AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO

DRAFT PROPOSED AMENDMENTS TO RULE 69.2.1 – SMALL BOILERS, PROCESS HEATERS, STEAM GENERATORS, AND LARGE WATER HEATERS, DRAFT PROPOSED NEW RULE 69.2.2 – MEDIUM BOILERS, PROCESS HEATERS, AND STEAM GENERATORS, AND RELATED DRAFT PROPOSED AMENDMENTS TO RULE 11 – EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS AND RULE 12 – REGISTRATION OF SPECIFIED EQUIPMENT

WORKSHOP REPORT

The San Diego County Air Pollution Control District (District) held a public workshop on September 27, 2019, to discuss and receive input on the draft proposed amendments to Rule 69.2.1 – Small Boilers, Process Heaters, Steam Generators, and Large Water Heaters; draft proposed new Rule 69.2.2 – Medium Boilers, Process Heaters, and Steam Generators; and related draft proposed amendments to Rule 11 – Exemptions from Rule 10 Permit Requirements and Rule 12 – Registration of Specified Equipment. A meeting notice was mailed to each permit holder, applicant, registration holder, and chamber of commerce in the region, as well as the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB). Additionally, a meeting notice was posted on the District's website and distributed to interested parties including through the County of San Diego's electronic mail service.

The workshop was attended by 34 people. A summary of the comments and District responses are provided below:

RULE 69.2.1 COMMENTS

1. WORKSHOP COMMENT

While the rule is intended to apply to equipment manufacturers, the words "or installs" in proposed Section (a) – Applicability could unintentionally subject owners or operators of a boiler, process heater, steam generator, or water heater (unit) to the rule. The District should clarify the rule applicability to minimize potential confusion or compliance issues for the regulated community.

DISTRICT RESPONSE

The District disagrees. Pursuant to both existing Rule 69.2.1 and the proposed amendments, any person who installs a new unit, whether an owner, operator, or third party, must ensure that the equipment complies with the requirements of Rule 69.2.1.

2. WORKSHOP COMMENT

Does the proposed amended rule apply to the sale of a used boiler with heat input rating from 75,000 to 600,000 Btu/hour?

DISTRICT RESPONSE

Yes, a used boiler that is sold or offered for sale on or after January 1, 2021, would be considered a "new unit" as defined in proposed Subsection (c)(14) and therefore subject to the proposed amended rule.

3. WORKSHOP COMMENT

Is a boiler (with heat input rating from 75,000 to 600,000 Btu/hour) that is relocated from one stationary source to another considered an existing unit?

DISTRICT RESPONSE

The relocated unit would be considered an existing unit only if both stationary sources are under the same ownership. Proposed Subsection (c)(17) has been revised to clarify this.

4. WORKSHOP COMMENT

If ownership of an existing unit (with heat input rating from 75,000 to 600,000 Btu/hour) is transferred from one owner to another, would the equipment then be considered as a new unit?

DISTRICT RESPONSE

The unit would be considered as an existing unit only if the transfer of ownership occurs before January 1, 2021, otherwise it would be considered a new unit.

5. WORKSHOP COMMENT

Are existing units required to undergo emissions testing?

DISTRICT RESPONSE

No. Proposed Subsection (e)(1) has been revised to clarify that only a manufacturer of any *new* unit offered for sale in San Diego County is required to conduct emissions testing for each model unit to certify compliance with the requirements of the rule.

6. WORKSHOP COMMENT

What documentation must an owner or operator of an existing unit maintain to demonstrate that it is not subject to the rule?

DISTRICT RESPONSE

The proposed requirements for record keeping apply to manufacturers only. Proposed Section (g) – Record Keeping has been revised to clarify this.

7. <u>CARB COMMENT</u>

CARB has no official comments at this time.

8. <u>EPA COMMENT</u>

Proposed Subsection (b)(1)(iv) exempts from the rule units with a heat input rating from 75,000 Btu per hour to 400,000 Btu per hour that operate exclusively to heat residential swimming pools and hot tubs. However, there are residential pool and hot tub heaters commercially available that can comply with a NOx limit of 55 parts per million by volume (ppmv). Therefore, proposed Subsection (b)(1)(iv) should be removed, and such equipment should be subject to a NOx limit of 55 ppmv similar to other analogous air district rules.

DISTRICT RESPONSE

The District agrees. Proposed Subsection (b)(1)(iv) has been removed, and proposed Section (d) – Standards has been revised to include a NOx emission limit of 55 ppmv for residential pool and hot tub heaters as suggested.

9. <u>EPA COMMENT</u>

Proposed Subsection (b)(1)(vi) exempts from the rule dual-fueled units. This exemption is a rule approvability issue because there are commercially available natural gas and liquefied petroleum gas (LPG) dual-fueled units that can comply with a 20 ppmv NOx limit, and natural gas and heating oil dual-fueled units that can comply with a 40 ppmv NOx limit. Therefore, proposed Subsection (b)(1)(vi) should be removed.

DISTRICT RESPONSE

The District agrees. Proposed Subsection (b)(1)(vi) has been removed as suggested.

10. EPA COMMENT

Proposed Subsection (b)(1)(vii) exempts from the rule existing or relocated units. This exemption is redundant to the rule applicability and should be removed.

DISTRICT RESPONSE

The District agrees. Proposed Subsection (b)(1)(vii) has been removed as suggested.

11. <u>EPA COMMENT</u>

Proposed Subsection (b)(2) exempts, from proposed Sections (e) – Certification Statement and (f) – Labeling, new units with a heat input rating from 75,000 Btu per hour to less than 1,000,000 Btu per hour that operate primarily on non-Public Utility Commission quality natural gas or liquid fuel. This exemption is a rule approvability issue because it impacts the enforcement of proposed Sections (g) – Record Keeping and (h) – Test Methods for new units with a heat input rating from 75,000 Btu per hour to less than 1,000,000 Btu per hour. In addition, there are commercially available oil-fired units that can meet the NOx emission limits specified in proposed Section (d) – Standards and appear to meet the certification and labeling requirements of the rule. Therefore, proposed Subsection (b)(2) should be removed.

DISTRICT RESPONSE

The District agrees. Proposed Subsection (b)(2) has been removed as suggested.

12. <u>EPA COMMENT</u>

In proposed Subsection (e)(1)(iii), the name and address of the manufacturer should be included in the list of items required in the certification statement, in addition to the description of the model being certified, including burner type (or fuel-type), for rule approvability and consistency with other analogous air district rules.

DISTRICT RESPONSE

The District agrees. Proposed Subsection (e)(1)(iii) has been revised as suggested.

RULE 69.2.2 COMMENTS

13. WORKSHOP COMMENT

For consistency with the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart DDDDD for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, the following categories of boilers should be added to proposed Section (b) – Exemptions:

temporary portable boilers; rental boilers for supplemental steam; training boilers; and boilers or process heaters used specifically for research and development, including test steam boilers used to provide steam for testing the propulsion systems on military vessels.

DISTRICT RESPONSE

The District disagrees. NESHAP Subpart DDDDD regulates major sources of hazardous air pollutants. By contrast, proposed Rule 69.2.2 regulates oxides of nitrogen as a criteria pollutant and precursor to ozone pollution. The analogous boiler rules in other air districts do not provide the suggested exemptions.

14. WORKSHOP COMMENT

Are temporary units required to be registered with the District?

DISTRICT RESPONSE

Yes. Temporary units are subject to the requirements of the proposed rule, including obtaining a Certificate of Registration or Permit to Operate.

15. <u>WORKSHOP COMMENT</u>

If a unit is purchased before January 1, 2021, but installed after that date, is the equipment considered a new unit upon installation?

DISTRICT RESPONSE

Yes. Per the definition of "new unit" in proposed Subsection (c)(16), a unit installed on or after January 1, 2021, will be considered a new unit subject to the applicable requirements.

16. WORKSHOP COMMENT

For consistency, proposed Section (d) – Standards should include the tuning procedure specified in NESHAP Subpart DDDDD as an acceptable option.

DISTRICT RESPONSE

The District agrees. Proposed Subsections (d)(2) and (3) have been revised to reference the tuning procedure specified in NESHAP Subpart DDDDD, which is found in 40 CFR Part 63, Sections 63.7540(a)(10)(i) through (vi).

17. WORKSHOP COMMENT

Does proposed Section (e) – Monitoring Requirements apply to units fueled exclusively by natural gas, or to units fueled exclusively by liquid fuel?

DISTRICT RESPONSE

No. The monitoring requirements of proposed Section (e) apply only to new dual-fueled units capable of burning gaseous and liquid fuel.

18. WORKSHOP COMMENT

Proposed Section (e) – Monitoring Requirements refers to new units, but does not address existing units. It would be an additional expense for the owner or operator to install a fuel meter for an existing unit. Proposed Section (e) should be revised to ensure that the requirement to install a fuel meter does not apply to existing units.

DISTRICT RESPONSE

The suggested revision is unnecessary because proposed Section (e) applies only to an owner or operator of a new unit. Owners or operators of an existing unit are not subject to this proposed requirement.

19. WORKSHOP COMMENT

Will registered or permitted units be included in a site's annual inspection? If so, will a District inspector require access to physically inspect the unit?

DISTRICT RESPONSE

Yes, units with a Certificate of Registration or Permit to Operate will be included in a site's annual inspection. The inspection will include a review of the site's records to verify compliance with proposed Section (h) – Record Keeping Requirements. Typically, physical access to the unit will not be necessary.

20. WORKSHOP COMMENT

What will be the process and fees required to apply for a Certificate of Registration or a Permit to Operate for a boiler?

DISTRICT RESPONSE

Application forms will be available on the District's website. Once a completed application and applicable fee are submitted to the District, the application will be evaluated for approval. Upon District approval, a Certificate of Registration or Permit to Operate, as applicable, will be issued.

Evaluating and processing a registration application will require less District labor and time than for a permit application, and thus will be less costly. The proposed fee to apply for a registration will be determined as part of the next proposed update of District Rule 40 – Permit and Other Fees, which is scheduled for spring 2020.

Based on preliminary information, the registration application fee is roughly estimated to be approximately \$1,000, in addition to an annual renewal fee that is roughly estimated to be approximately \$200. The actual proposed fee values will be included in future draft amendments to Rule 40, which will be distributed for public review and comment prior to consideration of adoption by the Board at a public hearing.

21. WORKSHOP COMMENT

What are the conditions that will be specified on a Certificate of Registration for a boiler?

DISTRICT RESPONSE

The conditions will include the requirements for annual tuning, record keeping, and may include other conditions referenced from other applicable District rules, such as Rule 51 – Nuisance.

22. WORKSHOP COMMENT

Is an owner or operator required to apply for a Certificate of Registration before the installation of a new boiler?

DISTRICT RESPONSE

Yes. Before a new unit is purchased or installed, an application for a Certificate of Registration or Permit to Operate shall be submitted and approved by the District.

23. WORKSHOP COMMENT

What is the timeframe for receiving a Certificate of Registration for a boiler after a complete application is submitted to the District?

DISTRICT RESPONSE

In most cases, the District anticipates issuing a Certificate of Registration on the same business day a completed application is submitted.

24. WORKSHOP COMMENT

Why would someone choose to apply for a Permit to Operate instead of a Certificate of Registration for a boiler?

DISTRICT RESPOSE

There may be a rare circumstance in which a unit that is not certified (by the manufacturer to meet the emissions standards) is needed to support a process or operation that requires a Permit to Operate. Proposed Subsection (b)(3) exempts from the certification requirement any unit that is used in conjunction with any equipment, product line, system, process line or process that is subject to permit requirements. In this case, an owner or operator of an uncertified unit is required to apply for a Permit to Operate because the unit is not eligible for a Certificate of Registration.

25. <u>WORKSHOP COMMENT</u>

Would an existing certified unit ever require a Permit to Operate instead of a Certificate of Registration?

DISTRICT RESPONSE

No, the District is not aware of any instance in which it would require a Permit to Operate in lieu of a Certificate of Registration for an existing certified unit.

26. WORKSHOP COMMENT

Will the District maintain a list of certified units on its website to help facilitate the registration process?

DISTRICT RESPONSE

Yes, a list of certified units will be maintained on the District website.

27. WORKSHOP COMMENT

What is the anticipated cost increase for a certified unit that meets the proposed requirements versus a conventional unit?

DISTRICT RESPONSE

The District estimates that the capital cost of a certified unit is 35% more than a conventional unit. Certified units tend to be more fuel efficient and the resulting savings in fuel costs will help to offset the increase in capital cost.

28. WORKSHOP COMMENT

Is the estimated emissions reduction based on the replacement of existing units?

DISTRICT RESPONSE

Yes. The District estimates an emissions reduction of 194 tons of NOx per year upon full implementation of the rule when, through attrition, all existing units are eventually replaced at the end of their useful lives by new compliant equipment.

29. WORKSHOP COMMENT

The District should compare the additional resources that stationary sources would need to expend on new rules such as Rule 69.2.2 versus the environmental benefits that may be realized through implementation of the rule. Continuing to restrict emissions from stationary sources will have little effect on air quality considering that most of the NOx and VOC emissions are currently emitted from mobile sources.

DISTRICT RESPONSE

San Diego County does not attain the current federal and State clean air standards for ozone pollution. Accordingly, the District is mandated by federal and State law to adopt all feasible measures to further control and reduce ozone-forming emissions from stationary sources in the region, including oxides of nitrogen (NOx) from boilers, process heaters, and steam generators subject to proposed new Rule 69.2.2. Similar boiler rules are already in place throughout much of California.

The District acknowledges that controlling and reducing emissions from sources under its authority, i.e., stationary sources, is only part of the solution. Mobile sources, which are under State and federal control, contribute the majority of air pollutant emissions in the region. Accordingly, the District continues to work with our State and federal partners to seek the maximum feasible reductions from mobile sources. Additionally, the District will continue to offer monetary incentives to increase the penetration of the cleanest technologies in the mobile source sector and achieve the emissions reductions needed.

30. <u>CARB COMMENT</u>

CARB has no official comments at this time.

31. <u>EPA COMMENT</u>

Proposed Subsections (d)(2) and (3) specify the tuning procedures for applicable units. However, the rule allows for District discretion in determining acceptable boiler tuning procedures, and is a rule approvability issue. Either remove this provision for District discretion, or provide within the rule the minimum criteria for what would constitute approvable tuning requirements.

DISTRICT RESPONSE

The District agrees. Proposed Subsections (d)(2) and (3) have been revised to remove "*or other tuning procedure approved by the Air Pollution Control Officer*."

32. <u>EPA COMMENT</u>

Proposed Subsection (f)(3) references the Bay Area AQMD Regulation 9, Rule 7, certification program for boilers as an alternative option for certifying units offered for sale in San Diego County. However, the version of Bay Area's rule including this certification program is not in the California State Implementation Plan (SIP), and would need to be submitted into the SIP or otherwise addressed since this is a rule approvability issue. Proposed Subsection (f)(3) should be removed, but the EPA is willing to work with the District to explore alternative methods of approvable certification for these units.

DISTRICT RESPONSE

The District agrees. Proposed Subsection (f)(3) has been removed as suggested. New proposed Subsection (f)(2) has been added to require the certification application to demonstrate that the unit model was tested in accordance with the test methods in proposed Section (i) – Test Methods. In addition, new proposed Subsection (f)(3) has been added to clarify that after completing the review of the application for certification and source test report, the Air Pollution Control Officer shall either approve the certification and include the subject model on the list of certified devices, or deny the certification.

33. <u>EPA COMMENT</u>

The records retention schedule specified in proposed Section (h) – Record Keeping Requirements should be extended to five years to improve enforceability.

DISTRICT RESPONSE

The District disagrees. The three-year records retention requirement is consistent with all other District prohibitory rules.

RULE 11 COMMENT

34. WORKSHOP COMMENT

There seems to be a conflict between Rule 11 – Exemptions from Rule 10 Permit Requirements, Rule 12 – Registration of Specified Equipment, and Rule 69.2.2 – Medium Boilers, Process Heaters, and Steam Generators. Rule 11 exempts from Permit to Operate requirements a unit with a heat input rating of 2 million Btu per hour or less fired exclusively with natural gas and/or liquefied petroleum gas. Rule 69.2.2 applies to units with a heat input rating greater than 2 million Btu per hour.

Units rated at 2 million Btu per hour are unaddressed in Rule 11, which may lead to confusion and compliance issues. Proposed Subsection (d)(2)(iv)(B) in Rule 11 should be revised to "less than 2 million Btu per hour fired exclusively with natural gas and/or liquefied petroleum gas."

DISTRICT RESPONSE

The District disagrees. Units with a heat input rating of 75,000 to 2 million (inclusive) Btu per hour are subject to Rule 69.2.1, which does not require a Certificate of Registration or a Permit to Operate for such units. This is consistent with proposed Subsection (d)(2)(iv)(B) in Rule 11 which exempts from Permit to Operate requirements units with a heat input rating of 2 million Btu per hour or less.

RULE 12 COMMENTS

35. WORKSHOP COMMENT

Proposed Subsection (e)(1)(i) requires a Certificate of Compliance to be submitted with a completed Registration application form. Is a Certificate of Compliance required for registering an existing unit subject to proposed Rule 69.2.2 – Medium Boilers, Process Heaters, and Steam Generators?

DISTRICT RESPONSE

No. A Certificate of Compliance would be required for new units only.

36. WORKSHOP COMMENT

What are the fees required to apply for a Certificate of Registration for a grain silo?

DISTRICT RESPONSE

Based on preliminary information, the registration application fee for a grain silo is roughly estimated to be approximately \$1,000, in addition to an annual renewal fee that is roughly estimated to be approximately \$200. Also see District Response to Workshop Comment No. 20.

37. WORKSHOP COMMENT

What are the conditions that will be specified on a Certificate of Registration for a grain silo?

DISTRICT RESPONSE

The conditions that will be specified on a Certificate of Registration for a grain silo will include the requirements specified in proposed Subsection (d)(7), and other conditions that mirror conditions specified in a Permit to Operate for a grain silo.

AMO:RC:jlm 12/05/19

RULE 69.2.2 MEDIUM BOILERS, PROCESS HEATERS, AND STEAM GENERATORS (Adopted (*date of adoption*) & Effective January 1, 2021)

(a) **APPLICABILITY**

Except as otherwise provided in Section (b), this rule shall apply to any person who manufactures, sells, offers for sale or distributes for use within San Diego County, or installs or operates within San Diego County a boiler, process heater, or steam generator with a heat input rating greater than 2 million Btu per hour to less than 5 million Btu per hour.

(b) **EXEMPTIONS**

(1) The provisions of this rule shall not apply to the following:

(i) Any waste heat recovery boilers that are used to recover heat from the exhaust of gas turbines, internal combustion engines, or other combustion equipment.

(ii) Furnaces, kilns, and any combustion equipment where the material being heated is in direct contact with the products of combustion.

(iii) Thermal oxidizers and associated waste heat recovery equipment.

(2) The provisions of Subsection (d)(1)(i)(B) and Section (e) shall not apply to any unit which burns liquid fuel only during periods of natural gas curtailment, during emergencies, or during equipment testing for the purpose of maintaining the fuel oil back-up system, provided that both of the following conditions are met:

(i) Total cumulative operation during curtailment periods or emergencies shall not exceed 168 hours per calendar year.

(ii) Liquid fuel firing for equipment testing shall not exceed 48 hours per calendar year.

It is the responsibility of any person claiming this exemption to keep records in accordance with Subsections (h)(4) and (h)(5).

(3) The provisions of Section (f) shall not apply to any unit used in conjunction with any equipment, product line, system, process line or process that is subject to permit requirements of Rule 10 - Permits Required.

(c) **DEFINITIONS**

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

(1) **"Annual Heat Input"** means the actual, total heat input of fuels burned by a unit in a calendar year, as determined from the higher heating value and cumulative annual usage of each fuel. Annual heat input shall not include the heat input from fuels used during natural gas curtailment, during an emergency, or during equipment testing for the purpose of maintaining the fuel oil back-up system.

(2) **"Boiler"** means any combustion equipment fired with gaseous and/or liquid fuel and used to produce steam or to heat water.

(3) "**Btu**" means British thermal unit.

(4) **"Emergency"** means an unforeseen disruption or interruption in the supply of gaseous fuel to the unit.

(5) **"Existing Unit"** means any unit which was installed and capable of operation before January 1, 2021.

(6) **"Furnace"** means any enclosed structure in which heat is produced by the combustion of any fuel.

(7) "Gaseous Fuel" means natural gas or liquefied petroleum gas.

(8) **"Heat Input"** means the heat derived from combustion of a fuel in a unit, calculated using the higher heating value, excluding the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, including but not limited to, gas turbines, internal combustion engines and kilns.

(9) **"Heat Input Rating"** means the maximum steady state heat input capacity of a unit, in Btu per hour, as specified by the manufacturer.

(10) **"Higher Heating Value"** means the total heat liberated, including the heat of condensation of water, per mass of fuel burned (Btu per pound) when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to standard conditions.

(11) **"Installed"** means located onsite at the final destination and capable of operation.

(12) **"Kiln"** means an oven, furnace, or heated enclosure used for processing a substance by burning, firing, or drying.

(13) "Liquefied Petroleum Gas (LPG)" means a gas, consisting primarily of propane, propylene, butane, and butylene in various mixtures, that is stored as a liquid at high pressure.

(14) **"Liquid Fuel"** means any fuel, including distillate oils, which is a liquid at atmospheric pressure and ambient temperature conditions.

(15) "**Natural Gas Curtailment**" means a shortage in the supply of natural gas, due solely to limitations or restrictions in distribution pipelines by the utility supplying the gas, and not due to the cost of natural gas.

(16) **"New Unit"** means a unit installed, manufactured, or sold on or after January 1, 2021.

(17) **"Process Heater"** means any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from the combustion gases to water or process streams. Pool heaters used for swimming pools, spas and/or therapy pools shall be considered process heaters.

(18) **"Registration"** means the process of obtaining a Certificate of Registration for an emission unit that allows an owner or operator to lawfully operate the emission unit within San Diego County without applying for a Permit to Operate, as provided in Rule 12 – Registration of Specified Equipment.

(19) **"Relocated Unit"** means an existing unit which is moved within San Diego County from one stationary source to another stationary source. A relocated unit is deemed to maintain the status of an existing unit at the subsequent stationary source.

(20) "Stationary Source" means the same as defined in Rule 2 – Definitions.

(21) **"Steam Generator"** means any combustion equipment fired with gaseous and/or liquid fuel and used to produce steam or to heat water.

(22) **"Thermal Oxidizer"** means combustion equipment fired with gaseous fuel and used to control emissions of air contaminants from industrial or commercial processes.

(23) "Unit" means any boiler, process heater, or steam generator.

(d) **STANDARDS**

New Units

(1) Effective January 1, 2021, except as otherwise provided in Section (b), no person shall manufacture, sell, offer for sale or distribute for use within San Diego County, or install or operate a new unit within San Diego County unless:

(i) Emissions of nitrogen oxides (NOx), calculated as nitrogen dioxide at 3% oxygen on a dry basis, do not exceed the following levels:

(A) 30 parts per million by volume when operated on a gaseous fuel as a primary fuel.

(B) 40 parts per million by volume when operated on a liquid fuel as a primary fuel.

(C) The heat-input weighted average of the limits specified in Subsections (d)(1)(i)(A) and (d)(1)(i)(B) when operated on combinations of a gaseous and a liquid fuel. The heat-input weighted average is calculated using the following equation:

Heat-input weighted average, ppmv = $\{(H_g) (30 \text{ ppmv}) + (H_l) (40 \text{ ppmv})\}/(H_g + H_l)$

where:

 H_g = the actual heat input of gaseous fuel to a unit, in Btu per hour.

 H_1 = the actual heat input of liquid fuel to a unit, in Btu per hour.

(ii) Emissions of carbon monoxide (CO), calculated at 3% oxygen on a dry basis, do not exceed 400 parts per million by volume.

(iii) The new unit model has been certified by the Air Pollution Control Officer in accordance with Section (f).

(2) No person shall operate any new unit unless it is initially tuned no later than one year after the date of installation, and tuned at least once every calendar year thereafter. No two tuning events shall occur within 90 days of each other. Boiler tuning shall be conducted in accordance with the recommended tuning procedure of the manufacturer or boiler tuning contractor, or other the tuning procedure approved by the Air Pollution Control Officer specified in 40 CFR Part 63, Sections 63.7540(a)(10)(i) through (vi). At the time of tuning, the measurements of nitrogen oxides and carbon monoxide concentrations shall be conducted with the use of a portable NOx and CO analyzer in accordance with Subsection (i)(2).

Existing or Relocated Units

(3) Except as otherwise provided in Section (b), no person shall operate any existing or relocated unit unless it is initially tuned no later than July 1, 2021, and tuned at least once every calendar year thereafter. No two tuning events shall occur within 90 days of each other. Boiler tuning shall be conducted in accordance with the recommended tuning procedure of the manufacturer or boiler tuning contractor, or other-the tuning procedure approved by the Air Pollution Control Officer specified in 40 CFR Part 63. Sections 63.7540(a)(10)(i) through (vi).

(e) MONITORING REQUIREMENTS

An owner or operator of a new unit which is capable of burning both gaseous and liquid fuel and is subject to the requirements of Subsection (d)(1), except as specified in Subsection (b)(2), shall install one of the following:

(1) A non-resettable, totalizing meter in each fuel line to measure the mass flow rate of each fuel to the unit; or

(2) A non-resettable, totalizing meter in each fuel line to measure the volumetric flow rate, temperature and pressure of each fuel to the unit.

(f) **EQUIPMENT CERTIFICATION**

(1) A manufacturer of any unit to be offered for sale within San Diego County shall submit to the Air Pollution Control Officer an application to certify that each model of boiler, process heater, or steam generator subject to the requirements of Section (d) complies with the provisions of this rule.

(i) The application shall be signed, dated, and attested to the accuracy of all information by a representative of the manufacturer.

(ii) The application shall be submitted at least 30 days before the unit model is offered for sale, sold, or installed within San Diego County.

- (iii) The application shall include:
 - (A) Brand name,
 - (B) Model number,
 - (C) Heat input rating as specified on the nameplate, and

(D) Oxides of nitrogen and carbon monoxide emission test results of each model being certified.

(2) The certification application shall include a demonstration that the boiler, process heater, or steam generator model was tested in accordance with Section (i) and found to comply with the requirements of Subsection (d)(1).

(3) After completing review of the application for certification and source test report, the Air Pollution Control Officer shall either approve the certification and include the subject model on the list of certified devices, or deny the certification.

(24) A manufacturer shall submit to the Air Pollution Control Officer a new certification application for any unit model whose design is changed in any manner which may alter oxides of nitrogen or carbon monoxide emissions.

(3) Alternatively, to comply with Subsections (f)(1) or (f)(2), a manufacturer may submit to the Air Pollution Control Officer a statement for the unit model certifying it has been approved pursuant to the requirements in the Bay Area Air Quality Management District (BAAQMD) Regulation 9, Rule 7, Section 9-7-406 – Application for Certification.

(g) **REGISTRATION OR PERMIT TO OPERATE REQUIREMENTS**

An owner or operator of any unit subject to this rule and without a current District Permit to Operate shall:

(1) Register the unit with the District in accordance with the applicable requirements of Rule 12 – Registration of Specified Equipment; or

(2) Submit an application for an Authority to Construct/Permit to Operate according to Rule 10 – Permits Required.

(h) **RECORD KEEPING REQUIREMENTS**

(1) An owner or operator of a new unit shall maintain documentation verifying the required annual tune-ups, including but not limited to records of nitrogen oxides and carbon monoxide emissions for compliance with the requirements of Subsection (d)(1) as applicable.

(2) An owner or operator of a new unit subject to the requirements of Subsection (d)(1)(i)(C) shall record the annual average higher heating value and annual usage of each fuel.

(3) An owner or operator of an existing or relocated unit shall maintain documentation verifying the required annual tune-ups.

(4) An owner or operator of any unit which is burning liquid fuel during natural gas curtailment or an emergency shall monitor and record the cumulative annual hours of operation on liquid fuel. At a minimum, these records shall include the dates and times of operation on liquid fuel and any corresponding totalizer readings.

(5) An owner or operator of any unit which is burning liquid fuel for equipment testing purposes shall monitor and record the cumulative annual hours of operation on liquid fuel. At a minimum, these records shall include the dates and times of operation on liquid fuel and any corresponding totalizer readings.

All records shall be maintained onsite for at least three calendar years in electronic and/or hardcopy format and shall be made available to the District upon request.

(i) **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 this rule.

(1) To determine compliance with Subsection (d)(1) for each unit model, a manufacturer of any unit operated on gaseous fuel to be offered for sale within San Diego County shall have the measurements of nitrogen oxides and carbon monoxide concentrations conducted by an independent testing laboratory in accordance with:

(i) San Diego County Air Pollution Control District's Test Method 100 "Test Procedures for the Determination of Nitrogen Oxides, Carbon Monoxide, and Diluent Gases by Continuous Emission Monitoring," May 1995, or its most current version approved by the U.S. Environmental Protection Agency (EPA), or

(ii) Bay Area Air Quality Management District Manual of Procedures,

Volume IV, ST-13A "Oxides of Nitrogen, Continuous Sampling," July 2017, and ST-6 "Carbon Monoxide, Continuous Sampling," July 2017, and ST-14 "Oxygen, Continuous Sampling," January 1982, or the most current versions approved by EPA.

(2) To determine compliance with Subsection (d)(1), at the time of boiler tune-up the owner or operator of any new unit shall conduct the measurements of nitrogen oxides and carbon monoxide concentrations using a portable NOx and CO analyzer in accordance with ASTM Test Method D-6522-11 (Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers), or its most current version.

(3) Certification of the higher heating value of a fuel as required by Subsection (h)(2), if not provided by a third party fuel supplier, shall be determined by one of the following methods:

(i) ASTM Test Method D240-17 (Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter) or D4809-18 (Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter - Precision Method), or their most current versions, for liquid hydrocarbon fuels.

(ii) ASTM Test Method D1826-94(2017) (Standard Test Method for Calorific (Heating) Value of Gases in Natural Gas Range by Continuous Recording Calorimeter), or D1945-14 (Standard Test Method for Analysis of Natural Gas by Gas Chromatography), in conjunction with ASTM Test Method D3588-98(2017) (Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels), or their most current versions, for gaseous fuels.

(4) 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.

(j) COMPLIANCE SCHEDULE

(1) Any person installing a new unit shall comply with all applicable requirements of this rule by January 1, 2021.

(2) An owner or operator of any existing or relocated unit shall:

(i) By January 1, 2021, submit to the Air Pollution Control Officer an application for registration; or

(ii) By January 1, 2021, submit to the Air Pollution Control Officer an application for an Authority to Construct/Permit to Operate; and

(iii) By July 1, 2021, comply with all applicable requirements of this rule.

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 5/09/12 Rev. Adopted & Effective 5/11/16 Rev. Adopted & Effective 10/30/19 Rev. Adopted (*date of adoption*) & Effective 1/1/21

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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 - Permits Required.

(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 - Visible Emissions or Rule 51 - Nuisance 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 - Permits Required 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) 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 – Toxic <u>Air Contaminants – New Source Review</u>, 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<u>—</u><u>Definitions</u>.

(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 May 11, 2016.

(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 – Definitions.

(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 $1,000 \text{ ft}^2/\text{hr}$ or higher; or an operation where the print capacity of any individual printer that uses water-based or UV inks is $10,000 \text{ ft}^2/\text{hr}$ or higher.

(17) **"Major Stationary Source"** means the same as defined in Rule 20.1 – New Source Review – General Provisions.

(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) **"Pharmaceutical Products"** means any substances resulting from preparing, preserving or compounding of medicinal drugs, vitamins or other materials used to enhance personal health. Cannabis products, including any cannabis products intended for external use, are not pharmaceutical products.

(22) **"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.

(23) **"Portable Emission Unit"** means the same as defined in Rule 20.1 – New Source Review – General Provisions.

(24) **"Preservative Oils and Compounds"** means materials which do not contain solids, and are applied to prevent corrosion and/or to provide lubrication.

(25) **"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.

(26) **"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.

(27) **"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.

(28) **"Stationary Internal Combustion Engine"** means a spark or compression ignited, reciprocating internal combustion engine that is not a portable emission unit.

(29) "Stationary Source" means the same as defined in Rule 2 – Definitions.

(30) **"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 oxy-fuel spraying, plasma spraying, and twin-wire electric arc spraying.

(31) **"Toxic Air Contaminant"** means the same as defined in Rule 2 – Definitions.

(32) **"Volatile Organic Compound (VOC)"** means the same as defined in Rule 2<u>—</u><u>Definitions</u>.

(33) **"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.

(34) **"Volatile Organic Solvent"** means an organic solvent with an initial boiling point of less than 400° F (204°C).

(35) **"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 – Permits Required. 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.

Regulation II

(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, <u>or water heater</u> with a manufacturer's maximum gross heat input rating of less than:

(A) <u>less than 1 million BTU per hour fired with any fuel, or</u>

(B) 5-2 million BTU per hour <u>or less fired exclusively</u> 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.

Regulation II

(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 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 – Receiving & Storing of Volatile Organic Compounds at Bulk Plants & Bulk Terminals.

(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 – Permit and Other Fees 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.

Regulation II

(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 ft²/hr, or an operation where the print capacity of any individual printer which uses water-based or UV inks is less than 10,000 ft²/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) Any polyester resin operation (portable or stationary) where the VOC emissions from the application of polyester resin materials are 150 pounds or less per consecutive 12-month period. All records necessary to calculate VOC emissions, such as VOC content of each material applied, monomer content, and daily or monthly usage records of such materials must be maintained on-site for three years to claim applicability of this exemption.

(ix) 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 materials with a VOC content of 25 grams per liter (g/l) (0.21 lbs/gal) of material or less, as used.

- (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.

Subsection (d)(16)(ix)(E) does not apply to cold solvent cleaning or

stripping operations and/or vapor degreasing operations as defined in Rules

67.6.1 - Cold Solvent Cleaning and Stripping Operations and Rule 67.6.2 -

Vapor Degreasing Operations.

(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. This exemption also does not apply to the transfer of volatile organic liquids into vehicle fuel tanks.

(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 – Receiving & Storing of Volatile Organic Compounds at Bulk Plants & Bulk Terminals.

(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.

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(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 and municipal water reclamation facilities each with a design throughput capacity of less than one million gallons of wastewater per day. Municipal wastewater pump stations with an annual average actual throughput of less than one million gallons of wastewater per day. Records of daily throughput shall be maintained on-site for three years and be made available to the District upon request.

(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 – Portable Equipment Registration. 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_ <u>Registration of Specified Equipment</u>.

(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)(33) 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.

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(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 October 30, 2019, 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 October 30, 2020.

RULE 12. REGISTRATION OF SPECIFIED EQUIPMENT

(Adopted 5/21/97; Rev. Effective 11/15/00; Rev. Effective 10/30/19; Rev. Effective 1/1/21)

(a) **APPLICABILITY**

(1) This rule applies to the following emission units:

 (i) Existing internal combustion emergency standby engines. <u>Such engines</u> <u>shall not be subject to Rule 69.4.1 – Stationary Reciprocating Internal Combustion</u> <u>Engines.</u>

 (ii) Existing stationary internal combustion engines rated at 200 brake horsepower or less which operate less than 200 hours per calendar year. <u>Such</u> <u>engines shall not be subject to Rule 69.4.1 – Stationary Reciprocating Internal</u> <u>Combustion Engines.</u>

(iii) Asphalt roofing kettles and asphalt roofing day tankers.

(iv) Any boiler, process heater or steam generator with a heat input rating greater than 2 million Btu per hour to less than 5 million Btu per hour, and fired exclusively with natural gas and/or liquefied petroleum gas.

(v) Paper shredders with a maximum throughput capacity of greater than 600 pounds per hour, either as rated by the manufacturer or as stated in writing by the manufacturer for the current configuration. This does not include hammer mills or any associated power units.

(vi) Grain silos used to brew beer at breweries that produce less than 100,000 barrels (3.1 million gallons) of beer per calendar year.

(2) This rule does not mandate the registration of any emission unit listed in Subsection (a)(1).

(3) Any emission unit registered under this rule shall be exempt from the requirements of Rule 10 – Permits Required and from the requirements of New Source Review Rules 20.1 through 20.8, inclusive.

(4) Registration under this rule or under District Rule 12.1<u>-</u>(Portable Equipment Registration), or by the California Air Resources Board pursuant to Health and Safety Code Section 41752, may be used in lieu of permitting. Any emission unit registered under this rule shall be precluded from simultaneously obtaining a Permit to Operate.

San Diego County Air Pollution Control District Regulation II – Post-Workshop Draft (12/03/19) -1(5) Except as provided in Subsection (a)(3), compliance with this rule shall not exempt any emission unit specified in Subsection (a)(1) from meeting all other applicable requirements of these Rules and Regulations.

(b) **RESERVED**

(c) **DEFINITIONS**

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

(1) **"Boiler"** means any combustion equipment fired with gaseous and/or liquid fuel and used to produce steam or to heat water. This does not include waste heat recovery boilers that are used to recover heat from the exhaust of gas turbines or internal combustion engines, or any waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

(2) <u>"Btu" means British Thermal Unit.</u>

(4<u>3</u>) **"California Diesel Fuel"** means any fuel that is commonly or commercially known, sold or represented as diesel fuel No. 1-D or No. 2-D, and which meets the requirements specified in Sections 2281 and 2282 of Title 13 of the California Code of Regulations.

(24) "Certificate of Compliance" means a statement in a specified format which is completed by an applicant, and which contains prohibitory rules and conditions of operation applicable to the operation of a registered emission unit.

(35) "Certificate of Registration" or "Certificate" means a written document issued by the Air Pollution Control Officer, granting authority to operate an emission unit in lieu of a Permit to Operate.

(4<u>6</u>) **"Emergency Situation"** means any one of the following:

(i) An unforeseen electrical power failure from the serving utility or on-site electrical transmission equipment.

(ii) An unforeseen flood or fire or a life-threatening situation.

(iii) Operation of emergency generators for Federal Aviation Administration licensed airports for the purpose of providing power in anticipation of a power failure due to severe storm activity.

An emergency situation shall not include operation for purposes of supplying power for distribution to an electrical grid, operation for training purposes, or other foreseeable events. (57) "Emergency Standby Engine" means an engine used exclusively in emergency situations to drive an electrical generator, an air compressor or a water pump, except for operations up to 52 hours per calendar year for non-emergency purposes.

(68) **"Emission Unit"** means the same as defined in Rule 2 – Definitions.

(7<u>9</u>) **"Existing Engine"** means an engine which commenced operation in San Diego County on or before November 15, 2000. Engines used to replace an existing engine pursuant to Rule 11 Subsection (d)(5) do not qualify as existing engines.

(810) **"Portable Emission Unit"** means an emission unit that is designed to be and capable of being carried or moved from one location to another. Indicia of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer or platform. For the purposes of this rule, dredge engines on a boat or barge are considered portable. An emission unit is not portable if any of the following apply:

(i) The unit, or its replacement, is attached to a foundation or, if not so attached, will reside at the same location for more than 12-consecutive months. Any portable emission unit such as a backup or standby unit that replaces a portable emission unit at a location and is intended to perform the same function as the unit being replaced will be included in calculating the consecutive time period. In that case, the cumulative time of all units, including the time between the removal of the original unit(s) and installation of the replacement unit(s), will be counted toward the consecutive time period; or

(ii) The emission unit remains or will reside at a location for less than 12consecutive months if the unit is located at a seasonal source and operates during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and operates at that single location at least three months each year, or

(iii) The emission unit is moved from one location to another in an attempt to circumvent the portable emission unit residence time requirements.

Days when a portable emission unit is stored in a designated holding or storage area shall not be counted towards the above time limits, provided the emission unit was not operated on that calendar day except for maintenance and was in the designated holding or storage area the entire calendar day.

(11) **"Process Heater"** means any combustion equipment fired with liquid and/or gaseous fuel and which 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 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.

(9<u>12</u>) "**Registered Emission Unit**" means an emission unit that has a valid Certificate of Registration.

(1013) "**Registration**" means the process of obtaining a Certificate of Registration for an emission unit. Registration is the same as "permit" as used in Division 26 of the California Health and Safety Code, Part 3, Chapter 8 and Part 4, Chapter 4, Articles 2 and 4, respectively entitled Hearing Boards, Variances, and Orders of Abatement. The Air Pollution Control Officer and the Hearing Board shall have the same authority concerning registration as with permits, and the owner or operator of registered equipment shall be entitled to the same privileges and rights granted to a permittee.

 $(\underline{1114})$ "**Rental Emission Unit**" means an emission unit temporarily rented or leased to operators other than the owner(s) of the unit.

(12<u>15</u>) **"Stationary Source" or "Source"** means the same as defined in Rule 2<u>—</u><u>Definitions</u>.

(13<u>16</u>) "Stationary Internal Combustion Engine" means a spark or compression ignited, reciprocating internal combustion engine which is not a portable emission unit.

(17) "Steam Generator" means any combustion equipment fired with gaseous and/or liquid fuel and used to produce steam or to heat water. This does not include waste heat recovery boilers that are used to recover heat from the exhaust of gas turbines or internal combustion engines, or any waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

(d) **REQUIREMENTS**

Emission units registered under this rule shall comply with these rules and regulations and the following requirements, as applicable:

(1) An internal combustion emergency standby engine shall be operated only during emergency situations and for not more than 52 hours per calendar year for nonemergency purposes. Operation for testing or maintenance purposes may be allowed for not more than 100 hours per calendar year with written authorization from the Air Pollution Control Officer, provided that an owner or operator demonstrates to the satisfaction of the Air Pollution Control Officer that such additional operation is necessary.

(2) An engine operating on diesel fuel shall use only California Diesel Fuel.

(3) An engine shall have a non-resettable hour or fuel meter installed that measures elapsed operating time or fuel usage, respectively.

(4) An owner or operator of an engine shall conduct periodic maintenance of the engine as recommended by the engine manufacturer or as specified by any other maintenance procedures approved in writing by the Air Pollution Control Officer. The periodic maintenance shall be conducted at least once each calendar year.

(5) An asphalt roofing kettle or asphalt day tanker shall have an identification tag or serial number stamped, welded or engraved in a visible, accessible location on the kettle or tanker; shall not be operated above $525^{\circ}F(274^{\circ}C)$ and shall be equipped with a functional temperature gauge, temperature control thermostat, and a lid which shall be closed at all times when the unit is operating except for loading asphalt.

(6) An owner or operator of a boiler, process heater or steam generator registered under this rule shall comply with all applicable requirements of Rule 69.2.2 – Medium Boilers, Process Heaters, and Steam Generators.

(7) Grain silos shall be equipped with a filter in good operating condition during pneumatic transferring and receiving of grain. Manufacturer's specifications or engineering data demonstrating a minimum particulate matter control efficiency of 90 percent by weight for PM_{10} shall be retained on site and made readily available to the District upon request. There shall be no leakage from silos and ducting prior to treatment in the filter.

(8) Paper shredders and any associated air pollution control devices shall be operated in accordance with all manufacturer's instructions. Manufacturer's instructions shall be retained with the shredder and made readily available to the District upon request.

(9) Paper shredders shall not discharge into the atmosphere from any single source of emissions any air contaminant for a period or periods aggregating more than three minutes in any one hour which has an opacity as to obscure an observer's view to a degree equal to or greater than does smoke of a shade designated Ringelmann 1 or equivalent 20 percent opacity.

(10) Paper shredders shall not discharge such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health or safety of any such persons or the public; or which cause or have a natural tendency to cause injury or damage to business or property.

(e) **REGISTRATION OF EMISSION UNITS**

(1) Application for Certificate of Registration

To apply for a Certificate of Registration, an owner or operator shall submit to the District, a completed Permit/Registration application form, a Certificate of Compliance, and any additional information determined by the Air Pollution Control Officer as necessary to demonstrate eligibility for registration. The applicable fees specified in Rule 40 - Permit and Other Fees shall also be paid. No application for registration shall be considered received unless accompanied by a Certificate of Compliance and the appropriate fees. A separate application is required for each emission unit.

(2) Action on Applications

(i) The Air Pollution Control Officer shall inform the applicant in writing, within 30 days of receipt of an application for registration, if the application is complete or incomplete. If incomplete, the written notice shall specify the additional information necessary to complete the application. When the additional information is received and the application is determined complete, the applicant shall be so notified.

(ii) An application for registration shall be canceled if additional information necessary to complete the application is not furnished within 90 days of such request, or if the Air Pollution Control Officer determines that the emission unit is not eligible to be registered under this rule.

(iii) An application for registration shall be withdrawn if the applicant requests such action in writing to the Air Pollution Control Officer. An application that is withdrawn by the applicant shall subsequently be canceled.

(iv) An application for registration shall be denied if the Air Pollution Control Officer finds that the emission unit will not comply with the applicable requirements of Section (d) of this rule, or other applicable District Rules and Regulations.

(v) The Air Pollution Control Officer shall issue a Certificate of Registration within a maximum of 90 days after an application for registration is deemed complete if the emission unit meets all applicable requirements of Section (d) of this rule.

(vi) Notice of any action taken shall be deemed to have been given when written notification has been delivered to the applicant or the applicant's representative.

(3) Conditions on Certificate of Registration

The Air Pollution Control Officer may issue a Certificate subject to temporary or permanent conditions which ensure compliance with these Rules and Regulations and applicable state laws and regulations. Operating a registered emission unit constitutes acceptance of all conditions specified on the Certificate.

(4) Maintenance of Certificate of Registration

An owner or operator whose emission unit has been issued a Certificate shall:

- (i) Comply with all conditions listed on the Certificate;
- (ii) Renew the Certificate annually pursuant to Subsection (f)(1) of this rule;

(iii) Maintain records, as applicable, in accordance with the requirements of Section (g) of this rule;

(iv) Display the current Certificate or a copy of the current Certificate in a clearly visible and accessible place within 25 feet of the emission unit. If the unit is so constructed or operated that the Certificate cannot be so placed, it shall be kept on the premises and be made readily available to the District at all times; and

(v) Not willfully deface, alter, forge, counterfeit or falsify any Certificate issued under this rule.

(f) **ADMINISTRATION OF CERTIFICATE OF REGISTRATION**

(1) **Renewal of Certificate of Registration**

(i) Current Certificate of Registration

Any person who holds a valid Certificate and who desires to maintain the Certificate after the expiration date shall, prior to the expiration date, pay the applicable renewal and processing fees specified in Rule 40<u>– Permit and Other Fees</u>. Any Certificate not reinstated within six months of the expiration date will be retired.

(ii) Expired Certificate of Registration

An expired Certificate may be reinstated within the first six months following the expiration date by paying the applicable renewal and processing fees and the appropriate late fees specified in Rule 40<u>– Permit and Other Fees</u>.

(2) Change of Status for Certificate of Registration

(i) Conversion to Inactive Status

Any person who holds a valid Certificate and chooses not to operate the emission unit, may apply to the Air Pollution Control Officer for a revised Certificate indicating the unit is to be registered in an inactive status. The application shall be accompanied by the applicable application and renewal fees specified in Rule 40<u>–</u> <u>Permit and Other Fees</u>. Operation of an emission unit registered in an inactive status shall constitute a violation of Subsection (e)(4)(i) of this rule. Any portable emission unit registered in an inactive status shall be stored at a fixed address provided to the Air Pollution Control Officer. All Certificates for emission units in inactive status shall be renewed annually.

(ii) Removal of Inactive Status

Any person who holds a valid Certificate for an emission unit in an inactive status and chooses to operate the unit shall first apply for and obtain a revised Certificate indicating the unit is now in an active status. The application shall be accompanied by the applicable application and renewal fees specified in Rule 40—Permit and Other Fees.

(3) Change of Location

Any person who holds a valid Certificate and who desires to change the location of the registered emission unit shall first apply for and obtain a revised Certificate from the Air Pollution Control Officer. The application shall be accompanied by the applicable application and processing fees specified in Rule 40 – Permit and Other Fees. This provision shall not apply to any change of location within a stationary source or any change of location for a portable emission unit.

(4) Transfer of Ownership

The ownership of a valid Certificate may be transferred by applying for and obtaining a revised Certificate from the Air Pollution Control Officer. The application shall include a completed Permit/Registration application form and a Certificate of Compliance. Such application shall be deemed a temporary Certificate if accompanied by the applicable application fees specified in Rule 40 – Permit and Other Fees. The temporary Certificate shall be subject to all the terms and conditions of the current Certificate and shall expire upon receipt of a revised Certificate. An application for transfer of ownership shall not be deemed a temporary Certificate if the emission unit is in an inactive status. A new application shall be required if the emission unit has been modified.

(g) RECORD KEEPING

The owner or operator of a registered emission unit shall maintain the applicable records listed below. The records shall be retained on-site for at least three years and be made available to the District upon request.

(1) An owner or operator of an engine shall maintain the following records:

(i) An operating log, which at a minimum, includes the following:

(A) records of periodic engine maintenance including dates maintenance was performed; and

(B) total cumulative hours of operation per calendar year, based on actual readings of the engine hour or fuel meter; and

(C) dates and times of emergency standby engine operation, if applicable. Each entry shall indicate whether the operation was for nonemergency purposes or during an emergency situation and the nature of the emergency, if available. Individual date and time of engine operation records are not required if total operations for any purpose, including emergency situations, do not exceed 52 hours in a calendar year; and

(ii) California Diesel Fuel certifications, if fueled with diesel fuel; and

(iii) A manual of recommended maintenance procedures as provided by the engine manufacturer, or other maintenance procedures as approved in writing by the Air Pollution Control Officer.

(2) An owner or operator of any emission unit specified in Subsection (a)(1) which is operated as a rental emission unit shall maintain the following records, as applicable:

(i) The owner of a rental emission unit shall provide the operator with a copy of the Certificate and the recordkeeping requirements specified in Subsection (g)(1) as part of the emission unit rental agreement. The owner shall maintain written acknowledgment by the operator of receiving the above information.

(ii) During the duration of a rental agreement or contract, the operator of a rental emission unit shall be responsible for compliance with the recordkeeping requirements of this rule and the terms and conditions on the Certificate applicable to operation of the unit. The operator shall furnish the records specified in Subsection (g)(1), to the owner of the rental emission unit upon return of the unit.

(3) An owner or operator of a boiler, process heater or steam generator registered under this rule shall comply with the record keeping requirements specified in Rule 69.2.2 – Medium Boilers, Process Heaters, and Steam Generators.