump stations each with a design throughput capacity of less than one million gallons of wastewater per day.

#### (xxii) Industrial wastewater treatment that:

- (A) does not use processes designed to remove or destroy VOCs, or
- (B) if such processes are used, the uncontrolled VOC emissions do not exceed an average of 5 pounds per day from all such treatment at the stationary source.
- (xxii<u>i</u>) Sludge processing operations at <u>municipal</u> wastewater treatment facilities each with a design throughput capacity of less than one million gallons of wastewater per day.
- (xxiiixxiv) Smoke generating equipment in training sessions conducted by government agencies for the purpose of certifying persons to evaluate visible emissions for compliance with State law or District Rules and Regulations.
- (xxivxxy) Smoke generating equipment used for training military personnel and smoke generating equipment used for the testing of military equipment by the Department of Defense.
  - (xxvi) Any agricultural source where the aggregate actual emissions, excluding fugitive PM10 emissions, from all stationary emission units are:
    - (A) less than 50% of the federal major source threshold for NOx and VOC: and
    - (B) less than do not exceed 25<u>50</u> tons per year for CO, PM10, PM2.5, Pb or SOx; of each criteria pollutant and
    - (<u>C</u>) do not exceed<u>less than</u> 5 tons per year of any single HAP or 12.5 tons per year of combined HAPs.
  - (xxvi) Agricultural sources at a stationary source that, in aggregate, produce actual emissions less than one-half of any applicable emission threshold for a major source in the District. For the purposes of determining permitting applicability, fugitive emissions, except fugitive dust emissions, are included in determining aggregate emissions. This exemption shall not apply to an agricultural source required to obtain a Title V permit pursuant to Regulation XIV (Title V Operating Permits).
  - (xxvii) Fuel cells used in power and/or heat generating equipment that are certified under California Air Resources Board's Distributed Generation Program or meet the emission standards of that program.
  - (xxviii) Operations that exclusively use preservative oils and compounds,; lubricants, *including solid film lubricants*; greases, or waxes.

- (xxix) Ozone generators with a generation capacity of less than 1,000 grams of ozone per hour.
  - (A) with a generation capacity of less than 0.1 pounds of grams of ozone per day, or
  - (B) with a generation capacity of less than 0.5 pounds of ozone per day, that capture and vent ozone emissions out a vertical unobstructed stack.
- (<u>xxix</u>xxx) Site assessment for soil and/or groundwater remediation projects, provided that all of the following conditions are met:
  - (A) the sole purpose of the site assessment is to determine the extent of the contamination and the VOC concentrations in the soil and/or groundwater in order to design the appropriate collection and control equipment for the remediation project; and
  - (B) the site assessment is conducted for nodoes not last more than 30 cumulative days within a calendar year. A record of the number of operating days must be maintained with the equipment for the duration of the site assessment; and
  - (C) the collected soil, vapor or groundwater is routed through effluent gas stream from the sample collection site is vented to emission control equipment.

This exemption does not apply to any associated combustion equipment unless such equipment is also exempt pursuant to Subsection (d)(2) of this rule.

- (xxxi) Soil, sediment, air or groundwater monitoring, and installation of associated wells, performed to meet the requirements of other regulatory agencies.
- (xxxii) Any underground building ventilation system, sub-slab depressurization system, or soil/vapor intrusion mitigation associated with soil, vapor or groundwater that is not required to be remediated by any other regulatory agency.
- (xxxiii) Additive manufacturing (3-D printing) equipment.
- (xxxiv) Except as otherwise provided in Subsection (d)(16)(xɨ), asbestos removal equipment and operations subject to, or exempt from, District Regulation XI 40 CFR Part 61, Subpart M National Emission Standards for Asbestos.
- (xxxv) Wet screening operations.

#### (20) REGISTERED EQUIPMENT

- (i) Any portable equipment that is registered in accordance with District Rule 12.1. This exemption does not apply to any equipment while in use for screening of soils in contaminated soil remediation projects.
  - (ii) Any emission unit registered in accordance with District Rule 12.
- (iii) Any portable equipment registered in accordance with the Statewide Portable Equipment Registration Program adopted pursuant to California Health and Safety Code Section 41750, et seq., except in circumstances specified in that program (California Code of Regulations, Title 13, §2451 and §2457).

#### (e) **RESERVED**

#### (f) **RESERVED**

## (g) **TEST METHODS**

The following test methods will be used for compliance verification purposes.

- (1) Measurement of tThe VOC content of all coating and adhesive materials containing more than 50 grams of VOC per litersubject to this rule shall be conducted in accordance withdetermined by the Environmental Protection Agency (EPA)Test Reference Method 24 (40 CFR Part 60, Appendix A,) (Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings), September 11, 1995, or by the South Coast Air Quality Management District (SCAQMD) Method 304-91 (Determination of Volatile Organic Compounds in Various Materials), February 1996.
- (2) Measurement of The VOC content of surface preparation or cleaning materials containing 50 grams of VOC per liter or less, subject to the requirements of Subsection (d)(16)(i) and (ix), shall be conducted in accordance with the determined by South Coast-Air Quality Management District SCAQMD Test Method 313-91 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), June-1993 February 1997, or by SCAQMD Method 308-91 (Quantitation of Compounds by Gas Chromatography), February 1993. or 313.
- (3) Measurement of  $\underline{t}$ The initial boiling point of all materials subject to this rule shall be conducted determined in accordance with ASTM Standard Test Method D1078-05D1078-11 (Standard Test Method for dDistillation  $\underline{t}$ Range of  $\underline{t}$ Volatile  $\underline{t}$ Organic lLiquids), or its most current version.
- (4) Calculation of total VOC vapor pressure for all materials subject to this rule shall be conducted in accordance with the District's "SD 1, Procedures for Estimating the Vapor Pressure of VOC Mixtures," as it exists on June 27, 1995 dated June 2004-20, 1999.

If the vapor pressure of the liquid mixture, as calculated by this procedure, exceeds the limits specified, the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-97 (2002)D2879-10 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), or its most current version. The solvent composition shall be determined using one of the following ASTM standard recommended practices: E168-99 (2004), E169-04, or E260-96 (2001), or their most current versions. The fraction of water and exempt compounds in the liquid phase shall be determined by using ASTM Standard Test Methods D3792-05 and D4457-02, or their most current versions, and shall be used to calculate the partial pressure of water and exempt compounds. The results of vapor pressure measurements obtained using ASTM Standard Test Method D2879-97 (2002), or its most current version, shall be corrected for partial pressure of water and exempt compounds.

- (5) Reid Vapor Pressure pursuant to Subsections (c)(222932) and (d)(17) of this rule shall be measured in accordance with ASTM Standard Test Method D323-99aD323-08(2014) (Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)), or its most current version.
- (6) Concentration of halogenated compounds in water pursuant to Subsection (d)(18)(iii) shall be measured in accordance with EPA <u>Publication SW-846</u> Test Method 8021B (Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and Electrolytic Conductivity Detectors), *December 1996July 2014*.

#### (h) **COMPLIANCE SCHEDULE**

Any person operating existing equipment previously exempt from Rule 10 permit requirements pursuant to the version of Rule 11 existing prior to (*date of adoption*), and that is no longer exempt from Rule 10 permit requirements pursuant to this rule, shall submit an application for a permit to operate such equipment by (*one year from date of adoption*).

#### **CHANGE COPY**

# RULE 66.1 MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE ORGANIC COMPOUNDS (Adopted 2/24/10), Rev. Adopted (date of adoption))

#### (a) **APPLICABILITY**

- (1) This rule is applicable to all surface coating, solvent cleaning or other operations or processes that may result in emissions of VOCs and are not subject to or exempt from, the following rules:
  - 67.0.1 Architectural Coatings;
  - 67.2 Dry Cleaning Equipment Using Petroleum Based Solvents;
  - 67.3 Metal Parts and Products Coating Operations;
  - 67.4 Metal Container, Metal Closure and Metal Coil Coating Operations;
  - 67.5 Paper, Film and Fabric Coating Operations;
  - 67.6.1 Cold Solvent Cleaning and Stripping Operations;
  - 67.6.2 Vapor Degreasing Operations;
  - 67.9 Aerospace Coating Operations;
  - 67.10 Kelp Processing and Bio-Polymer Manufacturing Operations;
  - 67.11 Wood Products Coating Operations;
  - 67.11.1 Large Coating Operations for Wood Products;
  - 67.12.1 Polyester Resin Operations;
  - 67.15 Pharmaceutical and Cosmetic Manufacturing Operations;
  - 67.16 Graphic Arts Operations;
  - 67.18 Marine Coating Operations;
  - 67.19 Coatings and Printing Inks Manufacturing Operations;
  - 67.20.1 Motor Vehicle and Mobile Equipment RefinishingCoating Operations;
  - 67.21 Adhesive Materials Application Operations;
  - 67.24 Bakery Ovens;
  - 61.1 through 61.8 Vapor Recovery Rules;
  - 68 through 69.4.1 Rules Regulating Combustion Sources.
- (2) Section (g) of this rule is applicable to any manufacturer, seller or supplier of any coating, coating component, solvent cleaning material, or any other VOC containing material that is used in an operation that may be subject to this rule.

#### (b) **EXEMPTIONS**

- (1) This rule shall not apply to the following:
- (i) Surface coatings, surface preparation or solvent cleaning materials applied using hand-held non-refillable aerosol spray containers.

- (ii) Any surface coating operation where 20 gallons or less of surface coatings are applied per consecutive 12-month period. To claim applicability of this exemption monthly coating usage records shall be maintained on site for three years and made available to the District upon request.
- (iii) Any surface coating or other VOC emitting operation where the total VOC emissions, excluding emissions from cleaning or surface preparation materials, are 150 lbs or less per consecutive 12-month period. To claim applicability of this exemption all records necessary to calculate VOC emissions shall be maintained on site for three years and made available to the District upon request.
  - (iv) The use of pesticides, including insecticides, rodenticides or herbicides.
- (v) Research and development operations or testing for quality control or quality assurance purposes.
- (vi) Operations involved in the manufacture of biotechnology pharmaceutical and bio-agricultural products that are exempt from the District permit to operate requirements by Rule 11, Section (d).
- (vii) Laboratory operations located at secondary schools, colleges, or universities and used exclusively for instruction.
  - (viii) Touch-up operations.
    - (ix) Stripping of cured inks, coatings and adhesives.
    - (x) Digital printing operations.
- (xi) Any solvent cleaning, including wipe cleaning, or surface preparation of electrical or electronic components, medical devices, laser optics or precision optics components.
  - (xi) Any solvent cleaning, including wipe cleaning, or surface preparation of electrical or electronic components, medical devices, laser optics or precision optics components.
- (xii) Surface preparation or solvent cleaning, including wipe cleaning, for quality control or quality assurance purposes.
- (xiii) Surface preparation or solvent cleaning, including wipe cleaning, for routine janitorial maintenance, including graffiti removal.

- (ix) Any solvent cleaning, including wipe cleaning, performed in conjunction with welding of 5XXX series aluminum structures for Navy ships and in accordance with quality assurance standards for such structures.
- (2) Subsection (d)(2) and Section (f) shall not apply to:
- (i) Any solvent cleaning, including wipe cleaning, of aerospace components not associated with a surface coating operation and provided that the cleaning material complies with the requirements of Rule 67.9, Subsection (d)(4).
- (ii) Any solvent cleaning, including wipe cleaning, performed in conjunction with welding of 5XXX series aluminum structures for Navy ships and in accordance with quality assurance standards for such structures.
- (iii) Any cleaning or surface preparation operation, including wipe cleaning, necessary to achieve the required purity of surfaces for precision welding or thermal spray operations used in the manufacture of gas turbine engines, provided that the combined total amount of such cleaning materials used for these operations at the stationary source does not exceed 50 gallons per consecutive 12 months.
- (iviii) Any cleaning or surface preparation operation, including wipe cleaning, where the combined total amount of cleaning materials used from all such operations located at the stationary source does not exceed not more than 20550 gallons of cleaning materials are used per calendar year consecutive 12-months, provided that the total amount of non-compliant cleaning materials used at the stationary source does not exceed 20 gallons per consecutive 12-months; or
- (ii) Any surface preparation or solvent cleaning, including wipe cleaning, associated with a coating operation, provided the use of such cleaning materials does not exceed 20 gallons per consecutive 12 months or the VOC emissions from such cleaning materials do not exceed 150 lbs per consecutive 12 months.
- (viv) Any cleaning or surface preparation operation, including wipe cleaning, where the uncontrolled VOC emissions from all such operations located at the stationary source cleaning materials do not exceed 1503,650 lbs per calendar year consecutive 12-months, provided that the total VOC emissions from non-compliant cleaning materials used at the stationary source do not exceed 150 lbs per consecutive 12-months.
- (iii) Any surface preparation or solvent cleaning, including wipe cleaning, not associated with a coating operation, where the combined total amount of cleaning

materials used at the stationary source does not exceed 550 gallons per consecutive 12 months or the total VOC emissions from all such cleaning materials used at the stationary source do not exceed 3,650 lbs per consecutive 12 months.

To claim the applicability of the exemptions in Subsections (b)(2), all records of monthly purchase or usage of cleaning materials, their VOC content, vapor pressure, or any other data necessary to calculate VOC emissions, as applicable, shall be maintained on site for three years and made available to the District upon request.

## (c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

- (1) "Aerospace Component" means any raw material, partial or completed fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle, including mockups, test panels and prototypes, and associated electrical and electronic components.
- (2) "Air-Dried Coating" means any coating that is not heated above 90°C (194°F) for the purpose of curing or drying.
- (3) "Baked Coating" means any coating that is cured or dried in an oven where the oven air temperature exceeds 90°C (194°F).
- (4) "Biotechnology" means the use of living organisms and/or biological processes often combined with chemical processes to develop products used in a variety of fields such as medicine, agriculture, and food production. Biotechnology industry includes, but is not limited to, medicinal drug manufacturing, peptide synthesis and DNA synthesis.
- (4<u>5</u>) "Coating" means a material which can be applied as a thin layer to a substrate, and which either dries or cures to form a continuous solid film or impregnates a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, lacquers, and stains but exclude adhesives.
- (56) "**Digital Printing Operation**" means an operation that uses a printing device guided by a computer-driven machine to transfer an electronic image to a substrate through the use of inks, toners, or other graphic materials. Digital printing operations also include associated surface preparation, solvent cleaning, and the cleaning of application equipment.
- (67) "**Dip Coat**" means a coating application method accomplished by dipping an object into the coating material.

- (78) "Electrical Components" means internal components such as wires, windings, stators, rotors, magnets, contacts, relays, energizers, and connections in an apparatus that generate or transmit electrical energy including, but not limited to, generators, transformers, and electric motors.
- (89) "Electronic Components" means components or assemblies of components including, but not limited to, circuit card assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the cabinet in which the components are to be housed.
- (910) "Electrostatic Spray" means a coating application method accomplished by charging atomized paint particles for deposition by electrostatic attraction.
  - (<del>10</del>11) "Exempt Compound" means the same as defined in Rule 2.
- (1112) "Existing Operation or Process" means a surface coating operation or other process emitting VOCs for which a complete application for an Authority to Construct in San Diego County was submitted before February 24, 2010(date of adoption). Wipe cleaning operations that are exempt from permit requirements per Rule 11 before February 24, 2010(date of adoption), are considered existing operations.
- (1213) "Flow Coat" means a coating application method accomplished by flowing a stream of coating over an object.
- (1314) "Hand Application Method" means a coating application method accomplished by applying a coating by manually held, non-mechanically operated equipment. Such equipment includes, but is not limited to, paintbrushes, hand rollers, rags and sponges.
- (44<u>15</u>) "High-Volume Low-Pressure (HVLP) Spray" means a coating application method which uses pressurized air at a permanent pressure between 0.1 and 10.0 psig, not to exceed 10.0 psig, measured at the air cap of the coating application system.
- (1516) "Low-Solids Coating" means a coating containing one pound of solids or less per gallon of material, as supplied.
- (1617) "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 disease or other conditions or in the cure, mitigation, treatment, or prevention of disease, or is intended to affect the structure or any function of the body. For the purposes of Subsection (d)(2) of this rule, a medical device also includes any associated manufacturing or assembly apparatus (e.g., molds, medical device parts, or sub-components).

- (47<u>18</u>) "New Operation or Process" means a surface coating operation or other process emitting VOCs for which a complete application for an Authority to Construct in San Diego County was submitted on or after February 24, 2010(date of adoption).
- (1819) "Organic Solvent" means any substance containing an organic compound or combination of organic compounds which is liquid at atmospheric pressure and ambient temperature and which is used as a reactant, diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or for other similar purposes.
- (1920) "**Operation**" means any process that includes one or more pieces of equipment linked by the process flow and resulting in a product that cannot be made if any piece of equipment is removed or not functioning.
- (2021) "Precision Optics Components" means the components used to create high resolution images in optical devices.
- (2122) "Research and Development Operation" means a small scale operation for the purpose of creating new or improved processes or products, that is conducted by technically trained personnel under the supervision of a research director, and is not used in the may not be used to manufacture of products or byproducts for sale or exchange for commercial profit, other than the first-article deliverable product.
- (2223) "Roll Coat" means a coating application method accomplished by rolling a coating onto a flat surface using a roll applicator.
  - (2324) "Solvent" means any organic solvent.
- (2425) "Source" means any article, machine, equipment, contrivance, operation or a group of such articles, machines, equipment, contrivances or operations that emits or may emit volatile organic compounds.
- (2526) "Solvent Cleaning" means the removal of uncured adhesives, inks, coatings, and other contaminants such as dirt, soil, and grease from parts, products, tools, machinery, equipment or general work area. For the purposes of this rule, solvent cleaning does not include the cleaning of soiled textile materials or the use of solvent for regeneration.
- (2627) "Surface Preparation" means the cleaning of surfaces by utilizing cleaning materials containing VOCs prior to coating, further treatment, sale or intended use.
- (2728) "Surface Coating" or "Surface Coating Operation" means all steps involved in the application, drying and curing of coatings.

- (2829) "Touch-up Operation" means the portion of a surface coating operation which is incidental to the main coating process but necessary to cover minor imperfections or minor mechanical damage incurred prior to intended use.
  - (2930) "Volatile Organic Compound (VOC)" means the same as defined in Rule 2.
- (3031) "VOC Content per Volume of Coatings, Less Water and Exempt Compounds" means the weight of VOC per combined volume of VOC and coating solids and is calculated by the equation provided in Rule 2.
- (3132) "VOC Content per Volume of Cleaning Material or Low-Solids Coating" means the weight of VOC per volume of cleaning material or low-solids coating and is calculated by the equation provided in Rule 2.
- (3233) "Wipe Cleaning" means a method of surface preparation or solvent cleaning that is not conducted in a container but performed by physically rubbing the surface with a material such as a rag, paper, sponge or cotton swab moistened with a cleaning material.

#### (d) STANDARDS

(1) Surface Coating and Other Operations

A person shall not conduct any surface coating or other operation, excluding surface preparation and solvent cleaning operations, that may result in emissions of volatile organic compounds unless one of the following requirements is satisfied:

- (i) VOC emissions from such operation are less than 5 tons per calendar year, excluding emissions from cleaning operations; or
- (ii) VOC emissions are reduced by air pollution control equipment in compliance with all the applicable requirements of Section (e); or
- (iii) a surface coating operation is conducted by using air-dried coatings with a VOC content not higher than 420 grams/liter (3.5 lbs/gal) of coating, less water and exempt compounds, as applied, or by using baked coatings with a VOC content not higher than 360 grams/liter (3.0 lbs/gal) of coating, less water and exempt compounds, as applied.
- (2) Surface Preparation and Solvent Cleaning Operations

A person shall not conduct a surface preparation or solvent cleaning operation, including wipe cleaning but excluding cleaning of coating application equipment, unless: the VOC content of cleaning material is 50 grams/liter (0.42 lbs/gal), or less as used, or the total VOC vapor pressure of cleaning material is 8 mm Hg at 20°C (68°F) or less.

(i) the total VOC vapor pressure of cleaning material is 8 mm Hg at 20°C (68°F) or less, or

- (ii) for Aerospace Electrical or Electronic-Components, not associated with a surface coating operation, 45 mm Hg at 20°C (68°F) or less; or
- (iii) the VOC content of cleaning material complies with the following limits expressed as either grams of VOC per liter of material (g/L) or pounds of VOC per gallon of material (lb/gal), as used:

CATEGORY	VOC LIMITS	
	<u>g/L</u>	<u>lb/gal</u>
General	<u>50</u>	0.42
Aerospace Electrical or Electronic-Components	<u>200</u>	<u>1.7</u>
<u>Ultra-High Purity Chemical Manufacturing</u>	<u>840</u>	<u>7.0</u>
Electrical or Electronic Components (non-Aerospace)  Laser Optics or Precision Optics Components  Medical Devices	<del>100</del> <del>800</del> <del>800</del>	<u>0.83</u> <u>6.7</u> <u>6.7</u>
Pharmaceutical and Biotechnology	<del>800</del>	<u>6.7</u>

- (3) Application Equipment for Surface Coating Operations.
  - (i) Coating Application Methods.

No surface coatings shall be applied unless one of the following application methods is used:

- (A) Hand application method, or
- (B) Dip coat, or
- (C) Roll coat, or
- (D) Flow coat, or
- (E) Electrostatic spray, or
- (F) High-volume low-pressure (HVLP) spray. Facilities using HVLP spray shall have available on site pressure gauges in proper operating conditions to measure air pressure at the air cup, or have manufacturer's information regarding the correlation between the air cap pressure and the handle inlet pressure, or

G) Other coating application methods that are demonstrated to have a transfer efficiency equal at a minimum to one of the above application methods, and which are used in such a manner that the parameters under which they were tested are permanent features of the method. Such coating application methods shall be approved in writing by the Air Pollution Control Officer prior to use.

## (ii) Cleaning of Coating Application Equipment

A person shall not use VOC containing materials for the cleaning of coating application equipment used in operations subject to this rule unless:

- (A) The cleaning material contains 50 grams or less of VOC per liter of material; or
- (B) The cleaning material is flushed or rinsed through the application equipment in a contained manner that will minimize evaporation into the atmosphere; or
- (C) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or its parts and provided that the cleaned equipment or its parts are drained to the container until dripping ceases; or
- (D) A system is used that totally encloses the component parts being cleaned during the washing, rinsing, and draining processes.

#### (e) **CONTROL EQUIPMENT**

- (1) In lieu of complying with the provisions of Section (d) of this rule, an owner/operator may use an air pollution control system which:
  - (i) Has been installed in accordance with an Authority to Construct; and
  - (ii) Has a combined emissions capture and control device efficiency of at least 85% by weight.
- (2) A person electing to use control equipment pursuant to Subsection (e)(1) shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance plan for the proposed emission control device and emission collection system and receive approval prior to operation of the control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. Such plan shall:
  - (i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(ii), such as temperature, pressure and/or flow rate; and

- (ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed record keeping practices regarding the key system operating parameters.
- (3) Upon approval by the Air Pollution Control Officer, a person subject to the requirements of Section (e) shall implement the Operation and Maintenance plan and shall comply thereafter with the provisions of the approved plan.

#### (f) RECORD KEEPING REQUIREMENTS

- (1) Any person conducting operations subject to this rule shall maintain a current list of each coating, solvent, or other VOC containing material in use, which provides the VOC content and all other data necessary to evaluate compliance, including but not limited to:
  - (i) Manufacturer name and identification for each material containing VOCs; and
  - (ii) For coatings, other than low-solid coatings, the VOC content expressed in grams per liter (lbs/gal), less water and exempt compounds, as applied and mix ratio of components, if applicable; and
    - (iii) Actual oven drying temperature, if applicable; and
  - (iv) For surface preparation and cleaning materials or for low-solid coatings, the VOC content expressed in grams per liter (lbs/gal) of cleaning material or low-solids coating as used, and density and mix ratio of components, if applicable; and
  - (v) For other materials containing VOCs, other than surface coatings, surface preparation or cleaning materials, the VOC concentration per weight or volume of material.
  - (2) In addition, any person conducting operations subject to this rule shall:
    - (i) Maintain monthly records of the amount of each coating used; and
  - (ii) Maintain monthly inventory, purchasing or dispensing records for each surface preparation and cleaning material or other VOC containing materials used.
- (3) In addition, any person using control equipment pursuant to Section (e) of this rule shall maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan pursuant to Subsection (e)(2). Such records shall be sufficient to document continuous compliance with Subsection (e)(1)(ii) during periods of emission producing activities.
- (4) All records shall be retained onsite for at least three years and made available to the District upon request.

#### (g) MANUFACTURER AND SUPPLIER INFORMATION

Any person, who manufactures, sells, offers for sale, or supplies to users in San Diego County any coating, coating component, solvent cleaning material, or any other VOC containing material that is used in an operation that may be subject to this rule shall provide the following information to customers:

- (1) The manufacturer's name and identification of each coating or coating component, surface preparation material, equipment cleaning material or any other material containing VOCs; and
- (2) The VOC content of coatings, as supplied, expressed in grams per liter or pounds per gallon, less water and exempt compounds; and
- (3) The VOC content of low-solid coatings, as supplied, surface preparation or solvent cleaning materials or any other materials containing VOCs in grams per liter or pounds per gallon; and
- (4) Any other necessary information enabling a user to comply with the requirements of Section (d) of this rule.

#### (h) **TEST METHODS**

When more than one test method or set of test methods are specified in this Section, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

- (1) The VOC content of coatings containing more than 50 grams of VOC per liter of material shall be determined by the Environmental Protection Agency (EPA) Reference Method 24 (Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, (40 CFR Part 60, Appendix A), Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings), dated-September 1995 or by the South Coast Air Quality Management District (SCAQMD) Method 304-91 (Determination of Volatile Organic Compounds in Various Materials), February 1996as they exist on February 24, 2010.
- (2) The VOC content of solvents or coatings containing 50 grams of VOC per liter of material or less shall be determined by the South Coast Air Quality Management District

- (SCAQMD) Method 313<u>-91</u> (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), February 1997, SCAQMD Method 308<u>-91</u> (Quantification Quantitation of Compounds by Gas Chromatography), February 1993as they exist on February 24, 2010, or any other alternative test methods approved by EPA, California Air Resources Board, and the Air Pollution Control Officer.
- (3) The content of methyl acetate, acetone and parachlorobenzotrifluoride shall be determined in accordance with the ASTM Test Method D6133-02 (20082014) (Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate or t-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph), or its most current version.
- (4) Measurements of exempt compound content, except for those determined in accordance with Subsection (g)(3), shall be conducted in accordance with the SCAQMD Test Method 303-91 (Determination of Exempt Compounds), August 1996.
- (4<u>5</u>) Calculation of total VOC vapor pressure for materials subject to Subsection (d)(2) of this rule shall be conducted in accordance with the District's "Procedures for Estimating the Vapor Pressure of VOC Mixtures-", <u>dated June 2004</u>. If the vapor pressure of the liquid mixture, as calculated by this procedure, exceeds the limits specified in Subsection (d)(2), the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-97(2007)10 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), or its most current version.
- (56) Measurements of transfer efficiency pursuant to Subsection (d)(3)(i)(G) of this rule shall be conducted in accordance with the SCAQMD "Spray Equipment Transfer Efficiency Test Procedure for Equipment User," May 1989 as it exists on February 24, 2010. The equivalency of coating application equipment pursuant to Subsection (d)(3)(i)(G) shall be determined by the SCAQMD "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns," September 2002 as they exist on February 24, 2010.
- (67) The overall control efficiency of air pollution control equipment operated pursuant to Subsection (e)(1)(ii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Test Methods 25A and/or 18 (40 CFR Part 60, Appendix A), both dated September 1996, and in accordance with a protocol approved by the Air Pollution Control Officer.
- (78) Capture efficiency of an emission collection system pursuant to Subsection (e)(1)(ii) shall be determined according to EPA Test Method 204 and 204A through 204F (40 CFR Part 51, Appendix M), as applicable, dated June 1997, and technical document, "Guidelines for Determining Capture Efficiency," dated January 9, 1995. Subsequent to

the initial compliance demonstration period, appropriate key system operating parameters as approved by the Air Pollution Control Officer may be used as indicators of the performance of the emission control system.

(9) Other test methods which are determined to be equivalent to the test methods specified in this rule and approved, in writing, by the Air Pollution Control Officer, California Air Resources Board, and EPA may be used in place of the test methods specified in this rule.

#### (i) **COMPLIANCE SCHEDULE**

- (1) All new operations or processes subject to this rule shall comply with all applicable requirements upon initial startup.
- (2) All existing operations or processes subject to this rule shall comply with all applicable requirements no later than February 24, 2011(one year after date of adoption).
- (3) The owner or operator of an existing operation that chooses to comply with the rule by installing air pollution control equipment pursuant to Section (e) of this rule shall:
  - (i) By August 24, 2010(6 months after date of adoption), submit to the Air Pollution Control Officer an application for an Authority to Construct and a Permit to Operate an air pollution control system as specified in Section (e).
  - (ii) By August 24, 2011(18 months after date of adoption), comply with all applicable rule requirements.