RULE 102. DEFINITIONS. (Adopted 10/18/1971, revised 1/12/1976, readopted 10/23/1978, revised 7/11/1989, 7/10/1990, 7/30/1991, 7/18/1996, 4/17/1997, 1/21/1999, 5/20/1999, 6/19/2003, 1/20/2005, 6/19/2008, 1/15/2009, 9/20/2010, ~~and~~ 3/17/2011, and [*date of amended rule adoption*])

These definitions apply to the entire rulebook. Definitions specific to a given rule are defined in that rule or in the first rule of the relevant regulation. Except as otherwise specifically provided in these Rules where the context otherwise indicates, words used in these Rules are used in exactly the same sense as the same words are used in Division 26 of the Health and Safety Code.

[. . .]

"Capture Efficiency" means the percentage by weight of affected pollutants delivered to a control device divided by the weight of total affected pollutants generated by the source.

Comment [A1]: The term is found in proposed amended Rules 330, 337, 349, and 353. To avoid ambiguity, this definition, and other add-on control equipment definitions (e.g., **control device** and **control device efficiency**), are being added. To avoid redundancy in Rules 330, 337, 349, and 353, the District is adding the definitions to Rule 102.

[. . .]

"Control Device" means any destruction and/or recovery equipment used to destroy or recover affected pollutant emissions generated by a regulated operation.

"Control Device Efficiency" means the percentage of affected pollutants entering a control device that is not present in the exhaust to the atmosphere of that control device.

[. . .]

"Enclosed Cleaning System" means any application equipment cleaner (e.g., an enclosed gun washer) that totally encloses spray guns, cups, nozzles, bowls, and other parts during solvent washing, rinsing, and draining procedures. An enclosed cleaning system for cleaning application equipment is not a solvent cleaning machine.

Comment [A2]: This definition is being added per requests from industry. The term appears in current Rule 321 and PARs 337 and 353. Hence, we are placing the definition in Rule 102.

[. . .]

"Exempt Compound" means any compound listed as an exempt compound in the definition of **"**Reactive Organic Compound.**"** Tertiary-butyl acetate (also known as t-butyl acetate or tBAc) shall be considered exempt as a reactive organic compound only for purposes of reactive organic compound emissions limitations or reactive organic compound content requirements and shall be considered a reactive organic compound for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling, and inventory requirements which apply to reactive organic compounds.

Comment [A3]: Adding the **exempt compound** definition here eliminates the need to insert the same definition into other rules. The tBAc qualifier addresses EPA concerns.

[. . .]

"Fluorinated Gases" means a compound that contains fluorine and exists in a gaseous state at 25 degrees Celsius and 1 atmosphere of pressure. Fluorinated gases include, but are not limited to:

1. hexafluoroethane (C_2F_6), (CFC-116),
2. octafluoropropane (C_3F_8), (PFC 218),
3. octafluorocyclopentene (C_5F_8), (PFC C-1418),
4. tetrafluoromethane (CF_4), (CFC-14),
5. trifluoromethane (CHF_3), (HFC-23),
6. difluoromethane (CH_2F_2), (HFC-32),
7. octafluorocyclobutane (c-C_4F_8), (RC 318),
8. octafuorotetrahydrofuran (C_4F_8O),
9. hexafluoro-1,3-butadiene (C_4F_6),
10. carbon fluoride oxide (COF_2),
11. nitrogen trifluoride (NF_3), and
12. sulfur hexafluoride (SF_6).

Comment [A4]: Adding chemical names here follows the protocol used in the **exempt compound** list within the **reactive organic compound** definition.

[. . .]

"Overall Efficiency" means the emission reduction, expressed as a percentage that results from the combined effect of capture and control of affected pollutants (capture efficiency multiplied by control efficiency).

[. . .]

"**Reactive Organic Compound"** means any compound containing at least one (1) atom of carbon, except for the following exempt compounds:

1. acetone
2. ammonium carbonate
3. carbon dioxide
4. carbon monoxide
5. carbonic acid
6. dimethyl carbonate
7. ethane
8. metallic carbides or carbonates
9. methane
10. methyl acetate
11. methyl chloroform (1,1,1-trichloroethane)
12. methyl formate; $HCOOCH_3$
13. cyclic, branched, or linear completely methylated siloxane compounds
14. methylene chloride
15. parachlorobenzotrifluoride
16. perchloroethylene (tetrachloroethylene)
17. the following four classes of perfluorocarbon (PFC) compounds:
    a. cyclic, branched, or linear, completely fluorinated alkanes,
    b. cyclic, branched, or linear, completely fluorinated ethers with no unsaturations,
    c. cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, and
    d. sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
18. propylene carbonate
19. tertiary-butyl acetate; $C_6H_{12}O_2$ ("acetic acid, 1,1-dimethylethyl ester")

    Tertiary-butyl acetate (also known as t-butyl acetate or tBAc) shall be considered exempt as a reactive organic compound only for purposes of reactive organic compound emissions limitations or reactive organic compound content requirements and ~~will continue to~~ shall be considered a reactive organic compound for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling, and inventory requirements which apply to reactive organic compounds.

20. CFC-11 (trichlorofluoromethane)
21. CFC-12 (dichlorodifluoromethane)
22. CFC-113 (1,1,2-trichloro-1,2,2-trifluoroethane)
23. CFC-114 (1,2-dichloro 1,1,2,2-tetrafluoroethane)
24. CFC-115 (chloropentafluoroethane)
25. HCFC-22 (chlorodifluoromethane)
26. HCFC-31 (chlorofluoromethane)
27. HCFC-123 (1,1,1-trifluoro 2,2-dichloroethane)
28. HCFC-123a (1,2-dichloro-1,1,2-trifluoroethane)
29. HCFC-124 (2-chloro-1,1,1,2-tetrafluoroethane)

30. HCFC-141b (1,1-dichloro 1-fluoroethane)
31. HCFC-142b (1-chloro-1,1 difluoroethane)
32. HCFC-151a (1-chloro-1-fluoroethane)
33. HCFC-225ca (3,3-dichloro-1,1,1,2,2-pentafluoropropane)
34. HCFC-225cb (1,3-dichloro-1,1,2,2,3-pentafluoropropane)
35. HFC-23 (trifluoromethane)
36. HFC-32 (difluoromethane)
37. HFC-43-10mee (1,1,1,2,3,4,4,5,5,5-decafluoropentane)
38. HFC-125 (pentafluoroethane)
39. HFC-134 (1,1,2,2-tetrafluoroethane)
40. HFC-134a (1,1,1,2-tetrafluoroethane)
41. HFC-143a (1,1,1-trifluoroethane)
42. HFC-152a (1,1-difluoroethane)
43. HFC-161 (ethylfluoride)
44. HFC-227ea (1,1,1,2,3,3,3-heptafluoropropane)
45. HFC-236ea (1,1,1,2,3,3-hexafluoropropane)
~~45~~46. HFC-236fa (1,1,1,3,3,3-hexafluoropropane)
~~46~~47. HFC-245ca (1,1,2,2,3-pentafluoropropane)
~~47~~48. HFC-245ea (1,1,2,3,3-pentafluoropropane)
~~48~~49. HFC-245eb (1,1,1,2,3-pentafluoropropane)
~~49~~50. HFC-245fa (1,1,1,3,3-pentafluoropropane)
~~50~~51. HFC-365mfc (1,1,1,3,3-pentafluorobutane)
~~51~~52. HFE-7000; n-$C_3F_7OCH_3$; (1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane)
53. HFE-7100; $(CF_3)_2CFCF_2OCH_3$; (2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane) or $C_4F_9OCH_3$; (1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane)
~~52~~54. HFE-7200; $(CF_3)_2CFCF_2OC_2H_5$; (2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane) or $C_4F_9OC_2H_5$; (1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane)
55. HFE-7300; ((1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy- 4-trifluoromethyl-pentane)
56. HFE-7500; (3-ethoxy- 1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2- (trifluoromethyl) hexane)

Rule 202.D.10.l.1 requires an Authority to Construct and Permit to Operate when using more than one gallon per year per stationary source of any one of the following exempt compounds:

(6) dimethyl carbonate,	(37) HFC-43-10mee,
(12) methyl formate,	(50) HFC-245fa,
(33) HCFC-225ca,	(51) HFC-365mfc, or
(34) HCFC-225cb,	(53) HFE-7100 [$(CF_3)_2CFCF_2OCH_3$ or $C_4F_9OC_2H_5$]

Rule 202.D.10.l.2 requires an Authority to Construct and Permit to Operate when using more than one gallon per year per stationary source of: (19) tertiary-butyl acetate.

The one gallon per year per stationary source limit is a per compound limit for each compound in aggregate for the entire stationary source and includes any amounts of the compound used in mixed or diluted product.

[. . .]

"South Coast Air Quality Management District Method 313-91, 'Determination of Volatile Organic Compounds by Gas Chromatography-Mass Spectrometry,'" June 1993, means the test method adopted by and in effect by the South Coast Air Quality Management District on [*date of amended rule adoption*].

[. . .]

"Temporary Total Enclosure" means any total enclosure that is constructed for the sole purpose of measuring the emissions from an affected source that are not delivered to an emission control device. A

Comment [A5]: EPA's definition of **volatile organic compounds** in 40 CFR, Part 51.100(s) includes HFC-227ea. The same is true for the other compounds we are adding (52, 55, and 56).

Comment [A6]: The data is reformatted into two columns with the compound's item number added for ease of reference.

temporary total enclosure must be constructed and ventilated (through stacks suitable for testing) so that it has minimal impact on the performance of the permanent emission capture system. A temporary total enclosure will be assumed to achieve total capture of fugitive emissions if it meets the requirements found in 40 CFR Section 63.750(g)(4) and if all natural draft openings are at least four duct or hood equivalent diameters away from each exhaust duct or hood. Alternatively, the owner or operator may apply to the Administrator for approval of a temporary enclosure on a case-by-case basis.

"Total Enclosure" means any permanent structure that is constructed around a gaseous emission source so that all gaseous pollutants emitted from the source are collected and ducted through a control device, such that 100 percent capture efficiency is achieved. There are no fugitive emissions from a total enclosure. The only openings in a total enclosure are forced makeup air and exhaust ducts and any natural draft openings such as those that allow raw materials to enter and exit the enclosure for processing. All access doors or windows are closed during routine operation of the enclosed source. Brief, occasional openings of such doors or windows to accommodate process equipment adjustments are acceptable, but if such openings are routine or if an access door remains open during the entire operation, the access door must be considered a natural draft opening. The average inward face velocity across the natural draft openings of the enclosure shall be calculated including the area of such access doors. The drying oven itself may be part of the total enclosure. An enclosure that meets the requirements found in 40 CFR Section 63.750(g)(4) is a permanent total enclosure.

[. . .]