PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 101
TITLE

Adopted 11-12-74
(Revised 05-24-77, 06-19-79, 05-27-86, 10-19-93)

These Rules and Regulations, adopted pursuant to Section 40702 of the California Health and Safety Code, shall be known as the Rules of the Air Pollution Control District of the County of Placer.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 102
DEFINITIONS

Adopted 11-12-74
(Amended 5-24-77, 12-19-78, 6-19-79, 5-20-85, 2-04-92, 8-08-96, 6-19-97)

CONTENTS

100 GENERAL

101 PURPOSE

200 DEFINITIONS

201 AGRICULTURAL BURNING
202 AGRICULTURAL OPERATION
203 AGRICULTURAL WASTES
204 AIR CONTAMINANT
205 AIR POLLUTION CONTROL OFFICER
206 ALTERATION
207 APPROVED IGNITION DEVICES
208 ARB
209 BOARD
210 BRUSH TREATED
211 BULK PLANT
212 CITRUS HEATER
213 COMBUSTIBLE WASTE
214 COMBUSTION CONTAMINANT
215 CONDENSED FUMES
216 CONSTRUCTION-DEMOLITION DEBRIS
217 DESIGNATED AGENCY
218 DISTRICT
219 DUST
220 EMISSION
221 EMISSION POINT
222 EXEMPT COMPOUNDS
223 FLAMMABLE WASTE
224 FLUE
225 FOREST MANAGEMENT BURNING
226 FOSSIL FUEL
227 FOSSIL FUEL-FIRED STEAM GENERATOR
228 HEARING BOARD
229 HYDROCARBON
230 INCINERATION
231 INCINERATOR
232 INSTALLATION
233 LAKE TAHOE AIR BASIN

234 NO-BURN DAY
235 OPEN OUTDOOR FIRE
236 OPERATOR
237 ORCHARD HEATER
238 OWNER
239 PARTICULATE MATTER
240 PERMISSIVE BURN DAY
241 PERSON
242 POLLUTANT
243 PROCESS WEIGHT PER HOUR
244 PUBLIC RECORD
245 RANGE IMPROVEMENT BURNING
246 RECORD
247 RESIDENTIAL RUBBISH
248 SECTION
249 SILVICULTURAL PRACTICES
250 SOLID PARTICULATE MATTER
251 SOLID WASTE DUMP
252 STANDARD CONDITIONS
253 STANDARD CUBIC FOOT OF GAS
254 TIMBER OPERATIONS
255 VOLATILE ORGANIC COMPOUND (VOC)
256 WOOD-FIRED BOILER

300 STANDARDS
(NOT INCLUDED)

400 ADMINISTRATIVE REQUIREMENTS
(NOT INCLUDED)

500 MONITORING AND RECORDS
(NOT INCLUDED)

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100 GENERAL

101 PURPOSE: To provide definitions of specific terms used in the Placer County Air Pollution Control District Rules and Regulations.

200 DEFINITIONS

PROVISO: Except as otherwise specifically provided in these Rules, and except where the context otherwise indicates, words used in these Rules are used in exactly the same sense as the same words are used in the Health and Safety Code of the State of California.

201 AGRICULTURAL BURNING: Open outdoor fires used in agricultural operations in the growing of crops or raising of fowl or animals or open outdoor fires used in forest management, range improvement, or the improvement of land for wildlife and game habitat or disease or pest prevention or the use of open outdoor fires used in the operation or the maintenance of a system for the delivery of water.

202 AGRICULTURAL OPERATION: The growing and harvesting of crops, raising of fowl or animals for the primary purpose of making a profit or providing a livelihood, or the conducting of agricultural research or instruction by

an educational institution.

203 AGRICULTURAL WASTES: The unwanted or unsellable materials produced wholly from agricultural operations and materials not produced from agricultural operations, but which are intimately related to the growing or harvesting of crops.

204 AIR CONTAMINANT: Any discharge, release or other propagation directly into the atmosphere. It includes, but is not limited to, smoke, dust, charred paper, soot, grime, carbon, noxious acids, fumes, gases, odors, particulate matter, or any combination thereof.

205 AIR POLLUTION CONTROL OFFICER: The Air Pollution Control Officer of the Placer County Air Pollution Control District, or designee.

206 ALTERATION: Any addition to, enlargement of, replacement of, or any major modification or change of the design, capacity, process, or arrangement, or any increase in the connected loading of equipment or control apparatus, which will significantly increase or affect the kind and/or amount of air contaminants emitted.

207 APPROVED IGNITION DEVICES: Those instruments or materials that will ignite open fires without the production of black smoke by the ignition device. This would include such items as liquid petroleum gas, butane, propane, or diesel oil burners, flares, or other similar material as approved by the Air Pollution Control Officer. This does not include tires, tar, tar paper, oil and other similar materials.

208 ARB: The California State Air Resources Board, or any person authorized to act on its behalf.

209 BOARD: The Board of Directors of the Placer County Air Pollution Control District.

210 BRUSH TREATED: Material which has been felled, crushed or up-rooted with mechanical equipment, or which has been desiccated with herbicides.

211 BULK PLANT: A distribution plant which receives organic liquids; stores them in stationary tanks; and loads them into tank trucks for delivery to other bulk plants, service stations or storage tanks.

212 CITRUS HEATER: Any article, machine, equipment, or other contrivance, burning any type of fuel or material capable of emitting air contaminants, used or capable of being used for the purpose of giving protection from frost damage.

213 COMBUSTIBLE WASTE: Any garbage, rubbish, trash, rags, paper, boxes, crates, excelsior, ashes, offal, carcass of a dead animal, petroleum product waste or any other combustible or flammable refuse material.

214 COMBUSTION CONTAMINANT: Any particulate matter discharged into the atmosphere from the burning of any material which contains carbon in either the free or the combined state.

215 CONDENSED FUMES: Minute solid particles generated by the condensation of vapors from solid matter after volatilization from the molten state, or may be generated by sublimation, distillation, calcination, or chemical reaction, when these processes create airborne particles.

216 CONSTRUCTION-DEMOLITION DEBRIS: Any material associated with the construction or demolition of any building, dwelling, or other man-made structures, including but not limited to lumber, tar paper, roofing material, wiring, flooring material, insulation, and plywood.

217 DESIGNATED AGENCY: Any agency designated by the ARB and Placer County Air Pollution Control District as having authority to issue Agricultural Burn Permits.

218 DISTRICT: The Placer County Air Pollution Control District.

219 DUST: The minute solid particles released into the air by natural forces or by mechanical processes such as

crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, sweeping, or other similar process.

220 EMISSION: The act of releasing or discharging air contaminants into the atmosphere from any source.

221 EMISSION POINT: The place, located in a horizontal plane and vertical elevation, at which an emission enters the atmosphere.

222 EXEMPT COMPOUNDS: Organic compounds which are exempt from the definition of Volatile Organic Compounds (VOC). Notwithstanding definitions of Exempt Compounds that may be included in specific rules in Regulation II, the following compounds are exempt:

222.1 carbon monoxide
222.2 carbon dioxide
222.3 carbonic acid
222.4 metallic carbides or carbonates
222.5 ammonium carbonate
222.6 methane
222.7 methylene chloride (dichloromethane)
222.8 perchloroethylene (tetrachloroethylene)
222.9 1,1,1-trichloroethane (methyl chloroform)
222.10 trichlorofluoromethane (CFC-11)
222.11 dichlorodifluoromethane (CFC-12)
222.12 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
222.13 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
222.14 chloropentafluoroethane (CFC-115)
222.15 chlorodifluoromethane (HCFC-22)
222.16 1,1,1-trifluloro-2,2-dichloroethane (HCFC-123)
222.17 1,1-dichloro-1-fluoroethane (HCFC-141b)
222.18 1-chloro-1,1-difluoroethane (HCFC-142b)
222.19 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
222.20 trifluoromethane (HFC-23)
222.21 1,1,2,2-tetrafluoroethane (HFC-134)
222.22 1,1,1,2-tetrafluoroethane (HFC-134a)
222.23 pentafluoroethane (HFC-125)
222.24 1,1,1-trifluoroethane (HFC-143a)
222.25 1,1-difluoroethane (HFC-152a)
222.26 cyclic, branched, or linear, completely methylated siloxanes
222.27 The following classes of perfluorocarbons:

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.*
d. *sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds to carbon and fluorine.*

222.28 The following low-reactive organic compounds which have been exempted by the U. S. EPA:

a. *acetone*
b. *ethane*
c. *parachlorobenzotrifluoride*

223 FLAMMABLE WASTE: Any garbage, rubbish, trash, rags, paper, boxes, crates, excelsior, ashes, offal, carcass of a dead animal, petroleum product waste or any other combustible or flammable refuse material.

224 FLUE: Any duct or passage for air or other gases, including but not limited to a stack or a chimney.

225 FOREST MANAGEMENT BURNING: The use of open fires, as part of a forest management practice, to remove forest debris. Forest management practices include timber operations, silvicultural practices and forest production practices.

226 FOSSIL FUEL: Natural gas, petroleum, coal and any form of solid, liquid, or gaseous fuel derived from such materials.

227 FOSSIL FUEL-FIRED STEAM GENERATOR: A furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

228 HEARING BOARD: The Hearing Board of the Air Pollution Control District of Placer County.

229 HYDROCARBON: Any compound of carbon containing hydrogen.

230 INCINERATION: An operation in which combustion is carried on for the principal purpose, or with the principal result of oxidizing a waste material to reduce its bulk or facilitate its disposal.

231 INCINERATOR: Any furnace or other closed fire chamber used to dispose of combustible waste by burning, and from which the products of combustion are directed through a flue or chimney.

232 INSTALLATION: The placement, assemblage, or construction of equipment or control apparatus at the premises where the equipment or control apparatus will be used, including all preparatory work at such premises.

233 LAKE TAHOE AIR BASIN: That area as defined by Section 60113, Title 17, California Administrative Code.

234 NO-BURN DAY: Any day on which agricultural burning is prohibited by the ARB.

235 OPEN OUTDOOR FIRE: Combustion of any combustible material of any type, outdoors in the open air, where the products of combustion are not directed through a flue.

236 OPERATOR: Person who owns, operates, controls or supervises an affected facility, or a stationary source of which an affected facility is a part.

237 ORCHARD HEATER: Any article, machine, equipment, or other contrivance, burning any type of fuel or material capable of emitting air contaminants, used or capable of being used for the purpose of giving protection from frost damage.

238 OWNER: Person who owns, operates, controls or supervises an affected facility, or a stationary source of which an affected facility is a part.

239 PARTICULATE MATTER: Any material except uncombined water, which can exist in a finely divided form as a liquid or solid at standard conditions.

240 PERMISSIVE BURN DAY: Any day on which agricultural burning is not prohibited by the ARB.

241 PERSON: Any person, firm, association, organization, partnership, business trust, corporation, company, contractor, supplier, installer, operator, user, owner, any government agency, public district or any officer or employee thereof.

242 POLLUTANT: Any discharge, release or other propagation directly into the atmosphere. It includes, but is not limited to, smoke, dust, charred paper, soot, grime, carbon, noxious acids, fumes, gases, odors, particulate matter, or any combination thereof.

243 PROCESS WEIGHT PER HOUR: The total weight, including contained moisture, of all materials introduced into any specific process, which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. (The process weight per hour will be derived by dividing the total process weight introduced, by the number of hours in one complete operation, from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle.)

244 PUBLIC RECORD: Any record made available to the public by law, containing information relating to the conduct of the public's business that is prepared, owned, used or retained by the District, except trade secrets.

245 RANGE IMPROVEMENT BURNING: The use of open fires to remove vegetation for a wildlife, game or livestock habitat, or for the initial establishment of an agricultural practice on previously uncultivated land.

246 RECORD: Handwriting, typewriting, printing, photostating, photographing, and every other means of recording upon any form of communication or representation, including letters, words, pictures, sounds, or symbols, or any combination thereof, and all papers, maps, magnetic or paper tapes, photographed films and prints, magnetic or punched cards, magnetic disks, drums, and other documents.

247 RESIDENTIAL RUBBISH: Rubbish originating from a single or two family dwelling on its premises, limited to the following materials: wood, paper, cloth, cardboard, tree trimmings, leaves, lawn clippings and dry plants.

248 SECTION: A Section of the Health and Safety Code of the State of California, unless some other statute is specifically mentioned.

249 SILVICULTURAL PRACTICES: The establishment, development, care and reproduction of stands of timber.

250 SOLID PARTICULATE MATTER: Any material except uncombined water, which can exist in a finely divided form as a solid at standard conditions.

251 SOLID WASTE DUMP: Any accumulation for the purpose of disposal of any solid waste.

252 STANDARD CONDITIONS: A gas temperature of 60 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute. Results of all analyses and tests shall be calculated and reported at this gas temperature and pressure.

253 STANDARD CUBIC FOOT OF GAS: The amount of gas that would occupy a volume of one (1) cubic foot, if free of water vapor, at standard conditions.

254 TIMBER OPERATIONS: Cutting or removal of timber or other forest vegetation.

255 VOLATILE ORGANIC COMPOUND (VOC): Any chemical compound containing at least one atom of carbon except for those listed as "Exempt Compounds"

256 WOOD-FIRED BOILER: Any boiler used for steam generation, from which the products of combustion are directed through a flue or chimney and which derives at least 80 percent of its fuel input heat content from wood, or wood-associated waste.

RULE 102 DEFINITIONS

Adopted 11-12-74
(Amended 5-24-77, 12-19-78, 6-19-79, 5-20-85, 2-04-92, 10-19-93, 8-08-96, 6-19-97, 10-12-00, 8-12-10, 02-10-11, 02-09-12)

CONTENTS

100 GENERAL

101 PURPOSE

200 DEFINITIONS

201 AGRICULTURAL BURNING
202 AGRICULTURAL OPERATION
203 AGRICULTURAL WASTES
204 AIR CONTAMINANT
205 AIR POLLUTION CONTROL OFFICER (APCO)
206 AIR QUALITY
207 ALLOWABLE COMBUSTIBLES
208 ALTERATION
209 APPROVED IGNITION DEVICES
210 ARB
211 BOARD
212 BRUSH TREATMENT
213 BULK PLANT
214 BURN BARREL
215 CITRUS HEATER
216 COMBUSTIBLE
217 COMBUSTIBLE WASTE OR SUBSTANCES
218 COMBUSTION CONTAMINANT
219 CONDENSED FUMES
220 CONSTRUCTION-DEMOLITION DEBRIS
221 DAILY
222 DESIGNATED AGENCY
223 DISALLOWED COMBUSTIBLES
224 DISTRICT
225 DUST
226 EMISSION
227 EMISSION POINT
228 EXEMPT COMPOUNDS
229 FIRE PROTECTION AGENCY
230 FLAMMABLE WASTE
231 FLUE
232 FOREST MANAGEMENT BURNING
233 FOSSIL FUEL
234 FOSSIL FUEL-FIRED STEAM GENERATOR
235 HEARING BOARD
236 HYDROCARBON
237 IMMINENT AND SUBSTANTIAL ECONOMIC LOSS
238 INCINERATION
239 INCINERATOR
240 INSTALLATION
241 LAKE TAHOE AIR BASIN
242 MOUNTAIN COUNTIES AIR BASIN
243 NO-BURN DAY

244 OPEN BURNING OR OPEN OUTDOOR FIRE
245 OPERATOR
246 ORCHARD HEATER
247 OWNER
248 PARTICULATE MATTER
249 PERMISSIVE BURN DAYOR BURN DAY
250 PERSON
251 POLLUTANT
252 PROCESS WEIGHT PER HOUR
253 PUBLIC RECORD
254 QUARTERLY
255 RANGE IMPROVEMENT BURNING
256 RECORD
257 RESIDENCE
258 RESIDENTIAL ALLOWABLE BURN MATERIALS
259 SACRAMENTO VALLEY AIR BASIN
260 SECTION
261 SILVICULTURAL PRACTICES
262 SOLID PARTICULATE MATTER
263 STANDARD CONDITIONS
264 STANDARD CUBIC FOOT OF GAS
265 TIMBER OPERATIONS
266 VOLATILE ORGANIC COMPOUND (VOC)
267 WOOD-FIRED BOILER
268 YEARLY

300 STANDARDS

(NOT INCLUDED)

400 ADMINISTRATIVE REQUIREMENTS

(NOT INCLUDED)

500 MONITORING AND RECORDS

(NOT INCLUDED)

100 GENERAL

101 PURPOSE: To provide definitions of specific terms used in the Placer County Air Pollution Control District Rules and Regulations.

200 DEFINITIONS

PROVISO: Except as otherwise specifically provided in these Rules, and except where the context otherwise indicates, words used in these Rules are used in exactly the same sense as the same words are used in the Health and Safety Code of the State of California.

201 AGRICULTURAL BURNING: Open outdoor fires used in agricultural operations in the growing of crops or raising of fowl or animals or open outdoor fires used in forest management, range improvement, or the improvement of land for wildlife and game habitat or disease or pest prevention or the use of open outdoor fires used in the operation or the maintenance of a system for the delivery of water and wildland vegetation management burning.

202 AGRICULTURAL OPERATION: The growing and harvesting of crops, or raising of fowl or animals for the primary purpose of making a profit or providing a livelihood or the conducting of agricultural research or instruction by an educational institution. Agricultural operations do not include activities involving the processing or distribution of crops or fowl.

203 AGRICULTURAL WASTES: The following materials:

203.1 The unwanted or unsalable materials produced wholly from agricultural operations and materials not produced from agricultural operations, but which are intimately related to the growing or harvesting of crops.

203.2 Materials not produced wholly from agricultural operations, but which are intimately related to the growing or harvesting of crops and which are used in the fields. This includes materials such as fertilizer and pesticide paper sacks or paper containers, where the sacks or containers are emptied in the fields. This does not include, such items as shop wastes, demolition materials, garbage, oil filters, tires, plastic pesticide containers (except for paper pesticide containers), broken boxes, pallets, or other similar material, or orchard or vineyard wastes removed for land use conversion to non-agricultural purposes.

204 AIR CONTAMINANT: Any discharge, release or other propagation directly into the atmosphere. It includes, but is not limited to, smoke, dust, charred paper, soot, grime, carbon, noxious acids, fumes, gases, odors, particulate matter, or any combination thereof.

205 AIR POLLUTION CONTROL OFFICER (APCO): The Air Pollution Control Officer of the Placer County Air Pollution Control District, or designee.

206 AIR QUALITY: The characteristics of the ambient air as indicated by state ambient air quality standards which have been adopted by the ARB pursuant to Section 39606 of the Health and Safety Code and by National Ambient Air Quality Standards which have been established pursuant to Sections 108 and 109 of the federal Clean Air Act pertaining to criteria pollutants and Section 169A of the federal Clean Air Act pertaining to visibility.

207 ALLOWABLE COMBUSTIBLES: Vegetation originating on the premises and reasonably free of dirt, soil, and visible surface moisture.

208 **ALTERATION:** Any addition to, enlargement of, replacement of, or any major modification or change of the design, capacity, process, or arrangement, or any increase in the connected loading of equipment or control apparatus, which will increase or affect the kind and/or amount of air contaminants emitted.

209 **APPROVED IGNITION DEVICES:** Those instruments or materials that will ignite open outdoor fires without the production of black smoke by the ignition device. This would include such items as liquid petroleum gas, butane, propane, or diesel oil burners, flares, or other similar material as approved by the Air Pollution Control Officer. This does not include tires, tar, tar paper, oil and other similar materials.

210 **ARB:** The California State Air Resources Board or any person authorized to act on its behalf.

211 **BOARD:** The Board of Directors of the Placer County Air Pollution Control District.

212 **BRUSH TREATMENT:** Vegetation which has been felled crushed or up-rooted with mechanical equipment or which has been desiccated with herbicides.

213 **BULK PLANT:** A distribution plant which receives organic liquids; stores them in stationary tanks; and loads them into tank trucks for delivery to other bulk plants, service stations or storage tanks.

214 **BURN BARREL:** A metal container used outdoors for the purpose of disposal.

215 **CITRUS HEATER:** Any article, machine, equipment, or other contrivance, burning any type of fuel or material capable of emitting air contaminants, used or capable of being used for the purpose of giving protection from frost damage.

216 **COMBUSTIBLE:** Any substance capable of burning or any substance that will readily burn.

217 **COMBUSTIBLE WASTE OR SUBSTANCES:** Any garbage, rubbish, trash, rags, paper, boxes, crates, excelsior, ashes, offal, carcass of a dead animal, petroleum product waste or any other combustible or flammable refuse material.

218 **COMBUSTION CONTAMINANT:** Any particulate matter discharged into the atmosphere from the burning of any material which contains carbon in either the free or the combined state.

219 **CONDENSED FUMES:** Minute solid particles generated by the condensation of vapors from solid matter after volatilization from the molten state, or may be generated by sublimation, distillation, calcination, or chemical reaction, when these processes create airborne particles.

220 **CONSTRUCTION-DEMOLITION DEBRIS:** Any material associated with the construction or demolition of any building, dwelling, or other man-made structure, including but not limited to lumber, tar paper, roofing material, wiring, flooring material, insulation, and plywood.

221 **DAILY:** A 24-hour period beginning at 12:00 AM local time.

222 **DESIGNATED AGENCY:** Any agency designated by the ARB and Placer County Air Pollution Control District as having authority to issue Agricultural Burn Permits.

223 **DISALLOWED COMBUSTIBLES:** Any waste or manufactured material, including but not limited to petroleum products and petroleum wastes; construction and demolition debris; coated wire; putrescible (rotten wastes) and non-putrescible solid, semisolid and liquid materials or wastes; tires; tar; tarpaper; non-natural wood waste; processed or treated wood and wood products; metals; motor vehicle bodies and parts; rubber; synthetics; plastics, including plastic film, twine and pipe; fiberglass; styrofoam; garbage; trash; refuse; rubbish; disposable diapers; ashes; glass; industrial wastes; manufactured products; equipment; instruments; utensils; appliances; furniture; cloth; rags; paper or paper products; cardboard; boxes; crates; excelsior; offal; swill; carcass of a dead animal; manure; human or animal parts or wastes, including blood; and fecal- and food-contaminated material.

224 **DISTRICT:** The Placer County Air Pollution Control District.

225 **DUST:** The minute solid particles released into the air by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, sweeping, or other similar process.

226 **EMISSION:** The act of releasing or discharging air contaminants into the atmosphere from any source.

227 **EMISSION POINT:** The place, located in a horizontal plane and vertical elevation, at which an emission enters the atmosphere.

228 **EXEMPT COMPOUNDS:** Organic compounds which are exempt from the definition of Volatile Organic Compounds (VOC). Notwithstanding definitions of Exempt Compounds that may be included in specific rules in Regulation II, the following compounds are exempt:

228.1 carbon monoxide
228.2 carbon dioxide
228.3 carbonic acid
228.4 metallic carbides or carbonates
228.5 ammonium carbonate
228.6 methane
228.7 methylene chloride (dichloromethane)
228.8 perchloroethylene (tetrachloroethylene)
228.9 1,1,1-trichloroethane (methyl chloroform)
228.10 trichlorofluoromethane (CFC-11)
228.11 dichlorodifluoromethane (CFC-12)
228.12 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
228.13 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
228.14 chloropentafluoroethane (CFC-115)
228.15 chlorodifluoromethane (HCFC-22)
228.16 1,1,1-trifluloro-2,2-dichloroethane (HCFC-123)
228.17 1,1-dichloro-1-fluoroethane (HCFC-141b)
228.18 1-chloro-1,1-difluoroethane (HCFC-142b)
228.19 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
228.20 trifluoromethane (HFC-23)
228.21 1,1,2,2-tetrafluoroethane (HFC-134)
228.22 1,1,1,2-tetrafluoroethane (HFC-134a)
228.23 pentafluoroethane (HFC-125)
228.24 1,1,1-trifluoroethane (HFC-143a)
228.25 1,1-difluoroethane (HFC-152a)
228.26 ethoxy-nonafluorobutane (HFE-7200), which consists of 2 compounds:
    a. ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane; and
    b. (ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane
228.27 cyclic, branched, or linear, completely methylated siloxanes

228.28 The following classes of perfluorocarbons:
   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.
   d. sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds to carbon and fluorine.

228.29 The following low-reactive organic compounds which have been exempted by the U. S. EPA:
   a. acetone
   b. ethane
   c. parachlorobenzotrifluoride
   d. methyl acetate
   e. propylene carbonate
   f. dimethyl carbonate

228.30 The following compound(s) for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements:
   a. tertiary butyl acetate

229 FIRE PROTECTION AGENCY: Any agency with the responsibility and authority to protect people, property, and the environment from fire, and having jurisdiction within the District.

230 FLAMMABLE WASTE: Any garbage, rubbish, trash, rags, paper, boxes, crates, excelsior, ashes, offal, carcass of a dead animal, petroleum product waste or any other combustible or flammable refuse material.

231 FLUE: Any duct or passage for air or other gases, including but not limited to a stack or a chimney.

232 FOREST MANAGEMENT BURNING: The use of open outdoor fires, as part of a forest management practice, to remove forest debris. Forest management practices include timber operations, silvicultural practices and forest production practices.

233 FOSSIL FUEL: Natural gas, petroleum, coal and any form of solid, liquid, or gaseous fuel derived from such materials.

234 FOSSIL FUEL-FIRED STEAM GENERATOR: A furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

235 HEARING BOARD: The Hearing Board of the Air Pollution Control District of Placer County.

236 HYDROCARBON: Any compound of carbon containing hydrogen.

237 IMMINENT AND SUBSTANTIAL ECONOMIC LOSS: The loss of a planting season or irreparable harm to a crop.

238 INCINERATION: An operation in which combustion is carried on for the principal purpose, or with the principal result of oxidizing a waste material to reduce its bulk or facilitate its disposal.

239 **INCINERATOR:** Any furnace or other closed fire chamber used to dispose of combustible waste by burning, and from which the products of combustion are directed through a flue or chimney.

240 **INSTALLATION:** The placement, assemblage, or construction of equipment or control apparatus at the premises where the equipment or control apparatus will be used, including all preparatory work at such premises.

241 **LAKE TAHOE AIR BASIN:** That area as defined by Section 60113, Title 17, California Administrative Code.

242 **MOUNTAIN COUNTIES AIR BASIN:** Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60111 (I), the Mountain Counties Air Basin includes all of Placer County except that portion included in the Lake Tahoe Air Basin, defined by 17 CCR 60113(b), and that portion included in the Sacramento Valley Air Basin, defined by 17 CCR 60106(k).

243 **NO BURN DAY:** Any day on which agricultural burning including prescribed burning, is prohibited by the ARB or the APCO.

244 **OPEN BURNING OR OPEN OUTDOOR FIRE:** Burning of any combustibles of any type, outdoors in the open air, where the products of combustion are not directed through a flue.

245 **OPERATOR:** Person, who owns, operates, controls or supervises an affected facility, or a stationary source of which an affected facility is a part.

246 **ORCHARD HEATER:** Any article, machine, equipment, or other contrivance, burning any type of fuel or material capable of emitting air contaminants, used or capable of being used for the purpose of giving protection from frost damage.

247 **OWNER:** Person who owns, operates, controls or supervises an affected facility, or a stationary source of which an affected facility is a part.

248 **PARTICULATE MATTER (PM):** Any material except uncombined water, which can exist in a finely divided form as a liquid or solid at standard conditions.

249 **PERMISSIVE BURN DAY OR BURN DAY:** Any day in which agricultural burning including prescribed burning, is not prohibited by the ARB and/or the APCO.

250 **PERSON:** Any person, firm, association, organization, partnership, business trust, corporation, company, contractor, supplier, installer, operator, user, owner, any government agency, public district or any officer or employee thereof.

251 **POLLUTANT:** Any discharge, release or other propagation directly into the atmosphere. It includes, but is not limited to, smoke, dust, charred paper, soot, grime, carbon, noxious acids, fumes, gases, odors, particulate matter, or any combination thereof.

252 **PROCESS WEIGHT PER HOUR:** The total weight, including contained moisture, of all materials introduced into any specific process, which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. (The process weight per hour will be derived by dividing the total process weight introduced, by the number of hours in one complete operation, from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle.)

253 **PUBLIC RECORD:** Any record made available to the public by law, containing information relating to the conduct of the public's business that is prepared, owned, used or retained by the District, except trade secrets as provided for in Section 6254.7 of the California Government Code and relevant sections of the California Administrative Code.

254 **QUARTERLY:** Calendar quarter beginning January 1, April 1, July 1, and October 1.

255 **RANGE IMPROVEMENT BURNING:** The use of open outdoor fires to remove vegetation for a wildlife, game or livestock habitat, or for the initial establishment of an agricultural practice on previously uncultivated land.

256 **RECORD:** Handwriting, typewriting, printing, photocopying, photographing, and every other means of recording upon any form of communication or representation, including letters, words, pictures, sounds, or symbols, or any combination thereof, and all papers, maps, magnetic or paper tapes, photographed films and prints, magnetic or punched cards, magnetic disks, drums, and other documents.

257 **RESIDENCE:** A single or two-family dwelling unit and the land and ancillary (non-residential) structures.

258 **SACRAMENTO VALLEY AIR BASIN:** Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60106(k), the basin includes that portion of Placer County which lies west of Range 9 east, Mount Diablo Base and Meridian (M.D.B. & M.).

259 **SECTION:** A Section of the Health and Safety Code of the State of California, unless some other statute is specifically mentioned.

260 **SILVICULTURAL PRACTICES:** The establishment, development, care and reproduction of stands of timber.

261 **SOLID PARTICULATE MATTER:** Any material except uncombined water, which can exist in a finely divided form as a solid at standard conditions.

262 **STANDARD CONDITIONS:** A gas temperature of 60 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute. Results of all analyses and tests shall be calculated and reported at this gas temperature and pressure.

263 **STANDARD CUBIC FOOT OF GAS:** The amount of gas that would occupy a volume of one (1) cubic foot, if free of water vapor, at standard conditions.

264 **TIMBER OPERATIONS:** Cutting or removal of timber or other forest vegetation.

265 **VOLATILE ORGANIC COMPOUND (VOC):** Any chemical compound containing at least one atom of carbon except for those listed as "Exempt Compounds"

266 **WOOD-FIRED BOILER:** Any boiler used for steam generation, from which the products of combustion are directed through a flue or chimney and which derives at least 80 percent of its fuel input heat content from wood, or APCO approved wood-associated waste.

267 **YEARLY:** A calendar year beginning on January 1 at 12:00 AM.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 103
VALIDITY

Adopted 05-24-77

If any regulation, rule, subdivision, sentence, clause or phrase of these Rules and Regulations is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of these Rules and Regulations. The Air Pollution Control Board hereby declares that it would have adopted these Rules and Regulations and every regulation, rule, subdivision, sentence, clause and phrase thereof irrespective of the fact that any one or more regulations, rules, subdivisions, sentences, clauses, or phrases be declared unconstitutional or invalid.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 201
COVERAGE

Adopted 11-12-74
(Revised 06-19-79, 05-27-86, 10-19-93)

Prohibitions as set forth in this Regulation, shall apply in the Placer County Air Pollution Control District.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 203
EXCEPTIONS TO RULE 202

Adopted 05-24-77
(Revised 04-21-81, 10-19-93)

A. For the Sacramento Valley Air Basin and Mountain Counties Air Basin portions of the Placer County Air Pollution Control District:
   1. Fires set by a public officer pursuant to RULE 320.
   2. Agricultural burning for which a permit has been granted pursuant to RULE 315.
   3. Fires set or permitted by any public officer in the performance of his official duty for the improvement of watershed range or pasture.
   4. Open outdoor fires used for recreational purposes or for cooking of food for human consumption.
   5. Use of any aircraft to distribute aids over lands devoted to the growing of crops, or the raising of fowl or animals.
   6. The use of orchard or citrus grove heaters which are in compliance with the requirements of RULE 208.
   7. Agricultural operations necessary for the growing of crops, or raising of fowl or animals.
   8. The use of other equipment in agricultural operations necessary for the growing of crops, or the raising of fowl or animals.
   9. Fires set pursuant to a permit issued by the Air Pollution Control Officer or a designated agency.
   10. The use of visible emission generating equipment in training sessions conducted by government agencies necessary for certifying persons to evaluate visible emissions for compliance with Section 41701 or applicable District Rules and Regulations.
   11. Smoke emissions from tepee burners operating in compliance with Section 4438 of the Public Resources Code during the disposal of forestry and agricultural residues or forestry and agricultural residues with supplementary fossil fuels when such emissions result from the startup or shutdown of the combustion process or from the malfunction of emission control equipment. This subsection shall not apply to emissions which exceed a period or periods of time aggregating more than 30 minutes in any 24-hour period. This subsection shall not apply to emissions which result from the failure to operate and maintain in good working order any emission control equipment.
   12. Smoke emissions from burners fired with forestry and agricultural residues or forestry and agricultural residues with supplementary fossil fuels when such emissions result from the startup or shutdown of the combustion process or from the malfunction of emission control equipment. This subsection shall not apply to emissions which exceed a period or periods of time aggregating more than 30 minutes in any 24-hour period. This subsection shall not apply to emissions which result from the failure to operate and maintain in good working order any emission control equipment.

B. For the Lake Tahoe Air Basin portion of the Placer County Air Pollution Control District:
   1. Smoke from fires set or permitted by any public fire officer, if such fire is set by or permission given in the performance of the official duty of such officer, and such fire in the opinion of such officer is necessary:
      a. For the purpose of the prevention of a fire (or health hazard as determined by the Health Officer), which cannot be abated by any other means, or
      b. The instruction of public employees and/or volunteer firemen in the methods of fighting fires.
   2. Smoke from fires set pursuant to permit on property used for industrial purposes for the purpose of instruction of employees in methods of fighting fires.
   3. Open outdoor fires used for recreational purposes or for cooking of food for human consumption.
   4. The use of an experimental device, system or method to study or research open burning authorized by Section 41707 and 41805 (B) of the Health and Safety Code and these Rules and Regulations.
   5. Use of aircraft to distribute seed, fertilizer, insecticides, or other agriculture aids over lands devoted to the growing of crops, or the raising of fowl or animals.

6. The governing board of the district may by rule provide for the issuance by the Air Pollution Control Officer of permits for open burning. The provisions of RULE 202 do not apply to smoke from fires set pursuant to such permit.

RULE 206 INCINERATOR BURNING

Adopted 11-12-74
(Amended 05-24-77, 12-19-78, 05-20-85, 02-04-92, 11-03-94, 10-09-08, 04-11-13, 10-13-16)

CONTENTS

100 GENERAL
- 101 APPLICABILITY
- 102 EXEMPTION, BIOMASS BOILERS
- 103 EXEMPTION, CREMATORY INCINERATORS
- 104 EXEMPTION, EXISTING INCINERATORS
- 105 EXEMPTION, MEDICAL WASTE INCINERATORS
- 106 EXEMPTION, AIR CURTAIN INCINERATORS
- 107 EXEMPTION, TREATMENT UNITS

200 DEFINITIONS
- 201 ARB
- 202 BIOMASS
- 203 CONTROL EQUIPMENT
- 204 CREMATORY INCINERATOR
- 205 DIOXINS
- 206 EXCESS AIR
- 207 INCINERATOR
- 208 MULTIPLE-CHAMBER INCINERATOR
- 209 MULTIPLE-CHAMBER STARVED-AIR INCINERATOR
- 210 REFUSE DERIVED FUEL
- 211 PATHOLOGICAL WASTE
- 212 STOICHIOMETRIC AIR
- 213 SUB-STOICHIOMETRIC AIR
- 214 UNCONTROLLED EMISSIONS
- 215 WASTE
- 216 WASTE CHARGING RATE

300 STANDARDS
- 301 EMISSION LIMITATIONS
- 302 OPERATING REQUIREMENTS
- 303 AUXILIARY FUEL
- 304 ASH HANDLING

400 ADMINISTRATIVE REQUIREMENTS
- 401 UPSET NOTIFICATION
- 402 OPERATOR CERTIFICATION
- 403 OPERATION AND MAINTENANCE PLAN

500 MONITORING AND RECORDS
- 501 MONITORING
- 502 COMPLIANCE TEST FREQUENCY
- 503 DETERMINATION OF COMPLIANCE
- 504 TEST REQUIREMENTS
- 505 ALTERNATE TEST METHODS
- 506 RECORDKEEPING
- 507 DURATION OF RECORDS

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100 GENERAL

101 APPLICABILITY: This rule applies to any incinerator which burns combustible or flammable waste or refuse-derived fuel, including pathological waste.

102 EXEMPTION, BIOMASS BOILERS: This rule shall not apply to boilers which have a primary energy source of biomass consisting of a minimum of 75 percent of the total annual heat input and which are subject to the requirements of Rule 233, BIOMASS BOILERS.

103 EXEMPTION, CREMATORY INCINERATORS: This Rule shall not apply to crematories. Crematories are subject to Rule 241, CREMATORIES.

104 EXEMPTION, EXISTING INCINERATORS: This rule shall not apply to an existing incinerator for which an Authority to Construct was issued by the Air Pollution Control Officer before February 4, 1992.

105 EXEMPTION, MEDICAL WASTE INCINERATORS: This rule shall not apply to those incinerators which are subject to the requirements of the California Air Resources Board Dioxins Airborne Toxic Control Measure for Medical Waste Incinerators.

106 EXEMPTION, AIR CURTAIN INCINERATORS: This rule shall not apply to the burning of wood waste in an air curtain incinerator as defined by § 60.2245, Subpart CCCC, of 40 CFR Part 60, Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units.

107 EXEMPTION, TREATMENT UNITS: This rule shall not apply to treatment units associated with aeration of contaminated soil, air stripping, and vapor extraction operations.

200 DEFINITIONS

201 ARB: State of California Air Resources Board.

202 BIOMASS: Any organic material not derived from fossil fuels, such as agricultural crop residues, bark, lawn, yard and garden clippings, leaves, silvicultural residue, tree and brush prunings, wood and wood chips, and wood waste, including these materials when separated from other waste streams. Biomass does not include material containing sewage sludge, industrial sludge, medical waste, hazardous waste, or radioactive waste.

203 CONTROL EQUIPMENT: Any device which reduces emissions.

204 CREMATORY INCINERATOR: A furnace or other enclosed fire chamber where corpses are burned.

205 DIOXINS: Dibenzo-p-dioxins and dibenzofurans chlorinated in the 2, 3, 7, and 8 positions and containing 4, 5, 6, or 7 chlorine atoms and is expressed as 2, 3, 7, 8 tetrachlorinated dibenzo-para-dioxin equivalents using current California Environmental Protection Agency toxic equivalency factors.

206 EXCESS AIR: The air supplied in excess of that necessary to completely burn compounds.

207 INCINERATOR: Any furnace or other closed fire chamber used to dispose of combustible or flammable materials by burning and from which the products of combustion are directed through a flue, chimney, or smoke stack. For the purposes of

this rule incinerators shall include boilers heated by the burning of waste, unless otherwise exempted in Section 100.

208 MULTIPLE-CHAMBER INCINERATOR: An incinerator consisting of three or more refractory lined combustion furnaces in series, physically separated by refractory walls, inter-connected by gas passage ports or ducts employing adequate design parameters necessary for maximum combustion of the materials to be burned.

209 MULTIPLE-CHAMBER STARVED-AIR INCINERATOR (or Controlled Air Incinerator): An incinerator which is designed to burn waste in two independent chambers:

209.1 Primary Chamber: where the majority of waste volume reduction occurs operated at sub-stoichiometric conditions.

209.2 Secondary Chamber: operates at excess air conditions; where destruction of gas-phase combustion products occurs. Passage ports, ducts, flues, chimneys, or stacks with burners shall not be considered controlled air secondary chambers unless the combustion zone exhibits design measures for the retention of the gas stream in the chamber, turbulence or mixing, and the availability of excess air, as determined by engineering analysis.

210 PATHOLOGICAL WASTE: Includes, but not limited to, human or animal tissue, or natural constituents thereof, being combusted for reasons of waste reduction, or disease control.

211 REFUSE-DERIVED FUEL: Treated or processed solid waste that is used as a fuel.

212 STOICHIOMETRIC AIR: An amount of air (theoretical combustion air) theoretically required for the complete combustion of compounds with total depletion of oxygen.

213 SUB-STOICHIOMETRIC AIR: An amount of air (theoretical combustion air) less than that required for the complete combustion of compounds.

214 UNCONTROLLED EMISSIONS: The emissions measured from the incinerator at a location downstream of the last combustion chamber, but prior to any air pollution control equipment.

215 WASTE: All discarded putrescible and nonputrescible solid, semisolid, and liquid materials, including garbage, trash, refuse, paper, rubbish, food, ashes, plastics, industrial wastes, demolition and construction wastes, equipment, instruments, utensils, appliances, manure, and human or animal solid and semi-solid wastes or remains.

216 WASTE CHARGING RATE: The amount of waste charged or fed into the incinerator per unit of time, usually expressed in terms of pounds per hour or kilograms per hour.

300 STANDARDS

301 EMISSION LIMITATIONS: No person shall operate an incinerator subject to this rule unless:

301.1 Oxides of Nitrogen emissions, expressed as Nitrogen Dioxide (NO_2), do not exceed 50 parts per million by volume, dry basis, (ppmdv) corrected to 12% carbon dioxide (CO_2), for any 1 hour average emission rate.

301.2 Sulfur Dioxide emissions, expressed as Sulfur Dioxide (SO_2), do not exceed 30 ppmdv, corrected to 12% carbon dioxide (CO_2), for any 1 hour average emission rate.

301.3 Carbon Monoxide (CO) emissions do not exceed 100 ppmdv, corrected to 12% carbon dioxide (CO_2), for any 1 hour average emission rate.

301.4 Particulate Matter emissions do not exceed 0.015 grains per dry cubic foot of gas at standard conditions, corrected to 12% carbon dioxide (CO_2). The concentration limit shall apply to particulate matter measured using ARB Test Method 5.

301.5 Total Hydrocarbon (THC) emissions expressed as equivalent methane do not exceed 10 ppmdv, corrected to 12% carbon dioxide (CO_2), for any 1 average hour emission rate.

301.6 Total Hydrochloric Acid (HCl) emissions do not exceed 30 ppmdv, corrected to 12% carbon dioxide (CO_2), for any 1 hour average emission rate.

301.7 Dioxins emissions have been reduced to 10 nanograms or less per kilogram of waste burned.

302 OPERATING REQUIREMENTS: No person shall operate an incinerator subject to this rule unless control equipment is installed and used in a manner which has been demonstrated and approved by the Air Pollution Control Officer to meet the following requirements:

302.1 For any equipment subject to the emission limitations in Section 301, the flue gas temperature at the outlet of the control equipment shall not exceed 300 degrees Fahrenheit, unless it has been demonstrated to, and approved in writing by, both the ARB and the Air Pollution Control Officer that lower emissions are achieved at a higher outlet temperature;

302.2 Only multiple-chamber starved-air incinerators may be used. The primary combustion chamber shall be maintained at no less than 1400 degrees Fahrenheit, and the secondary chamber shall be maintained at no less than 1600 degrees Fahrenheit; and

302.3 For pathological waste, the incinerator shall distribute direct flame to pathological waste on a solid grate.

302.4 The furnace design shall provide for a residence time in the secondary chamber for combustion gas of at least one second. Residence time shall be calculated using the following equation:

$$\textbf{Residence Time} = \frac{V}{Q_C}$$

Where: V = means the volume, as expressed in cubic feet, from the point in the incinerator where the maximum temperature has been reached until the point where the temperature has dropped to 1600^{o}F.

Q_C = means the combustion gas flow through V, as expressed in actual cubic feet per second, which is measured according to ARB Test Method 2, after adjusting the measured flow rate to the maximum combustion

chamber temperature (T_C) by using T_C instead of T_{STD} in the ARB Test Method 2 calculation for Q_C.

The volumetric flow rate measured at the sampling points must be adjusted to chamber pressures.

Alternative methods may be used if conditions for determining the combustion gas flow rate by Method 2 are unacceptable. The determination shall be equivalent to, and within the guidelines of, ARB Test Method 2 and approved by the Air Pollution Control Officer and the U.S. Environmental Protection Agency (EPA).

T_C = means the maximum temperature, in degrees Fahrenheit, that has been reached in the incinerator.

302.5 For equipment subject to the emission limitations of Section 301, no person shall operate a waste or refuse-derived fuel incinerator unless the following equipment is installed and maintained in an operable condition:

302.5.1 A continuous data recording system as specified in Section 501.

302.5.2 Primary and secondary combustion chamber temperature indication.

302.5.3 Equipment for determining and recording the weight of waste charged to the incinerator.

302.5.4 An automated ram waste feeder with airlock, for batch fed incinerators, such that no ingress of external air occurs during the process of feeding waste to the primary combustion chamber.

303 AUXILIARY FUEL: Auxiliary fuels shall be natural gas, liquefied petroleum gas, or equivalent gaseous fuel.

304 ASH HANDLING: No person shall operate a waste incinerator unless the bottom ash, fly ash and scrubber residuals are handled and stored in a manner that prevents entrainment into ambient air.

400 ADMINISTRATIVE REQUIREMENTS

401 UPSET NOTIFICATION: Any violation, malfunction, or upset condition on the incinerator, the air pollution control equipment, or the continuous data recording system shall be reported to the District within 1 hour of occurrence or by 9:00 AM the next business day if the malfunction occurs outside normal business hours.

402 OPERATOR CERTIFICATION: No person shall operate a waste incinerator subject to the emission limitations of Section 301, unless each individual who operates or maintains the incinerator obtains either a certificate of training in waste incineration issued by the American Society of Mechanical Engineers within nine months of the commencement of operation. Copies of the training certificates for the operators and maintenance engineers shall be submitted to the District and the original certificates shall be available for inspection at the facility with the permit to operate.

403 OPERATION AND MAINTENANCE PLAN: Any person using an emission control device, as a means of complying with the emission limitations of Section 301, shall submit an Operation and Maintenance Plan with the Authority to Construct application for the emission control device.

403.1 The Operation and Maintenance Plan shall specify:

403.1.1 Operation and maintenance procedures that will demonstrate continuous operation of the emission control device during emission-producing operations; and

403.1.2 Records that must be kept to document the operation and maintenance procedures.

403.2 The records must comply with Sections 501, 506, and 507.

403.3 The Operation and Maintenance Plan shall be implemented upon approval by the Air Pollution Control Officer.

403.4 After completing the construction of the emission control device, the Operation and Maintenance Plan shall be resubmitted annually for approval.

500 MONITORING AND RECORDS

501 MONITORING: Any person operating an incinerator subject to the emission limitations of Section 301 of this rule shall maintain a data recording system which provides for each day of operation continuous recording of:

501.1 Primary and secondary combustion chamber temperatures;

501.2 Carbon monoxide emissions;

501.3 Hourly waste charging rates;

501.4 The opacity of stack emissions;

501.5 Key operating parameters of any air pollution control equipment

502 COMPLIANCE TEST FREQUENCY: An initial compliance test shall be conducted within sixty (60) days of achieving the maximum firing rate at which the unit will be operated, but not later than one hundred eighty (180) days after the initial startup. Compliance testing shall be conducted at least once every twelve months thereafter.

503 DETERMINATION OF COMPLIANCE: For purposes of demonstrating initial or annual compliance with the emission limits of Section 301, any person operating an incinerator subject to this rule shall conduct the following source tests in the manner specified in Section 504:

503.1 Source test for Oxides of Nitrogen using ARB Test Method 100, Title 17, CCR, Section 94114, Procedures for Continuous Emission Stack Sampling, or EPA Test Method 7E.

503.2 Source test for Sulfur Dioxide using ARB Test Method 6, Title 17, CCR, Section 94106, Determination of Sulfur Dioxide Emissions from Stationary Sources, or ARB Test Method 100.

503.3 Source test for Carbon Monoxide using ARB Test Method 10, Title 17, CCR, Section 94109, Determination of Carbon Monoxide Emissions from Stationary Sources, or ARB Test Method 100.

503.4 One source test for Particulate Matter using ARB Test Method 5, Title 17, CCR, Section 94105, Determination of Particulate Matter Emissions from Stationary Sources, including non-volatile impinger catch.

503.5 One source test for Total Hydrocarbons using ARB Test Method 100, measured as equivalent methane.

503.6 One source test for Hydrochloric Acid using ARB Test Method 421, Title 17, CCR, Section 94131, Determination of Hydrochloric Acid Emissions from Stationary Sources, for waste or refuse-derived fuel incinerators, excluding crematoria.

503.7 One source test for Dioxins using ARB Test Method 428, Title 17, CCR, Section 94139, Determination of Polychlorinated Dibenzo-p-Dioxin (PCDD), Polychlorinated Dibenzofuran (PCDF), and Polychlorinated Biphenyl (PCB) Emissions from Stationary Sources, for waste or refuse-derived fuel incinerators, excluding crematoria. The high resolution mass spectrometry option of ARB Test Method 428 shall be used.

503.8 Source test for Carbon Dioxide using ARB Test Method 100, or EPA Test Method 3A.

Further source testing may be required by the Air Pollution Control Officer in accordance with Rule 501, Section 304, Provision of Sampling and Testing Facilities. The installed continuous emissions monitoring systems specified by Section 501 shall demonstrate compliance or non-compliance with the emission limitations of Section 301.

504 TEST REQUIREMENTS

504.1 Test Plan: At least sixty (60) days prior to any testing, a written test plan detailing the test methods and procedures to be used shall be submitted for approval by the Air Pollution Control Officer. The plan shall cite the test methods to be used for the determination of compliance with the emission limitations of this rule, including any use of alternate test methods proposed in accordance with Section 505. The plan shall provide the proposed procedures for the characterization of the representative waste to be burned during testing.

504.2 Test Performance and Reporting: For purposes of determining compliance with Section 301, the source testing shall be conducted at the stack. Information regarding the composition (moisture content, heating value in British Thermal Units, and composition of waste, by weight percent (e.g. paper or cardboard, plastics, glass, wet garbage, or that is hazardous or radioactive) and feed rate of the waste and auxiliary fuel charged during the source test shall be provided with the test results. Source testing shall be conducted at the maximum waste firing capacity allowed by the air district permit.

505 ALTERNATE TEST METHODS: Alternate test methods may be used to demonstrate compliance with Section 301 in lieu of the specified test methods of Section 504 only if approved in writing by both the Air Pollution Control Officer and the U.S. EPA. Such test methods may include EPA test methods specified in 40 CFR 60 Appendix A, required for sources subject to New Source Performance Standards.

506 RECORDKEEPING: Maintenance records shall be kept for the incinerator, control equipment, monitoring equipment; and calibration records for the monitoring equipment.

507 DURATION OF RECORDS: All records maintained pursuant to this rule shall be retained for at least two years from date of entry, with the exception that sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM, shall retain records at least five years. Records shall be made available for inspection by the Air Pollution Control Officer upon request.

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RULE 209
FOSSIL FUEL-STEAM FACILITY

Adopted 11-12-74
(Revised 05-24-77)

A person shall not build, erect, install or expand any fossil fuel fired steam generating facility unless the discharge into the atmosphere of contaminants will not and does not exceed any one or more of the following rates:

A. 200 pounds per hour of sulfur compounds, calculated as sulfur dioxide (SO2).
B. 140 pounds per hour of nitrogen oxides, calculated as nitrogen dioxide (NO2).
C. 10 pounds per hour of combustion contaminants (as defined in RULE 102) derived from the fuel.

RULE 210
SPECIFIC CONTAMINANTS

Adopted 11-12-74
(Revised 05-24-77, 12-19-78, 6-19-79, 05-20-85, 10-19-93)

A. A person shall not discharge into the atmosphere from any source of emissions whatsoever, any one or more of the following contaminants, in any state or combination, therefore exceeding in concentration at point of discharge:
   1. Sulfur compounds, calculated as sulfur dioxide (SO2):
      a. 0.2 percent by volume for the Sacramento Valley and Mountain Counties Air Basin portions of the Placer County Air Pollution Control District.
      b. 500 parts per million by volume for the Lake Tahoe Air Basin portion of the Placer County Air Pollution Control District.
   2. Combustion Contaminants:
      a. Wood fired boilers and incinerators in the Sacramento Valley and Mountain Counties Air Basin portions of the Placer County Air Pollution Control District: 0.2 grains per cubic foot of gas calculated to 12 percent carbon dioxide (CO2) at standard conditions.
      b. All other combustion sources in the Sacramento Valley and Mountain Counties Air Basin portions of the Placer County Air Pollution Control District and all combustion sources in the Lake Tahoe Air Basin portion of the District: 0.1 grains per cubic foot of gas calculated at 12 percent carbon dioxide (CO2) at standard conditions.

B. Particulate matter emitted from a source in which exhaust gases from a combustion unit or process are used to dry, calcine, pyrolyze, sinter, or otherwise condition (exclusive of combusting) any process material shall be excluded from calculation as combustion contaminants.

RULE 211
PROCESS WEIGHT

Adopted 05-24-77
(Revised 06-19-79, 04-21-81, 05-20-85, 10-19-93)

A person shall not discharge into the atmosphere in any one hour from any source whatsoever solid particulate matter in excess of the amount shown in the following table:

ALLOWABLE RATE OF EMISSION BASED ON PROCESS WEIGHT RATE

Process Weight Rate lbs/hr	***Emission Rate lbs/hr***
50	0.4
100	0.6
500	1.5
1,000	2.3
5,000	6.3
10,000	9.7
20,000	15.0
60,000	29.6
80,000	31.2
120,000	33.3
160,000	34.9
200,000	36.2
400,000	40.4
1,000,000	46.8

Interpolation of the data from the process weight rate up to 60,000 lb/hr shall be accomplished by the use of equation:

$$E = 3.59\ P^{0.62}\quad P < 30\ \text{tons/hr}$$

and interpolation or extrapolation of the data for process weight rates in excess of 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 17.31\ P^{0.16}\quad P > 30\ \text{tons/hr}$$

Where:
E = Emission in pounds per hour
P = Process weight rate in tons per hour

A. The provisions of this Rule shall not apply to the following source categories located in the Sacramento Valley and Mountain Counties Air Basin portions of the District:
    1. Combustion equipment which derives at least 80% of its fuel input heat content from wood or wood associated waste.
    2. Incinerators.
    3. Processing equipment used in conjunction with combustion sources to dry, calcine, pyrolyze, sinter or otherwise thermally condition any process material.
    4. Sewage sludge incinerators, except that no person shall discharge from any sewage sludge incinerator particulate matter at a rate in excess of 1.30 lb/ton of dry sludge input. Performance tests used to determine compliance with this section shall comply with the provisions of CFR 40 Part 60, Appendix A, only.

RULE 212 STORAGE OF ORGANIC LIQUIDS

Adopted 5-24-77
(Amended 6-19-79, 9-25-90, 10-19-93, 11-03-94, 6-08-95, 6-19-97)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY

200 DEFINITIONS

201 EFFICIENCY
202 EXEMPT COMPOUNDS
203 EXTERNAL FLOATING ROOF
204 INTERNAL FLOATING ROOF
205 METALLIC-SHOE-SEAL
206 ORGANIC LIQUID
207 PRESSURE TANK
208 RESILIENT-TOROID-SEAL
209 STORAGE TANK
210 VAPOR PRESSURE
211 VAPOR RECOVERY SYSTEM
212 VAPOR TIGHT
213 VOLATILE ORGANIC COMPOUNDS (VOC)

300 STANDARDS

301 STORAGE TANKS WITH A CAPACITY GREATER THAN 40,000 GALLONS
302 STORAGE TANKS WITH A CAPACITY LESS THAN OR EQUAL TO 40,000 GALLONS
303 STORAGE TANKS WITH A CAPACITY GREATER THAN 20,000 GALLONS AND LESS THAN OR EQUAL TO 40,000 GALLONS
304 ABOVE GROUND STORAGE TANKS WITH A CAPACITY GREATER THAN 10,000 GALLONS AND LESS THAN OR EQUAL TO 20,000 GALLONS
305 ANY STORAGE TANK CONTAINING ORGANIC LIQUIDS WITH A VAPOR PRESSURE GREATER THAN 569 MM Hg (11 PSIA)
306 EXTERNAL FLOATING ROOF
307 INTERNAL FLOATING ROOF
308 VAPOR RECOVERY SYSTEM
309 CRITERIA FOR METALLIC-SHOE-SEAL CLOSURES
310 CRITERIA FOR WELDED TANKS WITH METALLIC-SHOE-SEALS
311 CRITERIA FOR RIVETED TANKS WITH METALLIC-SHOE-SEALS
312 CRITERIA FOR RESILIENT-TOROID-SEAL
313 CRITERIA FOR WELDED TANKS WITH ZERO GAP SECONDARY SEALS

400 ADMINISTRATIVE REQUIREMENTS

401 PRIMARY SEAL INSPECTION

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 TEST METHODS

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100 GENERAL

101 PURPOSE: To limit emissions from storage tanks for organic liquids.

102 APPLICABILITY:

102.1 Geographic: The provisions of this rule apply to all of Placer County.

102.2 Business Function: This rule applies to any facility where organic liquids having a vapor pressure greater than 25.8 mm Hg (0.5 psia) are placed, stored, or held in any stationary tank, reservoir or other bulk container.

200 DEFINITIONS

201 EFFICIENCY: A comparison of controlled emissions to those uncontrolled emissions which would occur from a fixed or cone roof tank in the same product service without a vapor control system. Baseline emissions shall be calculated using the criteria in API Bulletin 2518.

202 EXEMPT COMPOUNDS: Exempt Compounds are defined in Rule 102, Definitions.

203 EXTERNAL FLOATING ROOF: A vapor loss control device, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and which is equipped with an approved closure device between the tank shell and roof edge.

204 INTERNAL FLOATING ROOF: A vapor loss control device consisting of a fixed roof with an internal-floating-type cover which prevents the release or emission to the atmosphere of organic vapors or gases at an efficiency equivalent to an approved external floating roof closure device.

205 METALLIC-SHOE-SEAL: A type of seal used to minimize evaporative losses of organic liquids from a storage tank equipped with an external floating roof. It serves a primary seal, and is constructed with vertical metal plates or "shoes", connected by braces or other devices to the circumference of the floating roof. They are partially immersed in the liquid being stored, and are suspended in such a way that they are forced outward against the inner tank wall.

206 ORGANIC LIQUID: Any volatile organic compound which contains hydrogen and which would exist as a liquid at actual conditions of use or storage.

207 PRESSURE TANK: A closed storage tank designed and constructed to (1) operate at internal pressures above one atmosphere, (2) be able to withstand the vapor pressure of the stored liquid under all storage conditions and (3) prevent at all times the loss of such material or its vapor to the atmosphere.

208 RESILIENT-TOROID-SEAL: A type of seal used to minimize evaporative losses of organic liquids from a storage tank equipped with an external floating roof. It is a toroidal tube, or "donut", made of fabric or other resilient material, that rests on the surface of the stored liquid. It serves as primary seal that minimizes evaporative losses from the tank. The toroid seal may be filled with air, foam, or other resilient material.

209 STORAGE TANK: Any stationary container, reservoir, or tank used for the storage of organic liquids.

210 VAPOR PRESSURE: The vapor pressure under actual storage conditions as determined by the test methods specified in Section 502.1.

211 VAPOR RECOVERY SYSTEM: A California Air Resources Board (CARB) - certified system that collects organic vapors and gases from a storage tank and either returns them to the tank or otherwise processes them to prevent or reduce emissions to the atmosphere.

212 VAPOR TIGHT: A condition when the concentration of total hydrocarbons does not exceed 10,000 ppm (expressed as methane) above background, as determined by EPA Reference Method 21. Background shall be defined as the ambient concentration of organic compounds determined at least three (3) meters upwind of the potential source and not influenced by any specific emissions source.

213 VOLATILE ORGANIC COMPOUNDS (VOC): Compounds which contain at least one atom of carbon, except for the Exempt Compounds.

300 STANDARDS

301 STORAGE TANKS WITH A CAPACITY GREATER THAN 40,000 GALLONS: A person shall not store any organic liquid having a vapor pressure greater than 25.8 mm Hg (0.5 psia), in any storage tank with a capacity greater than 40,000 gallons, unless such tank is (1) a pressure tank maintaining working pressures sufficient at all times to prevent organic vapor or gas loss to the atmosphere, or (2) designed and equipped with one of the vapor loss control devices as specified in Sections 306, 307, and 308 of this rule.

302 STORAGE TANKS WITH A CAPACITY LESS THAN OR EQUAL TO 40,000 GALLONS: A person shall not store any organic liquid having a vapor pressure greater than 25.8 mm Hg (0.5 psia), in any storage tank with a capacity less than or equal to 40,000 gallons, unless such tank is equipped with one of the following:

302.1 A submerged fill pipe.

302.2 An apparatus of efficiency equal to a submerged fill pipe and which has been approved by the Air Pollution Control Officer.

302.3 One of the vapor loss control devices that complies with the applicable requirements of Sections 306 through 313 of this rule.

303 STORAGE TANKS WITH A CAPACITY GREATER THAN 20,000 GALLONS AND LESS THAN OR EQUAL TO 40,000 GALLONS: A person shall not store any organic liquid having a vapor pressure greater than 77.5 mm Hg (1.5 psia) in any storage tank with a capacity greater than 20,000 gallons, but less than or equal to 40,000 gallons, unless such tank is (1) a pressure tank maintaining working pressures sufficient at all times to prevent organic vapor or gas loss to the atmosphere, or (2) designed and equipped with one of the vapor loss control devices as specified in Sections 306 through 313 of this rule.

304 ABOVE GROUND STORAGE TANKS WITH A CAPACITY GREATER THAN 10,000 GALLONS AND LESS THAN OR EQUAL TO 20,000 GALLONS: A person shall not store any organic liquid having a vapor pressure greater than 77.5 mm Hg (1.5 psia) in any above ground storage tank with a capacity greater than 10,000 gallons, but less than or equal to 20,000 gallons capacity, unless such tank is (1) equipped with a pressure-vacuum valve which is set to operate at a pressure within 10% of the maximum allowable working pressure of the tank, or at a pressure of at least 25.8 mm Hg (0.5 psia), or (2) equipped with a vapor loss control device as specified in Sections 306 through 313 of this rule.

305 ANY STORAGE TANK CONTAINING ORGANIC LIQUIDS WITH A VAPOR PRESSURE GREATER THAN 569 mm Hg (11 psia): A person shall not store organic liquid with a vapor pressure greater than 569 mm Hg (11 psia) in any storage tank unless such tank is (1) a pressure tank maintaining working pressures sufficient at all times to prevent organic vapor or gas loss to the atmosphere, or (2) designed and equipped with a vapor recovery system which meets the requirements of Section 308 of this rule.

306 EXTERNAL FLOATING ROOF: This vapor loss control device, as defined in Section 203, shall be equipped with a closure device that consists of two seals, one above the other; the one below shall be referred to as the primary seal and the one above shall be referred to as the secondary seal. Seal designs shall be submitted to the Air Pollution Control Officer and shall not be installed or used unless they are approved by the Air Pollution Control Officer as meeting the criteria set forth within this section and the applicable closure requirements of Sections 309 through 313 of this rule.

307 INTERNAL FLOATING ROOF: This vapor loss control device with a fixed external roof, as defined in Section 205, shall prevent the release or emission to the atmosphere of organic vapors or gases at an efficiency equivalent to a floating roof closure device which meets the applicable requirements of Sections 309 through 313 of this rule.

308 VAPOR RECOVERY SYSTEM:

308.1 Any installed vapor recovery system shall be a CARB certified vapor recovery system capable of collecting organic vapors and gases, and shall include a vapor return or disposal system capable of processing such vapors and gases to prevent their emission to the atmosphere, at an efficiency of at least 95 percent by weight, determined in accordance with the applicable test method of Section 502.2.

308.2 Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a vapor-tight cover which shall be closed at all times except during gauging or sampling.

308.3 All piping, valves and fittings shall be constructed and maintained in a vapor-tight condition, as defined in Section 212.

309 CRITERIA FOR METALLIC-SHOE-SEAL CLOSURES:

309.1 Metallic-shoe-type seals shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 61 cm (24 inches) above the stored liquid surface.

309.2 The geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least 46 cm (18 inches) in the vertical plane above the liquid surface.

309.3 There shall be no holes or tears in, or openings through the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric.

309.4 The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal.

309.5 Any roof drain which opens directly into the organic liquid content in the tank shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least 90% of the area of the opening.

309.6 All openings in the roof, except pressure-vacuum valves, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover, seal, or lid shall at all times be in a closed position, with no measurable gap exceeding 0.32 cm (1/8 in.), except when the device or appurtenance is in use. Pressure-vacuum valves located in the roof shall be set to within ten percent of the maximum allowable working pressure of the roof.

310 CRITERIA FOR WELDED TANKS WITH METALLIC-SHOE-SEALS: Any welded tank shell which uses a metallic-shoe-type seal shall meet the following conditions:

310.1 No gap between the tank shell and the primary seal shall exceed 3.8 cm (1-1/2 inches). The cumulative length of all primary seal gaps exceeding 1.3 cm (2 inch) shall be not more than 10% of the circumference; the cumulative length of all primary seal gaps exceeding 0.32 cm (1/8 inch) shall not be more than 40 percent of the circumference. No continuous gap greater than 0.32 cm (1/8 inch) shall exceed 10% of the circumference of the tank.

310.2 No gap between the tank shell and the secondary seal shall exceed 1.3 cm (2 inch). The cumulative length of all secondary seal gaps exceeding 0.32 cm (1/8 inch) shall not exceed 5 percent of the circumference of the tank.

310.3 The secondary seal shall allow easy insertion of probes up to 3.8 cm (1-1/2 inches) in width in order to measure gaps in the primary seal.

311 CRITERIA FOR RIVETED TANKS WITH METALLIC-SHOE-SEALS: Any riveted tank shell which uses a metallic-shoe-seal shall meet the following conditions:

311.1 No gap between the tank shell and the primary seal shall exceed 6.4 cm (2-1/2 in.). The cumulative length of all primary seal gaps exceeding 3.8 cm (1-1/2 in.) shall not be more than 10% of the circumference.

311.2 The secondary seal shall consist of at least two sealing surfaces, such that the sealing surfaces prevent the emission of organic compounds around the rivets. Serrated sealing surfaces are allowable if the length of serration does not exceed 15.2 cm (6 in.). No gap between the tank shell and the secondary seal shall exceed 1.3 cm (2 in.). The cumulative length of all secondary seal gaps exceeding 0.32 cm (1/8 in.) shall not be more than 5% of the circumference.

311.3 The secondary seal shall allow easy insertion of probes up to 3.8 cm (1-1/2 inches) in width in order to measure gaps in the primary seal.

312 CRITERIA FOR RESILIENT-TOROID-SEAL: Any storage tank which uses a resilient-toroid-type seal shall meet the following conditions:

312.1 No gap between the tank shell and the primary seal shall exceed 1.3 cm (2 inch). The cumulative length of all gaps exceeding 0.32 cm (1/8 inch) shall not be more than 5% of the circumference.

312.2 No gap between the tank shell and the secondary seal shall exceed 1.3 cm (2 inch). The cumulative length of all gaps exceeding 0.32 cm (1/8 inch) shall not be more than 5% of the circumference.

312.3 The secondary seal shall allow easy insertion of probes up to 1.3 cm (2 inch) in width in order to measure gaps in the primary seal.

312.4 There shall be no holes or tears in, or openings through the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric.

313 CRITERIA FOR WELDED TANKS WITH ZERO GAP SECONDARY SEALS: Any welded tank shell which uses a zero gap secondary seal must meet the following conditions:

313.1 No gap between the tank shell and the primary seal shall exceed 3.8 cm (1-1/2 inches). The cumulative length of all primary seal gaps exceeding 1.3 cm (2 inch) shall be not more than 10% of the circumference and the cumulative length of all primary seal gaps exceeding 0.32 cm (1/8 inch) shall not be more than 40% of the circumference. No continuous gap greater than 0.32 cm (1/8 inch) shall exceed 10% of the circumference of the tank.

313.2 No gap between the tank shell and the secondary seal shall exceed 1.5 mm (0.06 in.). The cumulative length of all secondary seal gaps exceeding 0.5 mm (0.02 inch) shall not exceed 5% of the circumference of the tank, excluding gaps less than 5 cm (1.79 in.) from vertical weld seams.

313.3 The secondary seal must exert a positive pressure against the tank shell such that the seal surface in contact with the tank shell does not pull away from the tank shell more than the gaps allowed in Section 313.2.

400 ADMINISTRATIVE REQUIREMENTS

401 PRIMARY SEAL INSPECTION:

401.1 The primary seal envelope shall be made available for unobstructed inspection by the District on an annual basis at four locations selected along its circumference at random by the APCO. If the District detects one or more violations as a result of any such inspection, the District may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. The District shall also have the authority to require more inspection locations if the inspector suspects the possibility of a cumulative gap criteria violation.

401.2 In addition, for tanks with secondary seals the primary seal envelope shall be made available for inspection by the District prior to the installation of the secondary seal. For tanks with secondary seals installed before June 19, 1979, the primary seal envelope shall be made available for unobstructed inspection by the District for its full length every 5 years after June 19, 1979, except that if the secondary seal is voluntarily removed by the owner or operator prior thereto, it shall be made available for such inspection at that time. The owner or operator shall provide notification to the District no less than 7 working days prior to voluntary removal of the secondary seal.

500 MONITORING AND RECORDS

501 RECORDKEEPING:

501.1 A person whose tanks are subject to this Rule shall keep an accurate record of liquids stored in such containers and the vapor pressure ranges of such liquids.

501.2 Accurate records of throughput and stock temperature shall also be maintained.

501.3 Records shall include the number of organic liquid storage tanks serviced and their respective capacities in gallons.

501.4 Records shall be retained for a period of at least 2 years, and shall be retained at least 5 years by sources subject to the requirements of Rule 507, Federal Operating Permit Program, and made available to the Air Pollution Control Officer on request.

501.5 In addition to the recordkeeping requirements specified herein, all applicable provisions of Rule 410, Recordkeeping for Volatile Organic Compounds Emissions, shall be met.

502 TEST METHODS

502.1 Vapor Pressure Determination: The vapor pressure under actual storage conditions is determined by ASTM method D-2879-83 or ASTM method D-323-82.

502.2 Vapor Recovery System Testing: The determination of the overall vapor recovery system efficiency required in Section 308 shall be made using the following test procedures, as applicable:

502.2.1 California Air Resources Board Test Method TP 202.1, ADetermination of Emission Factor of Vapor Recovery Systems at Gasoline Bulk Plants@.

502.2.2 California Air Resources Board Test Method TP 203.1, ADetermination of Emission Factor of Vapor Recovery Systems at Gasoline Terminals@.

502.3 Vapor-Tight Condition Testing: EPA Reference Method 21 shall be used to test for vapor-tight condition.

RULE 213 GASOLINE TRANSFER INTO STATIONARY STORAGE CONTAINERS

Adopted 06-19-79
(Amended 04-21-81, 05-20-85, 09-25-90, 10-19-93, 2-21-13)

CONTENTS

100 GENERAL

101 APPLICABILITY
102 EXEMPTIONS

200 DEFINITIONS

201 AVERAGE MONTHLY THROUGHPUT
202 CARB CERTIFIED
203 GASOLINE
204 GASOLINE BULK PLANT
205 GASOLINE VAPORS
206 LEAK FREE
207 REID VAPOR PRESSURE
208 SUBMERGED FILL PIPE
209 VAPOR TIGHT
210 VAPOR TIGHT GASOLINE CARGO TANK

300 STANDARDS

301 TRANSFER PROVISIONS
302 PROHIBITION OF SALE

400 ADMINISTRATIVE REQUIREMENTS

401 RECORDKEEPING
402 TEST METHODS

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100 GENERAL

101 APPLICABILITY

101.1 The provisions of this rule shall apply to the transfer of gasoline into any stationary storage containers, except as provided in Section 102 of this rule.

102 EXEMPTIONS

102.1 The provisions of this Rule shall not apply to the transfer of gasoline into any stationary storage container:

102.1.1 Which has a capacity of less than 550 gallons and is used exclusively for the fueling of implements of husbandry as such vehicles are defined in Division 16 (Section 36000 et seq.) of the California Vehicle Code, if such container is equipped with a permanent submerged fill pipe.

102.1.2 With a capacity of 2,000 gallons or less and installed before January 1, 1979, if such container is equipped with a permanent submerged fill pipe.

102.2 The white paint provision of Standing Loss Vapor Recovery Control shall not apply to vertical, cylindrical, aboveground storage tanks over 15,000 gallons in capacity that use a combustion type vapor processor that are existing on February 21, 2013.

200 DEFINITIONS

201 AVERAGE MONTHLY THROUGHPUT: The total gasoline unloaded and dispensed in the most recent full calendar year from the facility's storage tanks divided by twelve.

202 CARB CERTIFIED: A vapor recovery system, equipment, or any component thereof, for which the CARB has evaluated its performance and issued a valid Executive Order pursuant to California Health and Safety Code Section 41954. Each component of a system that is a separate CARB certified item cannot be replaced with a non-certified item or other items that are not certified for use with the particular system. Except for qualified repairs, a CARB certified component shall be as supplied by the qualified manufacturer. A rebuilt component shall not be deemed as CARB certified unless the person who rebuilds the component is authorized by CARB to rebuild the designated CARB certified component.

203 GASOLINE: Any petroleum distillate having a Reid vapor pressure of four pounds or greater.

204 GASOLINE BULK PLANT: A distributing facility, with a throughput less than or equal to 20,000 gallons a day, which receives gasoline, stores it in stationary tanks, and loads it into tank trucks for delivery to service stations or other distribution points.

205 GASOLINE VAPORS: The displaced vapors including any entrained liquid gasoline.

206 LEAK FREE: A liquid leak of less than three drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed 10 milliliters (0.34 fluid ounces) per disconnect, averaged over three disconnects.

207 REID VAPOR PRESSURE: The absolute vapor pressure of volatile petroleum liquids, except liquefied petroleum gases, as determined in accordance with ASTM-323-89.

208 SUBMERGED FILL PIPE: Any fill pipe, the discharge opening of which is entirely submerged when the liquid level is 6.0 inches above the bottom of the container. "Submerged fill pipe" when applied to a container which is loaded from the side is defined as any fill pipe the discharge opening of which is entirely submerged when the liquid level is 18.0 inches above the bottom of the container.

209 VAPOR TIGHT: The concentration of total hydrocarbons, measured 1 cm from any source, not to exceed 10,000 ppm (expressed as methane) above background, as determined by EPA Reference Method 21.

210 VAPOR TIGHT GASOLINE CARGO TANK: A leak that does not exceed the standards as specified in EPA Reference Test Method 27.

300 STANDARDS

301 TRANSFER PROVISIONS

301.1 A person shall not transfer or permit the transfer of gasoline from any tank truck or trailer into any stationary storage container with a capacity of more than 250 gallons unless such container is provided with a permanent submerged fill pipe and unless such transfer is made under the following conditions:

301.1.1 The displaced gasoline vapors or gases are processed by a vapor recovery system that shall collect at least 95 percent by weight, as determined by CARB Test Procedure TP-201.1A, of the hydrocarbon vapors vented during filling of the stationary storage container and the system is CARB certified.

301.1.2 Transfer is made to a storage container equipped as required in RULE 212, STORAGE OF ORGANIC LIQUIDS.

301.2 Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor recovery system. Measures shall be taken to ensure that the loading device is leak free when it is not in use and to accomplish complete drainage before the loading device is disconnected.

301.3 The vapor recovery system shall be maintained and operated so that it does not cause the pressure in a gasoline delivery vessel to exceed 18 inches water gauge or the vacuum to exceed 6 inches water gauge.

301.4 All vapor recovery equipment and gasoline loading equipment shall be maintained in good working order and shall be leak free and vapor tight.

301.5 In no instance shall the gasoline loading operations exceed the capacity of the vapor processing unit.

301.6 No person shall store gasoline in or otherwise use or operate any gasoline delivery vessel unless such vessel is designed and maintained to be leak free and vapor tight. Any delivery vessel into which gasoline vapors have been transferred, shall be refilled only at a gasoline bulk plant or terminal that is equipped with a system that prevents at least 95 percent by weight of the gasoline vapors displaced from entering the atmosphere.

301.7 A person shall not operate any gasoline loading facility which is not subject to the provisions of RULE 215, TRANSFER OF GASOLINE INTO TANK TRUCKS, TRAILERS AND RAILROAD TANK CARS AT LOADING FACILITIES unless the

facility is equipped and operated with a system or systems to prevent the release to the atmosphere of at least 95 percent by weight, as determined by the applicable CARB Test Procedures, of the gasoline vapors displaced during the filling of the facility's stationary storage containers.

301.8 After April 1, 2013, transfer is made to an aboveground storage container equipped for Standing Loss Vapor Recovery Control as certified by the California Air Resources Board pursuant to Certification Procedure CP-206.

302 PROHIBITION OF SALE: A person shall not supply, offer for sale, sell, install or allow the installation of any new or rebuilt vapor recovery system or any of its components, unless the system and component are CARB certified. Each vapor recovery system and its components shall be clearly and permanently marked with the qualified manufacturer's name and model number as certified by CARB. In addition, any qualified manufacturer who rebuilds a component shall also clearly and permanently mark the corresponding information on the component.

400 ADMINISTRATIVE REQUIREMENTS

401 RECORDKEEPING

401.1 The owner or operator of any facility subject to the provisions of this rule shall prepare a daily log of the throughput and a summary of the throughput for the calendar year to date of the liquid compounds subject to the provisions of this rule. Such records shall be maintained at the facility for at least 2 years and shall be made available to the APCO upon request.

401.2 Records shall include the number of gasoline storage tanks serviced and their respective capacities in gallons.

401.3 In addition to the recordkeeping requirements specified herein, all provisions of RULE 410, RECORDKEEPING FOR VOLATILE ORGANIC COMPOUND EMISSION when applicable, must still be adhered to.

402 TEST METHODS: Test methods for compliance testing for this rule shall be conducted in accordance with the following test methods.

402.1 Static Torque of Rotatable Phase I Adaptors: CARB Test Procedure TP-201.1B.

402.2 Leak Rate of Drop Tube/Drain Valve Assembly Test: CARB Test ProcedureTP-201.1C.

402.3 Leak Rate of Drop Overfill Protection Devices and Spill Container Drain Valves: CARB Test Procedure TP-201.1D

402.3 Leak Rate and Cracking Pressure of P/V Valves Test: CARB Test Procedure TP-201.1E.

402.4 Static Leak Tests: CARB Test Procedure TP-201.3 or TP-201.3B as applicable.

402.5 Those vapor recovery systems whose CARB Executive Orders specify different tests to be performed instead of, or in addition to, the referenced test methods, or which, by their design, preclude the use of the referenced test methods, shall be tested in accordance with the test procedures specified in the applicable CARB Executive Orders or their equivalents as approved by the APCO and EPA.

402.6 Multiple Test Methods: When more than one test method or set of test methods is specified for any testing, a violation of any requirements of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule.

RULE 214 TRANSFER OF GASOLINE INTO VEHICLE FUEL TANKS

Adopted 06-19-79
(Amended 04-21-81, 10-19-93, 04-09-09, 02-21-13)

CONTENTS

100 GENERAL

101 APPLICABILITY
102 EXEMPTIONS

200 DEFINITIONS

201 CARB CERTIFIED
202 GASOLINE
203 LEAK FREE
204 MAJOR DEFECT
205 MINOR DEFECT
206 MOTOR VEHICLE
207 REID VAPOR PRESSURE
208 VAPOR TIGHT

300 STANDARDS

301 GASOLINE TRANSFER
302 POSTING OF OPERATING INSTRUCTIONS
303 PROHIBITION OF SALE
304 MAINTENANCE AND REPAIR

400 ADMINSTRATIVE REQUIREMENTS

401 TEST METHODS

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100 GENERAL

101 APPLICABILITY: The provisions of this rule shall apply to the transfer of gasoline from any stationary storage tank into any motor vehicle fuel tank.

102 EXEMPTIONS

102.1 Non Retail Gasoline Dispensing Facilities: The provisions of Section 301 shall not be subject to non-retail gasoline dispensing facilities located in that part of Placer County east of Range 8, Mount Diablo Base and Meridian.

102.2 Gasoline Dispensing to Non-Retail Motor Vehicles with Onboard Refueling Vapor Recovery: Transfer of gasoline from any storage tank into a vehicle fuel tank is exempt from Section 301 at any non-retail motor vehicle fueling facility where 95 percent of vehicles refueled are equipped with Onboard Refueling Vapor Recovery provided that the Phase II vapor recovery system, if previously installed, has been properly removed in a manner approved in writing by the Air Pollution Control Officer.

102.2.1 To qualify for this exemption, the gasoline dispenser(s) must be owned and operated by the owner of the vehicle fleet and exclusively dedicated to fueling the fleet.

102.2.2 An operator claiming this exemption shall keep a record of the make, model, model year, and vehicle identification number of all vehicles refueled at the gasoline dispensing operation. These records shall be maintained on the premises for at least five calendar years with a submittal of quarterly records to the Air District in order to demonstrate annual compliance with 95% Onboard Refueling Vapor Recovery. In lieu of refueling records, the Air Pollution Control Officer may approve an alternative method for verifying or ensuring that only vehicles equipped with Onboard Refueling Vapor Recovery are refueled at such facility.

102.3 Flexible Fuel Vehicle Fuel Tank: Transfer of E85 from any storage tank into a Flexible Fuel Vehicle fuel tank at any retail service station or non-retail motor vehicle fueling facility is exempt from Section 301. E85 is defined as a petroleum distillate/alcohol blend having a Reid vapor pressure of 4.0 pounds per square inch or greater and meeting the requirements of Title 13 California Code of Regulations, Section 2250 et seq., and as further defined in Title 12 California Code of Regulations Section 2250(b) and containing a minimum 15 percent of petroleum distillate and a maximum 85 percent of ethyl alcohol.

102.4 Maintenance and Repair: Only during the active repair of equipment, can the "Out of Order" tag be removed.

200 DEFINITIONS

201 CARB CERTIFIED: A vapor recovery system, equipment, or any component thereof, for which the CARB has evaluated its performance and issued a valid Executive Order pursuant to California Health and Safety Code Section 41954. Each component of a system that is a separate CARB certified item cannot be replaced with a non-certified item or other items that are not certified for use with the particular system. Except for qualified repairs, a CARB certified component shall be as supplied by the qualified manufacturer. A rebuilt component shall not be deemed as CARB certified unless the person who rebuilds the component is authorized by CARB to rebuild the designated CARB certified component.

202 GASOLINE: Any petroleum distillate having a Reid vapor pressure of four pounds or greater.

203 LEAK FREE: A liquid leak of no greater than three drops per minute.

204 MAJOR DEFECT: Any defect that meets the criteria of California Code of Regulations, Title 17, Division III, Chapter 1, Subchapter 8, Article 1, Section 94006 and is listed on CARB's Vapor Recovery Equipment Defects (VRED) list or is specified within the Executive Order certifying the vapor recovery system.

205 MINOR DEFECT: A defect in any gasoline dispensing equipment, which renders the equipment out of good working order but which does not constitute a major defect.

206 MOTOR VEHICLE: Any vehicle registered with the California Department of Motor Vehicles.

207 REID VAPOR PRESSURE: The absolute vapor pressure of volatile crude oil and volatile non-viscous petroleum liquids, except liquefied petroleum gases, and determined by ASTM-323-89.

208 VAPOR TIGHT: The concentration of total hydrocarbons, measured 1 cm from any source, not to exceed 10,000 ppm (expressed as methane) above background, as determined by EPA Reference Method 21.

300 STANDARDS

301 GASOLINE TRANSFER: A person shall not transfer or permit the transfer of gasoline from a stationary storage container subject to the provisions of RULE 213, GASOLINE TRANSFER INTO STATIONARY STORAGE CONTAINERS into any motor vehicle fuel tank of greater than 5 gallons capacity unless such transfer is made through a fill nozzle which directs the gasoline vapors displaced by the transfer through the fill nozzle to a system that is CARB certified and will prevent at least 95 percent by weight of such gasoline vapors from entering the atmosphere.

301.1 The vapor recovery system is operating in accordance with the applicable CARB Executive Orders, the manufacturer's specifications, and is maintained to be leak free, vapor tight, and in good working order; and

301.2 The equipment is operated and maintained without any major defects.

302 POSTING OF OPERATING INSTRUCTIONS: Each gasoline dispensing facility utilizing a Phase II system shall conspicuously post operating instructions for the system in the gasoline dispensing area. The instructions shall clearly describe how to fuel vehicles correctly with vapor recovery nozzles utilized at the station and shall include a warning that repeated attempts to continue dispensing, after the system having indicated that the vehicle fuel tank is full (topping off), is prohibited, and may result in spillage or recirculation of gasoline pursuant to California Health and Safety Code Section 41960.4.

303 PROHIBITION OF SALE: A person shall not supply, offer for sale, sell, install or allow the installation of any new or rebuilt vapor recovery system or any of its components, unless the system and component are CARB certified. Each vapor recovery system and its components shall be clearly and permanently marked with the qualified manufacturer's name and model number as certified by CARB. In addition, any qualified manufacturer who rebuilds a component shall also clearly and permanently mark the corresponding information on the component.

304 MAINTENANCE AND REPAIR

304.1 Major Defect: No person shall operate any CARB certified vapor recovery system or any portion thereof, or CARB certified vapor recovery equipment that has a major defect.

304.1.1 Upon the identification of any major defect, the owner or operator shall tag "Out-of-Order" all dispensing equipment for which vapor recovery has been impaired.

304.1.2 Except during active repair activity, the “Out of Order” tag on the tagged equipment shall be rendered inoperable and the tag(s) shall not be removed until the equipment has been repaired, replaced, or adjusted as necessary.

304.2 Minor Defect: The owner/operator shall repair or replace any vapor recovery component or equipment having a minor defect within seven days, pursuant to Section 41960.2(e) of the California Health and Safety Code.

400 ADMINSTRATIVE REQUIREMENTS

401 TEST METHODS: Test methods for compliance testing for this rule shall be conducted in accordance with the following test methods.

401.1 Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities (static pressure (leak decay)) test: CARB Test Procedure TP-201.3, TP-201.3B, or TP-206.3, as applicable.

401.2 Dynamic back pressure test: CARB Test Procedure TP-201.4.

401.3 Determination of Liquid Removal of Phase II Vapor Recovery Systems of Dispensing Facilities: CARB Test Procedure TP-201.6.

401.4 Gasoline Liquid Retention in Nozzles and Hoses: CARB Test Procedure TP-201.2E.

401.5 Determination of Static Pressure Performance of the (Franklin Fueling Systems) Healy Clean Air Separator: CARB Test Procedure in Executive Orders VR-201 and VR-202 Series and VR-203 and VR-204 Series and VR-209 Series.

401.6 Vapor to Liquid Volume Ratio CARB Test Procedure in Executive Orders VR-201 and VR-202 Series.

401.7 Nozzle Bag Test Procedure: CARB Test Procedure in Executive Orders VR-201 and VR-202 Series and VR-203 and VR-204 Series.

401.8 Veeder-Root ISD Operability Test: CARB Test Procedure in Executive Orders VR-201 and VR-202 Series.

401.9 FFS INCON ISD Operability Test: CARB Test Procedure in Executive Orders VR-201 and VR-202 Series.

401.10 Liquid Condensate Trap Compliance Procedure: CARB Test Procedure in Executive Orders VR-201 and VR-202 Series and VR-203 and VR-204 Series.

401.11 Healy VP1000 Vacuum Pump Test: Test Procedure in the Installation and Operation Manual for CARB Executive Orders VR-201 and VR-202 Series.

401.12 Liquid Removal Test Procedure: Test Procedure in the Executive Orders VR-203 and VR-204 Series.

401.13 VST ECS; Hydrocarbon Sensor Verification Test Procedure: Test Procedure in the Executive Orders VR-203 and VR-204 Series.

401.14 VST ECS; Determination of Processor Activation Pressure: Test Procedure in the Executive Orders VR-203 and VR-204 Series.

401.15 Veeder-Root; Vapor Pressure Sensor Verification Test Procedure: Test Procedure in the Executive Orders VR-203 and VR-204 Series.

401.16 Veeder-Root Vapor Polisher; Operability Test Procedure: Test Procedure in the Executive Orders VR-203 and VR-204 Series.

401.17 Veeder-Root Vapor Polisher; Hydrocarbon Emissions Verification Test Procedure: Test Procedure in the Executive Orders VR-203 and VR-204 Series.

401.18 Hirt VCS 100 Processor with Indicator Panel Operability Test Procedure: Test Procedure in the Executive Orders VR-203 and VR-204 Series, VR 205 Series, and VR-207 and VR-208 Series.

401.19 Veeder-Root; ISD Vapor Flow Meter Operability Test Procedure: Test Procedure in the Executive Orders VR-203 and VR-204 Series.

401.20 INCON ISD System Vapor Flow Meter Operability Test Procedure Test Procedure in the Executive Orders VR-207 and VR-208 Series.

401.21 INCON ISD System Vapor Pressure Sensor Verification Test Procedure Test Procedure in the Executive Orders VR-207 and VR-208 Series.

401.22 Only calibrated equipment meeting the calibration range and intervals specified by CARB and the equipment manufacturer shall be used to conduct any performance or reverification test.

401.23 Those vapor recovery systems whose CARB Executive orders specify different tests to be performed instead of, or in addition to, the referenced test methods, or which, by their design, preclude the use of the referenced test methods, shall be tested in accordance with the test procedures specified in the applicable CARB Executive Orders or their equivalents as approved by the APCO.

401.24 Multiple Test Methods: When more than one test method or set of test methods is specified for any testing, 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.

RULE 215 TRANSFER OF GASOLINE INTO TANK TRUCKS, TRAILERS AND RAILROAD TANK CARS AT LOADING FACILITIES

Adopted 6-19-79
(Amended 9-25-90, 11-03-94, 6-19-97)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY

200 DEFINITIONS

201 BULK PLANT
202 BULK TERMINAL
203 CAPACITY
204 EXEMPT COMPOUNDS
205 GASOLINE
206 GASOLINE VAPORS
207 LEAK FREE
208 ORGANIC LIQUID
209 REID VAPOR PRESSURE
210 SWITCH LOADING
211 VAPOR TIGHT
212 VOLATILE ORGANIC COMPOUNDS

300 STANDARDS

301 TRANSFER PROVISIONS
302 OTHER OPERATING REQUIREMENTS

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 TEST METHODS

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100 GENERAL

101 PURPOSE: To limit the emissions of volatile organic compounds (VOC) during gasoline transfer operations at bulk plants and bulk terminals.

102 APPLICABILITY:

102.1 Geographic: This provisions of this rule apply to all of Placer County.

102.2 Business Function: This rule applies to any bulk plant or bulk terminal where gasoline is loaded into a truck, trailer or railroad tank car, and to any person who owns, operates or is employed at such facility.

200 DEFINITIONS

201 BULK PLANT: A gasoline distribution facility which receives gasoline exclusively by tank truck from a refinery or bulk terminal and has a throughput less than or equal to 20,000 gallons per day or 5,000,000 gallons per year.

202 BULK TERMINAL: A gasoline distribution facility which receives gasoline from a refinery by pipeline, ship, or barge and has a throughput greater than 20,000 gallons per day or 5,000,000 gallons per year.

203 CAPACITY: The maximum volumetric quantity of liquid that may be stored in a tank.

204 EXEMPT COMPOUNDS: Exempt compounds are as defined in Rule 102, Definitions.

205 GASOLINE: Any organic liquid (including petroleum distillates and methanol) having a Reid Vapor Pressure of 4.0 pounds or greater and used as a motor vehicle fuel, or any fuel which is commonly or commercially known or sold as gasoline.

206 GASOLINE VAPORS: The displaced vapors including any entrained liquid gasoline.

207 LEAK FREE: Any liquid leak of less than three drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed 10 milliliters (0.34 fluid ounces) per disconnect, averaged over three contiguous disconnects.

208 ORGANIC LIQUID: Any volatile organic compound which contains hydrogen and which would exist as a liquid at actual conditions of use or storage.

209 REID VAPOR PRESSURE: The absolute vapor pressure of volatile crude oil and volatile non-viscous petroleum liquids, except liquefied petroleum gases, and determined by ASTM-323-58.

210 SWITCH LOADING: The transfer of organic liquids with a Reid Vapor Pressure of less than 4.0 lbs into a delivery vessel where the previous load was gasoline.

211 VAPOR TIGHT: A condition when the concentration of total hydrocarbons does not exceed 10,000 ppm (expressed as methane) above background, as determined by EPA Reference Method 21. Background shall be defined as the ambient concentration of organic compounds determined at least three (3) meters upwind of the potential source and not influenced by any specific emissions source.

212 VOLATILE ORGANIC COMPOUNDS: Compounds which contain at least one atom of carbon, except for the Exempt Compounds.

300 STANDARDS

301 TRANSFER PROVISIONS:

301.1 Vapor Recovery System Certification: A person shall not load gasoline into any tank truck, trailer, or railroad tank car from any bulk plant or bulk terminal, unless the loading device or equipment is equipped with a California Air Resources Board certified vapor recovery and disposal system.

301.2 Loading Procedures: Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor recovery system. Measures shall be taken to ensure complete drainage before the loading device is disconnected and the loading device shall be maintained in a vapor tight and leak free condition when not in use.

301.3 Bulk Plants: A person shall not transfer or permit the transfer of gasoline into any tank truck, trailer, or railroad tank car unless the emission of gasoline vapors and gases to the atmosphere does not exceed 0.6 pounds of Volatile Organic Compounds (VOC) per one thousand (1,000) gallons of gasoline transferred as determined by a method specified in Section 502.1.

301.4 Bulk Terminals: A person shall not transfer or permit the transfer of gasoline into any tank, truck, trailer, or railroad tank car unless the emission of gasoline vapors and gases to the atmosphere does not exceed 0.08 pounds of Volatile Organic Compounds (VOC) per one thousand (1,000) gallons of gasoline transferred as determined by the method specified in Section 502.2.

302 OTHER OPERATING REQUIREMENTS:

302.1 The loading facility vapor recovery system shall not create a back-pressure in excess of the pressure limits of the delivery vessel certification leak test (18 inches of water gauge).

302.2 All vapor recovery equipment and gasoline loading equipment shall be maintained in good working order and shall be leak free and vapor tight.

302.3 Switch loading shall be subject to Sections 301.3 and 301.4 of this rule.

302.4 Transfer equipment shall be configured to require that the gasoline delivery vessel be bottom loaded.

302.5 In no instance shall the gasoline loading operations exceed the capacity of the vapor processing unit.

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE:

401.1 By November 3, 1995, any person subject to this rule shall submit an application for Authority to Construct for any modifications required to achieve compliance with the requirements of this rule.

401.2 By November 3, 1996, any person subject to this rule shall demonstrate final compliance with all applicable standards and requirements of this rule. Compliance with Section 301 shall constitute compliance with Section 401 unless it is determined that the equipment does not comply with section 301.3 and 301.4.

500.MONITORING AND RECORDS

501 RECORDKEEPING:

501.1 The owner or operator of any facility subject to the provisions of this rule shall prepare a daily log of the throughput and a summary of the throughput for the calendar year to date of the liquid compounds subject to the provisions of this rule. Such records shall be retained at the facility for at least 2 years, and shall be retained for at least 5 years for sources subject to the requirements of Rule 507, Federal Operating Permit Program, and shall be made available to the Air Pollution Control Officer upon request.

501.2 Records shall include the number of petroleum storage tanks serviced and their respective capacities in gallons.

501.3 In addition to the recordkeeping requirements specified herein, all provisions of Rule 410, Recordkeeping for Organic Compound Emissions, shall apply.

502 TEST METHODS: Reference test methods for compliance testing shall be the following, as applicable:

502.1 California Air Resources Board Test Method TP 202.1, “Determination of Emission Factors of Vapor Recovery Systems at Gasoline Bulk Plants”.

502.2 California Air Resources Board Test Method TP 203.1, “Determination of Emission Factors of Vapor Recovery Systems at Gasoline Terminals”.

502.3 EPA Reference Method 21 shall be used to test for vapor tight condition or liquid leaks.

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RULE 216 ORGANIC SOLVENT CLEANING AND DEGREASING OPERATIONS

Adopted 06-19-79
(Amended 04-21-81, 09-25-90, 11-03-94, 06-08-95, 12-11-03)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 SEVERABILITY
104 EXEMPTIONS

200 DEFINITIONS

201 AIRTIGHT/AIRLESS CLEANING SYSTEM
202 CIRCUMFERENTIAL TROUGH
203 CLOSED CONTAINER
204 CONVEYORIZED DEGREASER
205 DEGREASER
206 EXEMPT COMPOUNDS
207 FREEBOARD HEIGHT
208 FREEBOARD RATIO
209 KEY SYSTEM OPERATING PARAMETER
210 LEAK
211 LIP EXHAUST
212 LOW VOLATILITY SOLVENT
213 MAKEUP SOLVENT
214 NESHAP
215 NON-VAPOR DEGREASER
216 OPEN-TOP VAPOR DEGREASER
217 OSHA
218 REFRIGERATED FREEBOARD CHILLER
219 REMOTE RESERVOIR DEGREASER
220 SOLVENT
221 SOLVENT DEGREASING
222 STATIONARY SOURCE (SOURCE OR FACILITY)
223 SUPERHEATED VAPOR ZONE
224 VOLATILE ORGANIC COMPOUND (VOC)
225 VOLATILE SOLVENT
226 WIPE CLEANING
227 WORKLOAD

300 STANDARDS

301 GENERAL EQUIPMENT REQUIREMENTS
302 NON-VAPOR DEGREASERS; EQUIPMENT REQUIREMENTS
303 VAPOR DEGREASERS; EQUIPMENT REQUIREMENTS
304 REMOTE RESERVOIR DEGREASER
305 VAPOR DEGREASERS; SAFETY SWITCHES
306 CONVEYORIZED DEGREASERS
307 GENERAL OPERATING REQUIREMENTS
308 LIP EXHAUST SYSTEM
309 ALTERNATIVE AIRTIGHT/AIRLESS CLEANING SYSTEM REQUIREMENTS
310 EMISSIONS CONTROL EQUIPMENT

400 ADMINISTRATIVE REQUIREMENTS

401 CALCULATION FOR DETERMINING VOC CONTENT OF SOLVENTS INCLUDING WATER AND EXEMPT COMPOUNDS
402 CALCULATION FOR DETERMINING PERCENT CONTROL EFFICIENCY AND VOC MASS EMISSION RATE
403 OPERATION AND MAINTENANCE PLAN

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 TEST METHODS

100 GENERAL

101 PURPOSE: To limit the emission of volatile organic compounds from degreasers.

102 APPLICABILITY:

102.1 Geographic: The provisions of this rule apply to all of Placer County.

102.2 Operations: This rule applies to solvent degreasing operations performed in non-vapor degreasers and vapor degreasers.

103 SEVERABILITY: If a court of competent jurisdiction issues an order that any provision of this rule is invalid, it is the intent of the Board of Directors of the District that other provisions of this rule remain in full force and effect, to the extent allowed by law.

104 EXEMPTIONS

104.1 The provisions of this rule shall not apply to solvent degreasing operations using exempt compounds mixed with volatile organic compounds provided that the mixture does not contain more than two (2) percent volatile organic compounds by weight.

104.2 The provisions in Section 302 of this rule shall not apply to non-vapor degreasers which have an air-solvent interface area less than or equal to 1.0 ft^2, except for requirements that cleaners shall be covered when work is not being processed, or to remote reservoir degreasers using a non-volatile solvent spray which is drained into the remote reservoir concurrently with the degreasing operation.

104.3 The provisions of this rule shall not apply to non-vapor degreasers, which use solvents that contain 50 grams per liter or less VOCs including water and exempt compounds.

104.4 The provisions of Section 307.8 of this rule do not apply to open-top vapor degreasers where solvent flow complies with Section 307.11.2 and liquid solvent does not splash above the air vapor interface.

104.5 The provisions of this rule shall not apply to solvent degreasing operations that are subject to the NESHAP requirements of 40 CFR Part 63 Subpart T – Halogenated Solvents Emissions from Solvent Cleaning.

104.6 The 50 grams VOC per liter limit in Section 302.2 does not apply to a non-vapor degreaser or to a remote reservoir degreaser that uses a solvent that complies with the VOC limit specified for the cleaning activity listed in Section 301 of Rule 240, Surface Preparation and Cleanup. Any non-vapor degreaser exempt under this section shall comply with other requirements of this rule.

104.7 The provisions of this rule shall not apply to products subject to the California Air Resources Board Consumer Products Regulations as set forth in Subchapter 8.5, Article 2, Section 94507-94517 of Title 17 of the California Code of Regulations.

104.8 The provisions of this rule shall not apply to wipe cleaning. Wipe cleaning requirements are specified in Rule 240 - Surface Preparation And Cleanup.

200 DEFINITIONS

201 AIRTIGHT/AIRLESS CLEANING SYSTEM: A sealed cleaning system that has no open air/vapor or air/solvent interface, and is designed and automatically operated to minimize the discharge or leakage of solvent vapor emissions to the atmosphere during all cleaning and vacuum drying operations. The system consists of devices to condense and recover solvent and solvent vapor, and control devices to remove solvent vapors from all gas streams that vent to the atmosphere.

202 CIRCUMFERENTIAL TROUGH: A receptacle located below the primary condenser that conveys condensed solvent and atmospheric moisture to a water separator.

203 CLOSED CONTAINER: A container, which has a nonabsorbent cover where the cover meets with the main body of the container without any visible gaps between the cover and the main body of the container.

204 CONVEYORIZED DEGREASER: Any continually loaded, conveyorized degreaser, using solvent that is maintained either above or below the initial boiling point temperature of the solvent.

205 DEGREASER: A tank, tray, drum, or other container in which objects to be cleaned are exposed to a degreasing solvent or degreasing solvent matter.

206 EXEMPT COMPOUNDS: For the purpose of this rule, “Exempt Compounds” has the same meaning as in Rule 102, Definitions.

207 FREEBOARD HEIGHT:

207.1 For non-vapor degreasers, freeboard height means the distance from the top of the solvent, or the solvent drain of a remote reservoir cold cleaner, to the top of the tank.

207.2 For vapor degreasers, freeboard height means the distance from the solvent vapor-air interface to the top of the degreaser.

207.3 For conveyorized degreasers, freeboard height means the vertical distance from the top of the solvent (non-vapor solvent) or the top of the vapor-air interface (vapor degreaser), to the bottom of the lowest opening where solvent vapors can escape.

208 FREEBOARD RATIO: The freeboard height divided by the smaller of the inside length or the inside width of the degreaser's evaporative surface area.

209 KEY SYSTEM OPERATING PARAMETER:

209.1 A variable that is critical to the operation of an emission control system and that ensures:

209.1.1 Operation of the system within the system manufacturer’s specifications, and

209.1.2 Compliance with the overall system efficiency standard required by Section 310.

209.2 Variables described in Section 209.1 may include, but are not limited to:

209.2.1 Hours of operation,

209.2.2 Temperature,

209.2.3 Flow rate, and

209.2.4 Pressure.

210 LEAK: A leak is:

210.1 The dripping of liquid volatile organic compounds in excess of three drops per minute; or

210.2 The appearance of a visible mist.

211 LIP EXHAUST: A system, which collects solvent vapors escaping from the top of a degreaser and directs them away from operating personnel.

212 LOW VOLATILITY SOLVENT: Any solvent with an initial boiling point, which is greater than 248^{o}F (120^{o}C).

213 MAKEUP SOLVENT: The solvent added to the degreaser to replace solvent lost through evaporation or other means.

214 NESHAP: National Emission Standards for Hazardous Air Pollutants.

215 NON-VAPOR DEGREASER: Any degreaser using solvent, which, if heated, is maintained, below the initial boiling point temperature of the solvent.

216 OPEN-TOP VAPOR DEGREASER: Any batch-loaded degreaser using solvent which is maintained above the initial boiling point temperature of the solvent. Degreasing occurs through the condensation of the resultant solvent vapor onto the surface of the workload.

217 OSHA: Occupational Safety and Health Administration.

218 REFRIGERATED FREEBOARD CHILLER: A secondary cooling coil mounted above the primary condenser which provides a chilled air blanket above the solvent vapor-air interface to cause the condensation of additional solvent vapor, thereby increasing vapor control efficiency.

219 REMOTE RESERVOIR DEGREASER: A non-vapor degreaser with a tank that is completely enclosed except for a solvent return opening no larger than 15.50 square inches (100 square centimeters) which allows used solvent to drain into it from a separate solvent sink or work area and which is not accessible for soaking workloads.

220 SOLVENT: Any liquid containing volatile organic compounds, which is used to perform solvent degreasing.

221 SOLVENT DEGREASING: The removal of contaminants with solvents from parts, products, tools, machinery, and equipment, including the subsequent drying of the items.

222 STATIONARY SOURCE (SOURCE OR FACILITY): Any building, structure, facility, or emissions unit, which emits or may emit any affected pollutant directly or as fugitive emissions.

222.1 Building, structure, facility, or emissions unit includes all pollutant emitting activities which:

222.1.1 belong to the same industrial grouping, and;

222.1.2 are located on one property or on two or more contiguous properties, and;

222.1.3 are under the same or common ownership, operation, or control or which are owned or operated by entities, which are under common control.

222.2 Pollutant emitting activities shall be considered as part of the same industrial grouping if:

222.2.1 they belong to the same two-digit standard industrial classification code under the system described in the 1987 Standard Industrial Classification Manual, or;

222.2.2 they are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material.)

223 SUPERHEATED VAPOR ZONE: A region located within the vapor zone of a degreaser whereby solvent vapors are heated above the solvent's boiling point.

224 VOLATILE ORGANIC COMPOUND (VOC): For purpose of this rule, "volatile organic compound" has the same meaning as in Rule 102, Definitions.

225 VOLATILE SOLVENT: Any solvent, which is not defined as a low volatility solvent pursuant to Section 212.

226 WIPE CLEANING: A method of cleaning which utilizes a material such as a rag wetted with a solvent, coupled with a physical rubbing process to remove contaminants from surfaces.

227 WORKLOAD: The objects put in a degreaser for the purpose of removing oil, grease, soil, coating, dirt or other undesirable matter from the surface of the objects.

300 STANDARDS

301 GENERAL EQUIPMENT REQUIREMENTS: Any person who uses a degreaser shall utilize the following equipment:

301.1 An apparatus or cover, which prevents the solvent from evaporating when not processing work in the degreaser.

301.1.1 For non-vapor degreasers using volatile solvent, or solvent that is agitated, the cover shall be a sliding, rolling or guillotine (bi-parting) type which can be opened and closed easily with one hand.

301.1.2 For open-top vapor degreasers, the cover shall be a sliding, rolling or guillotine (bi-parting) type, which can be opened and closed easily without disturbing the vapor zone.

301.1.3 For conveyorized degreasers, a cover shall be provided for closing off the entrance and exit when not in use.

301.2 A facility for draining cleaned parts such that the drained solvent is returned to the container.

301.3 A permanent, conspicuous label which summarizes operating requirements contained in Sections 303, through 307, of this rule.

301.4 Use only solvent containers free of all liquid leaks, visible tears, or cracks. Pumps, pipelines, or flanges, shall not have any liquid leaks, visible tears, or cracks.

302 NON-VAPOR DEGREASERS; EQUIPMENT REQUIREMENTS:

302.1 A person shall only operate non-vapor degreasers, including remote reservoir degreasers (except as noted in Section 104.2), using one of the following control devices:

302.1.1 Non-vapor degreasers with a freeboard ratio equal to or greater than 0.75 if using solvents which are:

302.1.1.1 Agitated, or

302.1.1.2 Heated above 122^{o}F (50^{o}C), or

302.1.1.3 Volatile.

302.1.2 Non-vapor degreasers using only low volatility solvents, which are not agitated, and which have a freeboard height of at least 6 inches.

302.1.3 A water cover may be used as an acceptable alternative to Sections 302.1.1 and 302.1.2 only if the solvent is insoluble in water and has a specific gravity greater than 1.

302.2 Effective December 11, 2004, a person owning or operating a non-vapor degreaser shall use solvents with a VOC content of 50 grams per liter or less.

303 VAPOR DEGREASERS; EQUIPMENT REQUIREMENTS: In addition to the applicable requirements in Section 301, a person operating a vapor degreaser shall also comply with the following requirements.

303.1 Until December 11, 2004, a person shall operate only vapor degreasers, which have all of the following control devices:

303.1.1 A freeboard ratio greater than or equal to 0.75.

303.1.2 Cleaners with an evaporative surface area greater than or equal to 1 square meter, shall be equipped with a refrigerated freeboard chiller for which the chilled air blanket temperature (^{o}F) at the coldest point on the vertical axis in the center of the air-vapor interface shall be no greater than 30% of the initial boiling point (^{o}F) of the fresh solvent used or no greater than 40^{o}F. If the chiller operates below the freezing temperature of water, it shall be equipped with an automatic defrost.

303.1.3 A primary condenser.

303.2 Effective December 11, 2004, a person shall not operate a vapor degreaser unless the vapor degreaser is equipped with all of the following:

303.2.1 An automated parts handling system;

303.2.2 Circumferential primary condensing coils;

303.2.3 A circumferential trough;

303.2.4 A water separator;

303.2.5 A freeboard ratio of at least 1.0;

303.2.6 A superheated vapor zone; and

303.2.7 A refrigerated freeboard chiller that is operated such that the chilled air blanket temperature measured at the center of the air blanket is no greater than 40 percent of the boiling point of the solvent, measured in degrees Fahrenheit.

304 REMOTE RESERVOIR DEGREASER: Effective December 11, 2004, in addition to Section 302, a person owning or operating a remote reservoir degreaser shall comply with the following requirements:

304.1 Prevent solvent vapors from escaping from the solvent container by using such devices as a cover or a valve when the remote reservoir is not being used, cleaned, or repaired;

304.2 Direct solvent flow in to prevent liquid solvent from splashing outside of the remote reservoir degreaser;

304.3 Use only solvent containers free of all liquid leaks. Auxiliary equipment such as pumps, pipelines, or flanges, shall not have any liquid leaks, visible tears, or cracks.

305 VAPOR DEGREASERS; SAFETY SWITCHES: If a vapor degreaser is used, then the following equipment shall be utilized:

305.1 A device that shuts off the sump heater if the condenser coolant stops circulating or becomes warmer than specified.

305.2 For degreasers of the spray type, a device that prevents spray pump operation unless the solvent vapor level is at the designed operating level.

305.3 A manual reset that shuts off the sump heater if the solvent vapor level rises above the designed operating level.

306 CONVEYORIZED DEGREASERS: In addition to the requirements of Sections 302, and 303, a person shall not operate a conveyorized degreaser unless it is equipped with the following control devices:

306.1 Either a drying tunnel or other means such as a rotating basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor.

306.2 Minimized opening: entrances and exits should silhouette workloads so that the average clearance between parts and the edge of the degreaser opening is either less than 4 inches (10 cm) or less than 10 percent of the width of the opening.

307 GENERAL OPERATING REQUIREMENTS: Any person who uses a degreaser must conform to the following operating requirements:

307.1 Operate and maintain the degreaser and emission control equipment in proper working order.

307.2 Do not allow any solvent to leak from any portion of the degreaser.

307.3 Do not store or dispose of any solvent from the degreaser, including waste solvent, in a manner that causes or allows any volatile organic compounds emissions.

307.4 If distillation recovery of waste solvent is performed, solvent residues shall not contain more than 10 percent solvent by volume after distillation.

307.5 Waste solvent and waste solvent residues, shall be disposed of by one of the following methods:

307.5.1 A commercial waste solvent reclamation service licensed by the State of California.

307.5.2 At a facility that is federally or state licensed to treat, store, or dispose of such waste.

307.5.3 Recycling in conformance with Section 25143.2 of the California Health and Safety Code.

307.6 Do not remove or open any device designed to cover the solvent unless processing work in the degreaser or performing maintenance on the degreaser.

307.7 Drain cleaned parts after cleaning until dripping ceases (non-vapor degreaser only).

307.8 If using a solvent flow, use only a continuous, fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not cause liquid solvent to splash outside of the degreaser.

307.9 Perform solvent agitation, where necessary, by means other than air agitation.

307.10 Do not degrease porous or absorbent materials such as cloth, leather, wood, or rope.

307.11 For vapor degreasers:

307.11.1 Workloads shall not occupy more than half of the degreaser's evaporative surface area.

307.11.2 Solvent spray shall be kept at least 4 inches below the air-vapor interface.

307.11.3 When starting the degreaser, the cooling system shall be turned on before, or simultaneously with, the sump heater.

307.11.4 When shutting down the degreaser, the sump heater shall be turned off before, or simultaneously with, the cooling system.

307.11.5 The degreaser shall be covered whenever the cooling system is off.

307.12 Minimize solvent carry-out by the following measures, as applicable:

307.12.1 Rack workload to facilitate drainage;

307.12.2 Move workload in and out of the degreaser at less than 3.3 m/min (11 ft/min);

307.12.3 Degrease the workload in the vapor zone until condensation ceases;

307.12.4 Allow workload to dry within the degreaser until visually dry;

307.12.5 For manual operation, tip out any pools of solvent remaining on the workload before removing it from the degreaser.

307.13 A cleaner shall not be located where drafts are directed across the cleaner.

307.14 For those cleaners equipped with water separators, no solvent shall be visually detectable in the water exiting the water separator.

307.15 Wipe cleaning materials containing solvent shall be kept in closed containers at all times, except during use.

307.16 All waste solvent shall be stored in properly identified and closed containers;

307.17 All associated pressure relief devices shall not allow liquid solvents to drain out; and

307.18 Spills during solvent transfer shall be wiped up immediately and the used wipe rags shall be stored in closed containers.

308 LIP EXHAUST SYSTEM: A lip exhaust system shall not be added to any degreaser, unless it is vented to an emission control system, pursuant to Section 310. The lip exhaust shall be turned off when the degreaser is covered.

309 ALTERNATIVE AIRTIGHT/AIRLESS CLEANING SYSTEM REQUIREMENTS: In lieu of complying with the applicable requirements in Sections 302, 303, and 306, a person may use an airtight/airless cleaning system that complies with the following requirements.

309.1 The airtight/airless cleaning system shall be operated in accordance with the manufacturer's specifications and operated with a door or other pressure sealing apparatus that is in place during all cleaning and drying cycles.

309.2 The airtight/airless cleaning system shall not have a vapor leak of more than 50 parts per million measured as methane at the outlet of the airtight/airless cleaning system as indicated by a portable analyzer pursuant to Section 502.8.

309.3. All waste solvent shall be stored in properly identified and closed containers.

309.4 All associated pressure relief devices shall not allow liquid solvents to drain out.

309.5 Spills during solvent transfer shall be wiped up immediately and the used wipe rags shall be stored in closed containers.

310 EMISSIONS CONTROL EQUIPMENT: As an alternative to complying with the applicable requirements of Sections 302, 303, and 306, a person may use an emissions control equipment, subject to the approval of the Air Pollution Control Officer, provided that the emissions control equipment satisfies the following requirements:

310.1 The emissions control equipment is approved by the Air Pollution Control Officer pursuant to Rule 501 – GENERAL PERMIT REQUIREMENTS, and

310.2 The emissions control equipment is designed and operated with an overall collection and control device efficiency (the collection efficiency multiplied by the control efficiency) of at least 85 percent on a mass basis, as determined pursuant to Sections 402, 502.2 and 502.3.

310.3 The emission collection system shall have a ventilation rate not greater than 20 cubic meters per minute per square meter over the total area of the degreaser's evaporative surface area, unless the rate must be changed to meet Federal and State OSHA requirements.

400 ADMINISTRATIVE REQUIREMENTS

401 CALCULATION FOR DETERMINING VOC CONTENT OF SOLVENTS INCLUDING WATER AND EXEMPT COMPOUNDS: For the VOC content as applied, the volume of solvent is defined as the volume of the original solvent, plus any material added to the original solvent (e.g., thinners or reducers). For the VOC content as supplied, the volume of solvent is defined as the volume of the original solvent. The weight of VOC per total volume of solvent shall be calculated by the following equation:

$$G_2 = \frac{W_v - W_w - W_{ec}}{V_m}$$

Where: G_2 = Weight of VOC per total volume of solvent, in grams per liter
W_v = Weight of all volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of solvent, in liters

402 CALCULATION FOR DETERMINING PERCENT CONTROL EFFICIENCY AND VOC MASS EMISSION RATE: The VOC mass emission rate shall be calculated both upstream and downstream of the emissions control equipment based on the VOC mass concentration and volumetric flowrate, pursuant to Sections 502.3, 502.4 and the following equations:

402.1 VOC Mass Emission Rate:

$$M = (Q) * (C) * (60 \frac{m}{hr}) \ (calculated\ upstream\ and\ downstream)$$

Where: M = VOC mass emission rate (upstream/downstream), in lb/hr.
Q = the volumetric flowrate at the inlet (upstream) or exhaust stack outlet (downstream), in standard cubic feet per minute as determined by Section 502.4.
C = the VOC mass concentration at the inlet (upstream) or outlet (downstream), in pounds per standard cubic feet, as determined pursuant to Section 502.3.

402.2 The percent control efficiency is calculated as follows:

$$\%CE = \left(\frac{M_u - M_d}{M_u} \right) * 100$$

Where: CE = control efficiency.
M_u = the upstream VOC mass emission rate, in lb/hr.
M_d = the downstream VOC mass emission rate, in lb/hr.

403 OPERATION AND MAINTENANCE PLAN: Any person using an approved emission control equipment pursuant to Section 310 must submit an Operation and Maintenance plan for the emissions control equipment to the Air Pollution Control Officer for approval. The plan shall specify operation and maintenance procedures that demonstrate continuous operation and compliance of the emissions control equipment during periods of emissions-producing operations. The plan shall specify key system operating parameters such as temperatures, pressures, and flow rates, necessary to determine compliance with this rule and shall describe in detail procedures to maintain the approved control device. The plan shall specify which records must be kept to document these operations and maintenance procedures. The records shall comply with the requirements of Section 501. The plan shall be implemented upon approval by the Air Pollution Control Officer.

500 MONITORING AND RECORDS

501 RECORDKEEPING: In addition to any existing permit conditions issued pursuant to Rule 501, General Permit Requirements, any person subject to this rule shall comply with the following requirements:

501.1 List of Materials: A list shall be maintained of all solvents currently used and/or stored at the site. The list shall include the following information:

501.1.1 Cleaning material type by name/code/manufacturer.

501.1.2 The actual VOC content of cleaning material as applied including water and exempt compounds.

501.1.3 The actual mixing ratio for the cleaning material as applied.

501.2 Usage Records: Any person within the District using cleaning materials regulated by this rule shall update and maintain the records as required by this rule as follows:

501.2.1 Monthly:

501.2.1.1 Records of total applied volume in gallons for each cleaning material used.

501.2.1.2 Record of solvent cleaning activity associated with each solvent used.

501.2.1.3 Records of each time waste solvent or waste residue is removed from the facility for disposal.

501.3 Emissions Control Equipment: Any person using an emission control equipment pursuant to Section 310 shall maintain such records on a daily basis, of key system operating parameters for emission control equipment, including, but not limited to:

501.3.1 Hours of operation;

501.3.2 Routine and non-routine maintenance; and

501.3.3 The records required by Section 403 as part of the Operation and Maintenance Plan.

501.3.4 Records of test reports conducted pursuant to Section 502.

501.4 Duration of Records: Such records shall be maintained on-site for two years, (five years for sources subject to Rule 507, FEDERAL OPERATING PERMIT PROGRAM,) and made available for review by the Air Pollution Control Officer upon request.

502 TEST METHODS

502.1 Determination of Boiling Point: The initial boiling point of solvents shall be determined in accordance with ASTM D 1078-01.

502.2 Determination of Control Efficiency: Control efficiency of control equipment shall be determined in accordance with United States Environmental Protection Agency Method 18, 25, or 25A (whichever is applicable).

502.3 Determination of Collection Efficiency: Efficiency of the collection system shall be determined in accordance with the United States Environmental Protection Agency's *Guidelines for Determining Capture Efficiency, January 9, 1995*. Individual capture efficiency test runs subject to United States Environmental Protection Agency technical guidelines shall be determined by:

502.3.1 Applicable United States Environmental Protection Agency Methods 204, 204A, 204B, 204C, 204D, 204E, and/or 204F; or

502.3.2 Any other method approved by United States Environmental Protection Agency, the California Air Resources Board, and the Air Pollution Control Officer.

502.4 Determination of Volumetric Flowrate: Volumetric flowrate shall be determined in accordance with United States Environmental Protection Agency Methods 2, 2A, 2C, or 2D (whichever is applicable).

502.5 Determination of VOC Content: VOC content of solvents shall be determined in accordance with United States Environmental Protection Agency Method 24 and Sections 401, and 502.6, of this rule.

502.6 Determination of Compounds Exempt From VOC Definition: Compounds exempted from the VOC definition, as listed in Section 206 of this rule, shall be determined in accordance with ASTM D 4457-85 or California Air Resources Board Method 432. If any of the perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the United States Environmental Protection Agency approved test method used to make the determination of these compounds.

502.7 Test Method Updates: Future U.S. EPA-approved revisions of any test methods referenced in Section 502 shall then become the applicable versions with respect to this rule.

502.8 Determination of VOC Leaks: Vapor VOC leaks shall be determined in accordance with United States Environmental Protection Agency Method 21.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 217
CUTBACK AND EMULSIFIED ASPHALT PAVING MATERIALS

Adopted 06-19-79
(Revised 05-20-85, 09-25-90)

1.0 GENERAL

1.1 APPLICABILITY

1.1.1 A person shall not discharge to the atmosphere volatile organic compounds (VOC's) caused by the use or manufacture of Cutback or Emulsified asphalts for paving, road construction or road maintenance, unless such manufacture or use complies with the provisions of this Rule.

1.2 EXEMPTIONS

1.2.1 The provisions of Section 3.0 shall not apply to:

1.2.2 The use of cutback asphalt or emulsified asphalt in the manufacturing of paving materials where such materials are for immediate shipment and eventual use outside of the County of Placer, State of California, and where such area is designated as attainment for the State and Federal Ozone Standard.

1.2.3 The use of medium cure cutback asphalt during the months of the year when the National Weather Service forecasts that atmospheric temperature for the 24-hour period following application will not exceed 10^{o} C (50^{o} F).

2.0 DEFINITIONS

2.1 ASPHALT - is defined as a dark brown to black cementitious material (solid, semisolid, or liquid in consistency) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.

2.2 CUTBACK ASPHALT - is defined as paving grade asphalts liquified with petroleum distillate and conforming to specifications of the American Society for Testing & Materials (ASTM) as follows:

Rapid Cure Type: ASTM D2028
Medium Cure Type: ASTM D2027
Slow Cure Type: ASTM D2026

2.3 EMULSIFIED ASPHALT - is defined as any asphalt liquified with water containing an emulsifier.

2.4 PAVING MATERIAL - is defined as a mixture consisting mainly of an asphalt and aggregate.

2.5 PAVING AND MAINTENANCE OPERATIONS - is defined as all activities involved in the new construction and maintenance of roadways and parking areas.

3.0 STANDARDS

3.1 CUTBACK ASPHALT

3.1.1 A person shall not manufacture for sale nor use for paving, road construction or road maintenance

any:

3.1.2 Rapid cure cutback asphalt;

3.1.3 Slow cure cutback asphalt containing organic compounds which evaporate at 260° C (500° F) or lower as determined by current ASTM Method D402;

3.1.4 Medium cure cutback asphalt except as provided in Section 1.2.

3.2 EMULSIFIED ASPHALT

3.2.1 A person shall not manufacture for paving, road construction or road maintenance any emulsified asphalt containing organic compounds which evaporate at 260° C (500° F) or lower as determined by current ASTM Method D244, in excess of three percent by volume.

4.0 ADMINISTRATIVE

4.1 TEST METHODS

4.1.2 Analysis of **Cutback Asphalt** samples for VOC content shall be in accordance with current ASTM Method D402.

4.1.3 Analysis of **Emulsified Asphalt** samples for VOC content shall be in accordance with current ASTM Method D244, in excess of three percent by volume.

4.2 RECORDKEEPING

4.2.1 Any person who manufactures or uses cutback asphalts and emulsified asphalts which contain solvents shall comply with the following requirements:

4.2.2 The manufacturer shall maintain records showing the types and amounts of cutback asphalts and emulsified asphalts which contain solvents produced and the destination of these products.

4.2.3 The users shall maintain records showing the types, amounts received, and amounts used of cutback asphalts and emulsified asphalts which contain solvents.

4.2.4 Such records shall be maintained daily and retained and available for inspection by the APCO for the previous 24 month period.

4.2.5 In addition to the recordkeeping requirements as specified herein, all provisions of Regulation IV, Rule 410, when applicable, must still be adhered to.

RULE 218 ARCHITECTURAL COATINGS

Adopted 6-19-79
(Amended 2-01-83, 5-20-85, 4-01-86, 2-09-95, 8-14-97, 12-13-01, 10-14-10)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 SEVERABILITY
104 EXEMPTIONS

200 DEFINITIONS

201 ADHESIVE
202 AEROSOL COATING PRODUCT
203 ALUMINUM ROOF COATING
204 ANTENNA COATING
205 ANTIFOULING COATING
206 APPURTENANCES
207 ARCHITECTURAL COATING
208 BASEMENT SPECIALTY COATING
209 BITUMENS
210 BITUMINOUS ROOF COATING
211 BITUMINOUS ROOF PRIMER
212 BOND BREAKER
213 CLEAR BRUSHING LACQUERS
214 CLEAR WOOD COATINGS
215 COATING
216 COLORANT
217 CONCRETE CURING COMPOUND
218 CONCRETE/MASONRY SEALER
219 DRIVEWAY SEALER
220 DRY FOG COATING
221 EXEMPT COMPOUND
222 FAUX FINISHING COATING
223 FIRE-RESISTIVE COATING
224 FIRE-RETARDANT COATING
225 FLAT COATING
226 FLOOR COATING
227 FLOW COATING
228 FORM-RELEASE COMPOUND
229 GRAPHIC ARTS COATING OR SIGN PAINT
230 HIGH-TEMPERATURE COATING
231 INDUSTRIAL MAINTENANCE COATING
232 LACQUER
233 LOW-SOLIDS COATING
234 MAGNESITE CEMENT COATING
235 MANUFACTURER'S MAXIMUM THINNING RECOMMENDATION
236 MASTIC TEXTURE COATING
237 MEDIUM DENSITY FIBERBOARD
238 METALLIC PIGMENTED COATING
239 MULTI-COLOR COATING
240 NONFLAT COATING
241 NONFLAT - HIGH GLOSS COATING

242 PARTICLE BOARD
243 PEARLESCENT
244 PLYWOOD
245 POST-CONSUMER COATING
246 PRE-TREATMENT WASH PRIMER
247 PRIMER, SEALER, AND UNDERCOATER
248 QUICK DRY ENAMEL
249 QUICK DRY PRIMER, SEALER, AND UNDERCOATER
250 REACTIVE PENETRATING SEALER
251 RECYCLED COATING
252 RESIDENTIAL
253 ROOF COATING
254 RUST PREVENTIVE COATING
255 SANDING SEALER
256 SEALER
257 SECONDARY INDUSTRIAL MATERIALS
258 SEMITRANSPARENT COATING
259 SHELLAC
260 SHOP APPLICATION
261 SOLICIT
262 SPECIALTY PRIMER, SEALER, AND UNDERCOATER
263 STAIN
264 STONE CONSOLIDANT
265 SWIMMING POOL COATING
266 SWIMMING POOL REPAIR AND MAINTENANCE COATING
267 TEMPERATURE-INDICATOR SAFETY COATING
268 TINT BASE
269 TRAFFIC MARKING COATING
270 TUB AND TILE REFINISH COATING
271 UNDERCOATER
272 VARNISH
273 VENEER
274 VIRGIN MATERIALS
275 VOLATILE ORGANIC COMPOUND (VOC)
276 VOC ACTUAL CONTENT
277 VOC CONTENT
278 VOC REGULATORY CONTENT
279 WATERPROOFING CONCRETE/MASONRY SEALER
280 WATERPROOFING MEMBRANE
281 WATERPROOFING SEALER
282 WOOD COATING
283 WOOD PRESERVATIVE
284 WOOD SUBSTRATE
285 ZINC-RICH PRIMER

300 STANDARDS

301 VOC CONTENT LIMITS
302 MOST RESTRICTIVE VOC LIMITS
303 SELL-THROUGH OF COATINGS
304 PAINTING PRACTICES
305 THINNING
306 COATINGS NOT LISTED IN SECTION 301
307 EARLY COMPLIANCE OPTION

400 ADMINISTRATIVE REQUIREMENTS

401 CONTAINER LABELING REQUIREMENTS

500 MONITORING AND RECORDS

501 REPORTING REQUIREMENTS
502 RECORDKEEPING
503 TEST METHODS AND COMPLIANCE PROVISIONS

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100 GENERAL

101 PURPOSE: To limit the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the District.

102 APPLICABILITY: Except as provided in Section 104, this rule is applicable to any person who:

102.1 Supplies, sells, or offers for sale any architectural coating for use within the District.

102.2 Manufactures, blends, or repackages any architectural coating for use within the District.

102.3 Applies or solicits the application of any architectural coating within the District.

103 SEVERABILITY: If a court of competent jurisdiction, issues an order that any provision of this rule is invalid, it is the intent of the Board of Directors of the District that other provisions of this rule remain in full force and affect, to the extent allowed by law.

104 EXEMPTIONS: This rule does not apply to:

104.1 Any architectural coating that is supplied, sold, offered for sale, or manufactured for use outside of the District, or for shipment to other manufacturers for reformulation, or repackaging.

104.2 Any aerosol coating product.

104.3 Any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less, except for Reporting Requirements, in Section 501.

104.4 Shop Coating Operations: Coating operations conducted in a business shop environment which are subject to either, Rule 236, WOOD PRODUCTS COATING OPERATIONS, or Rule 238, FACTORY COATING OF FLAT WOOD PANELING, are exempt from all provisions of this rule.

200 DEFINITIONS

201 ADHESIVE: Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

202 AEROSOL COATING PRODUCT: A pressurized coating product containing pigments or resins that dispense product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marking applications.

203 ALUMINUM ROOF COATING: A coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of coating (at least 0.7 pounds per gallon). Pigment content shall be determined in accordance with SCAQMD Method 318-95, incorporated by reference in subsection 503.5.4.

204 ANTENNA COATING: A coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

205 ANTIFOULING COATING: A coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the U.S. Environmental Protection Agency under the Federal Insecticide,

Fungicide, and Rodenticide Act (7 U.S.C. Section 136, *et seq*.) and with the California Department of Pesticide Regulation.

206 APPURTENANCES: Any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures, cabinets, concrete forms, doors, elevators, fences, hand railings, heating equipment, air conditioning equipment and other fixed mechanical equipment, or stationary tools, lampposts, partitions, pipes and piping systems, rain-gutters and down-spouts, stairways, fixed ladders, catwalks, and fire escapes, and window screens.

207 ARCHITECTURAL COATING: A coating to be applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purpose of this rule.

208 BASEMENT SPECIALTY COATING: A clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a hydrostatic seal for basements and other below-grade surfaces. Basement Specialty Coatings must meet the following criteria:

208.1 Coating must be capable of withstanding at least 10 psi of hydrostatic pressure, as determined in accordance with ASTM D7088-04, which is incorporated by reference in Subsection 503.5.11.

208.2 Coating must be resistant to mold and mildew growth and must achieve a microbial growth rating of 8 or more, as determined in accordance with ASTM D3273-00 and ASTM D3274-95, incorporated by reference in Subsection 503.5.17.

209 BITUMENS: Black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

210 BITUMINOUS ROOF COATING: A coating which incorporates bitumens that is labeled, and formulated exclusively for roofing, for the primary purpose of preventing water penetration.

211 BITUMINOUS ROOF PRIMER: A primer which incorporates bitumens that is labeled and formulated exclusively for roofing, and is intended for the purpose of preparing a weathered or aged surface or improving the adhesion of subsequent surfacing components.

212 BOND BREAKER: A coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

213 CLEAR BRUSHING LACQUERS: Clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush, and which are labeled as specified in Section 401.6.

214 CLEAR WOOD COATINGS: Clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.

215 COATING: A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

216 COLORANT: A concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating, after packaging in sale units, to produce the desired color.

217 CONCRETE CURING COMPOUND: A coating labeled and formulated for application to freshly poured concrete to perform one or more of the following functions:

217.1 Retard the evaporation of water;

217.2 Harden or dustproof the surface of freshly poured concrete.

218 CONCRETE/MASONRY SEALER: A clear or opaque coating that is labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions:

218.1 Prevent penetration of water;

218.2 Provide resistance against abrasion, alkalis, acids, mildew, staining, or ultraviolet light;

218.3 Harden or dustproof the surface of aged or cured concrete.

219 DRIVEWAY SEALER: A coating labeled and formulated for application to worn asphalt driveway surfaces to perform one or more of the following functions:

219.1 Fill cracks;

219.2 Seal the surface to provide protection;

219.3 Restore or preserve the appearance.

220 DRY FOG COATING: A coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

221 EXEMPT COMPOUND: For the purposes of this rule, “exempt compound” has the same meaning as in Rule 102, DEFINITIONS.

222 FAUX FINISHING COATING: A coating labeled and formulated to meet one or more of the following criteria:

222.1 A glaze or textured coating used to create artistic effects, including, but not limited to: dirt, suede, old age, smoke damage, and simulated marble and wood grain; or

222.2 A decorative coating used to create a metallic, iridescent, or pearlescent appearance that contains at least 48 grams of pearlescent mica pigment or other iridescent pigment per liter of coating, as applied (at least 0.4 pounds per gallon); or

222.3 A decorative coating used to create a metallic appearance that contains less than 48 grams of elemental metallic pigment per liter of coating as applied (less than 0.4 pounds per gallon), when tested in accordance with SCAQMD Method 318-95, incorporated by reference in subsection 503.5.4; or

222.4 A decorative coating used to create a metallic appearance that contains greater than 48 grams of elemental metallic pigment per liter of coating as applied (greater than 0.4 pounds per gallon) and which requires a clear topcoat to prevent the degradation of the finish under normal use conditions. The metallic pigment content shall be determined in accordance with SCAQMD Method 318-95, incorporated by reference in subsection 503.5.4; or

222.5 A clear topcoat to seal and protect a faux finishing coating that meets the requirements of subsections 222.1, 222.2, 222.3, or 222.4. These clear topcoats must be sold and

used solely as part of a faux finishing coating system, and must be labeled in accordance with subsection 401.4.

223 FIRE-RESISTIVE COATING: Coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. The fire-resistive category includes sprayed fire resistive materials and in tumescent fire resistive coatings that are used to bring structural materials into compliance with federal, state and local building code requirements: fire-resistive coatings shall be tested in accordance with ASTM E119-09c, incorporated by reference in Subsection 503.5.2. Fire-resistive coatings and testing agencies must be approved by building code officials.

224 FIRE-RETARDANT COATING: A coating labeled and formulated to retard ignition and flame spread, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state, and local building code requirements. The fire-retardant coating and the testing agency must be approved by building code officials. The fire-retardant coating shall be tested in accordance with ASTM E84-07, incorporated by reference in Section 503.5.1 (Flame Spread Index). Effective July 1, 2011, the fire-retardant coating category is eliminated and coatings with fire retardant properties will be subject to the VOC limit of their primary category (e.g., Flat, Nonflat, etc.).

225 FLAT COATING: A coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter, according to ASTM D523-89 (1999), incorporated by reference in Section 503.5. 3.

226 FLOOR COATING: An opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, garage floors, and other horizontal surfaces which may be subject to foot traffic.

227 FLOW COATING: A coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units**.**

228 FORM-RELEASE COMPOUND: A coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some other material other than concrete.

229 GRAPHIC ARTS COATING OR SIGN PAINT: A coating labeled and formulated for hand-application by artists using brush, airbrush, or roller techniques to indoor and outdoor signs (excluding structural components) and murals including lettering enamels, poster colors, copy blockers, and bulletin enamels.

230 HIGH-TEMPERATURE COATING: A high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204^{o}C (400^{o}F).

231 INDUSTRIAL MAINTENANCE COATING: A high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates, including floors, exposed to one or more of the following extreme environmental conditions listed in subsections 231.1 through 231.5, and labeled as specified in subsection 401.5:

231.1 Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;

231.2 Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;

231.3 Frequent exposure to temperatures above 121°C (250°F);

231.4 Frequent heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or

231.5 Exterior exposure of metal structures and structural components.

232 LACQUER: A clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film.

233 LOW-SOLIDS COATING: A coating containing 0.12 kilogram or less of solids per liter (1 pound or less of solids per gallon) of coating material as recommended for application by the manufacturer. The VOC content for Low Solids Coatings shall be calculated in accordance with Subsection 276.

234 MAGNESITE CEMENT COATING: A coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

235 MANUFACTURER'S MAXIMUM THINNING RECOMMENDATION: The maximum recommendation for thinning that is indicated on the label or lid of the coating container.

236 MASTIC TEXTURE COATING: A coating labeled and formulated to cover holes and minor cracks and to conceal surface irregularities, and is applied in a single coat of at least 10 mils (0.010 inch) dry film thickness.

237 MEDIUM DENSITY FIBERBOARD (MDF): A composite wood product panel, molding, or other building material composed of cellulosic fibers (usually wood) made by dry forming and pressing of a resinated fiber mat.

238 METALLIC PIGMENTED COATING: A coating that is labeled and formulated to provide a metallic appearance. Metallic pigmented coatings must contain at least 48 grams of elemental metallic pigment (excluding zinc) per liter of coating as applied (at least 0.4 pounds per gallon), when tested in accordance with South Coast Air Quality Management District Method 318-95, incorporated by reference in subsection 503.5.4. The metallic pigmented coating category does not include coatings applied to roofs or zinc-rich primers.

239 MULTI-COLOR COATING: A coating that is packaged in a single container and that is labeled and formulated to exhibit more than one color when applied in a single coat.

240 NONFLAT COATING: A coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter according to ASTM D523-89 (1999), incorporated by reference in Section 503.5.3.

241 NONFLAT-HIGH GLOSS COATING: A nonflat coating that registers a gloss of 70 or above on a 60 degree meter according to ASTM D523-89 (1999), incorporated by reference in Subsection 503.5.3. Nonflat-High Gloss coatings must be labeled in accordance with Section 401.12.

242 PARTICLE BOARD: A composite wood product panel, molding, or other building material composed of cellulosic material (usually wood) in the form of discrete particles, as distinguished from fibers, flakes, or strands, which are pressed together with resin.

243 PEARLESCENT: Exhibiting various colors depending on the angles of illumination and viewing, as observed in mother-of-pearl.

244 PLYWOOD: A panel product consisting of layers of wood veneers or composite core, pressed together with resin. Plywood includes panel products made by either hot or cold pressing (with resin) veneers to a platform.

245 POST-CONSUMER COATING: Finished coatings~~-~~ generated by a business or consumer that have served their intended end uses, and are recovered from, or otherwise diverted from the waste stream for the purpose of recycling.

246 PRE-TREATMENT WASH PRIMER: A primer that contains a minimum of 0.5 percent acid, by weight, when tested in accordance with ASTM D1613-06, incorporated by reference in Section 503.5.5, which is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

247 PRIMER, SEALER, AND UNDERCOATER: A coating labeled and formulated for one or more of the following purposes:

247.1 To provide a firm bond between the substrate and the subsequent coatings.

247.2 To prevent subsequent coatings from being absorbed by the substrate.

247.3 To prevent harm to subsequent coatings by materials in the substrate.

247.4 To provide a smooth surface for the subsequent application coatings.

247.5 To provide a clear finish coat to seal the substrate.

247.6 To block materials from penetrating into or leaching out of a substrate.

248 QUICK-DRY ENAMEL: A nonflat coating that is labeled as specified in Section 401.9 and that is formulated to have the following characteristics:

248.1 Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16^{o} and 27^{o}C (60^{o} and 80^{o}F);

248.2 When tested in accordance with ASTM D1640-95, incorporated by reference in Section 503.5.6, sets to touch in 2 hours or less, is tack free in 4 hours or less, and dries hard in 8 hours or less by the mechanical test method; and

248.3 Has a dried film gloss of 70 degrees or above on a 60 degree meter.

249 QUICK DRY PRIMER, SEALER, AND UNDERCOATER: A primer, sealer or undercoater that is dry to the touch in 30 minutes and can be recoated in 2 hours when tested in accordance with ASTM D1640-95, incorporated by reference in Section 502.5.6.

250 REACTIVE PENETRATING SEALER: A clear or pigmented coating that is labeled and formulated for application to above-grade concrete and masonry substrates to provide protection from water and waterborne contaminants, including, but not limited to, alkalis, acids and salts. Reactive penetrating sealers must penetrate into concrete and masonry substrates and chemically react to form covalent bonds with naturally occurring minerals in the substrate. Reactive penetrating sealers line the pores of concrete and masonry substrates with a hydrophobic coating, but do not form a surface film. Reactive penetrating sealers must meet all of the following criteria:

250.1 The reactive penetrating sealer must improve water repellency at least 80 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with one or more of the following standards, incorporated by reference in subsection 503.5.18: ASTM C67-07, or ASTM C97-02, or ASTM C140-06.

250.2 The reactive penetrating sealer must not reduce the water vapor transmission rate by more than 2 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with ASTM E96/E96M-05, incorporated by reference in subsection 503.5.19.

250.3 Products labeled and formulated for vehicular traffic surface chloride screening applications must meet the performance criteria listed in National Cooperative Highway Research Report 244 (1981), incorporated by reference in subsection 503.5.20.

Reactive penetrating sealers must be labeled in accordance with subsection 401.10.

251 RECYCLED COATING: An architectural coating formulated such that it contains not less than 50% by volume, post-consumer coating, with a maximum of 50% by volume secondary industrial materials or virgin materials.

252 RESIDENTIAL: Areas where people reside or lodge, including, but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.

253 ROOF COATING: A non-bituminous coating labeled and formulated for application to roofs for the primary purpose of preventing water penetration, reflecting ultraviolet light, or other reflecting solar radiation.

254 RUST PREVENTIVE COATING: A coating formulated to prevent the corrosion of metal surfaces for one or more of the following applications:

254.1 Direct to metal coating;

254.2 Coating intended for application over rusty, previously coated metal surfaces.

This rust preventative coating category does not include coatings that are required to be applied as a topcoat over a primer, or coatings that are intended for use on wood or any other non-metallic surfaces.

Rust preventative coatings, which are for metal substrates only, must be labeled as such in accordance with the labeling requirements in subsection 401.7.

255 SANDING SEALER: A clear or semi-transparent wood coating labeled and formulated for application to bare wood to seal the wood and to provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category.

256 SEALER: A coating labeled and formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.

257 SECONDARY INDUSTRIAL MATERIALS: Products or by-products of the paint manufacturing process, that are of known composition and have economic value but can no longer be used for their intended purpose.

258 SEMITRANSPARENT COATING: A coating that contains binders and colored pigments and is formulated to change the color of the surface, but not conceal the grain pattern or texture.

259 SHELLAC: A clear or opaque coating formulated solely with the resinous secretions of the lac beetle (Laccifer lacca), and formulated to dry by evaporation without a chemical reaction.

260 SHOP APPLICATION: Application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).

261 SOLICIT: To require for use or to specify, by written or oral contract.

262 SPECIALTY PRIMER, SEALER, AND UNDERCOATER: A coating that is formulated for application to a substrate to block water soluble stains resulting from: fire damage, smoke damage, or water damage. Coatings in these three categories must be labeled in accordance with subsection 401.8.

263 STAIN: A semitransparent or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture.

264 STONE CONSOLIDANT: A coating that is labeled and formulated for application to stone substrates to repair historical structures that have been damaged by weathering or other decay mechanisms. Stone Consolidants must penetrate into stone substrates to create bonds between particles and consolidate deteriorated material. Stone Consolidants must be specified and used in accordance with ASTM E2167-01, incorporated by reference in subsection 503.5.21.

Stone Consolidants are for professional use only and must be labeled as such, in accordance with the labeling requirements in subsection 401.11.

265 SWIMMING POOL COATING: A coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals. Swimming pool coatings include coatings used for swimming pool repair and maintenance.

266 SWIMMING POOL REPAIR AND MAINTENANCE COATING: A rubber based coating labeled and formulated to be used over existing rubber based coatings for the repair and maintenance of swimming pools.

267 TEMPERATURE-INDICATOR SAFETY COATING: A coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204^{o}C (400^{o}F).

268 TINT BASE: An architectural coating to which colorant is added after packaging in sale units to produce a desired color.

269 TRAFFIC MARKING COATING: A coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways.

270 TUB AND TILE REFINISH COATING: A clear or opaque coating that is labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop. Tub and tile refinish coatings must meet all of the following criteria:

270.1 The coating must have a scratch hardness of 3H or harder and a gouge hardness of 4H or harder. This must be determined on bonderite 1000, in accordance with ASTM D3363-05, incorporated by reference in subsection 503.5.13.

270.2 The coating must have a weight loss of 20 milligrams or less after 1000 cycles. This must be determined with CS-17 wheels on bonderite 1000, in accordance with ASTM D4060-07, incorporated by reference in subsection 503.5.14.

270.3 The coating must withstand 1000 hours or more of exposure with few or no #8 blisters. This must be determined on unscribed bonderite, in accordance with ASTM D4585-99 and ASTM D714-02e1, incorporated by reference in subsection 503.5.15.

270.4 The coating must have an adhesion rating of 4B or better, after 24 hours of recovery. This must be determined on unscribed bonderite, in accordance with ASTM D4585-99 and ASTM D3359-02, incorporated by reference in subsection 503.5.12.

271 UNDERCOATER: A coating labeled and formulated to provide a smooth surface for subsequent coats.

272 VARNISH: A clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.

273 VENEER: Thin sheets of wood peeled or sliced from logs for use in the manufacture of wood products, such as plywood, laminated veneer lumber, or other products.

274 VIRGIN MATERIALS: Materials that contain no post-consumer coatings or secondary industrial materials.

275 VOLATILE ORGANIC COMPOUND (VOC): For the purposes of this rule, "Volatile Organic Compound" has the same meaning as in Rule 102, DEFINITIONS.

276 VOC ACTUAL CONTENT: The weight of VOC per volume of coating calculated with the following equation:

VOC Actual = (Ws – Ww – Wec) / Vm

Where:

VOC Actual	=	The grams of VOC per liter of coating (also known as the "Coating VOC")
Ws	=	Weight of volatile compounds in grams
Ww	=	Weight of water in grams
Wec	=	Weight of exempt compounds (as defined in Rule 102, DEFINITIONS) in grams
Vm	=	Volume of material in liters

277 VOC CONTENT: The weight of VOC per volume of coating. VOC content is determined as VOC regulatory content, as defined in subsection 278, for all coatings except those in the Low Solids category. For coatings in the Low Solids category, the VOC content is VOC actual, as defined in subsection 276. If the coating is a multi-component product, the VOC content is VOC regulatory as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.

278 VOC REGULATORY CONTENT: The weight of VOC per volume of coating, less the volume of water and exempt compounds, calculated with the following equation:

VOC Regulatory = (Ws – Ww – Wec) / (Vm – Vw – Vec)

Where:

VOC Regulatory	=	The grams of VOC per liter of coating, less water and exempt compounds (also known as the "Material VOC")
Ws	=	Weight of volatile compounds in grams
Ww	=	Weight of water in grams

Wec	=	Weight of exempt compounds (as defined in Rule 102, DEFINITIONS) in grams
Vm	=	Volume of material in liters
Vw	=	Volume of water in liters
Vec	=	Volume of exempt compounds (as defined in Rule 102, DEFINITIONS) in liters

279 WATERPROOFING CONCRETE/MASONRY SEALER: A clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining.

280 WATERPROOFING MEMBRANE: A clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaced to provide a seamless waterproofing membrane that prevents any penetration of liquid water into the substrate. Waterproofing membranes are intended for the following waterproofing applications :(1) below-grade surfaces, (2) between concrete slabs, (3) inside tunnels, (4) inside concrete planters, and (5) under flooring materials. Waterproofing membranes must meet the following criteria:

280.1 Coatings must be applied in a single coat of at least 25 mils (0.025 inches) dry film thickness; and

280.2 Coatings must meet or exceed the requirements contained in ASTM C836-06, incorporated by reference in subsection 503.5.16.

The waterproofing membrane category does not include topcoats that are included in the concrete/masonry sealer category (e.g., parking deck topcoats, pedestrian deck topcoats, etc).

281 WATERPROOFING SEALER: A coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.

282 WOOD COATING: Coatings labeled and formulated for application to wood substrates only. The wood coatings category includes the following clear and semitransparent coatings: lacquers; varnishes; sanding sealers; penetrating oils; clear stains; wood conditioners used as undercoats; and wood sealers used as topcoats. The wood coatings category also includes the following opaque wood coatings: opaque lacquers, opaque sanding sealers, and opaque lacquer undercoaters.

The wood coatings category does not include the following: clear sealers that are labeled and formulated for use on concrete/masonry surfaces or coatings intended for substrates other than wood. Wood coatings must be labeled “For Wood Substrates Only”, in accordance with subsection 401.13.

283 WOOD PRESERVATIVE: A coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136, *et seq*.) and with the California Department of Pesticide Regulation.

284 WOOD SUBSTRATE: A substrate made of wood, particleboard, plywood, medium density fiberboard, rattan, wicker, bamboo, or composite products with exposed wood grain. Wood products do not include items comprised of simulated wood.

285 ZINC-RICH PRIMER: A coating that meets all of the following specifications:

285.1 Coating that contains at least 65 percent metallic zinc powder or zinc dust by weight, of total solids; and

285.2 Coating that is formulated for application to metal substrates to provide a firm bond between the substrate and subsequent applications of coatings; and

285.3 Coating that is intended for professional use only and is labeled as such in accordance with the labeling requirements in subsection 401.14.

300 STANDARDS

301 VOC CONTENT LIMITS: Except as provided in Sections 302, or 303, no person shall: (i) manufacture, blend, or repackage for use within the District; (ii) supply, sell, or offer for use within the District; or (iii) solicit for application or apply within the District, any architectural coating with a VOC content in excess of the corresponding limit specified in the following Table of Standards 1 and Table of Standards 2. Limits are expressed as VOC regulatory content as defined in subsection 278, in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding any colorant added to the tint bases; except for Low Solid Coatings where limits are expressed as VOC actual content as defined in subsection 276.

Table of Standards 1 (Effective Until July 1, 2011)

COATING CATEGORY	EFFECTIVE 1997	EFFECTIVE 6/15/2002	EFFECTIVE 1/1/2003	EFFECTIVE 1/1/2004
Flat Coating	250		100	
Nonflat Coating	250	250	150	
Nonflat – High Gloss Coating		250		
SPECIALTY COATINGS:				
Antenna Coating		530		
Antifouling Coating		400		
Bituminous Roof Coating		300		
Bituminous Roof Primers		350		
Bond Breakers	350			
CLEAR WOOD COATINGS:				
Clear Brushing Lacquer		680		
Lacquers (including lacquer sanding sealers)	680		550	
Sanding Sealers (other than lacquer sanding sealers)	350			
Varnishes	350			
Concrete Curing Compounds	350			
Dry Fog Coating	400			
Faux Finishing Coating		350		
Fire-Resistive Coating		350		
FIRE RETARDANT COATING:				
Clear Coating	650			
Opaque Coating	350			
Floor Coating		250		
Flow Coating		420		
Form – Release Compounds	250			
Graphic Arts Coating or Sign Paints	500			
High Temperature Coating	420			
Industrial Maintenance Coating	420			250
Low Solids Coating *		120		
Magnesite Cement Coating	450			
Mastic Texture Coating	300			
Metallic Pigmented Coating	500			
Multi-Color Coating	420		250	
Pre-Treatment Wash Primers	675	420		
Primers, Sealers, and Undercoaters		350	200	
Quick-Dry Enamels	400		250	
Quick-Dry Primers, Sealers, and	350		200	

COATING CATEGORY	EFFECTIVE 1997	EFFECTIVE 6/15/2002	EFFECTIVE 1/1/2003	EFFECTIVE 1/1/2004
Undercoaters				
Recycled Coating		250		
Roof Coating	300	250		
Rust Preventative Coating		400		
SHELLACS:				
Clear	730			
Opaque	550			
Specialty Primers, Sealers, and Undercoaters		350		
Stains	350		250	
Swimming Pool Coatings	340			
Swimming Pool Repair and Maintenance		340		
Temperature-Indicator Safety		550		
Traffic Marking Coating	250	150		
Waterproofing Sealers	400		250	
Waterproofing Concrete/Masonry Sealers		400		
Wood Preservatives	350			

Table of Standards 2 (Effective July 1, 2011)

VOC COATING CATEGORY	EFFECTIVE 7/1/11	EFFECTIVE 1/1/12
Flat Coatings	50	
Non-Flat Coatings	100	
Non-Flat-High Gloss Coatings	150	
SPECIALTY COATINGS		
Aluminum Roof Coatings	400	
Basement Specialty Coatings	400	
Bituminous Roof Coatings	50	
Bituminous Roof Primers	350	
Bond Breakers	350	
Concrete Curing Compounds	350	
Concrete/Masonry Sealers	100	
Driveway Sealers	50	
Dry Fog Coatings	150	
Faux Finishing Coatings	350	
Fire Resistive Coatings	350	
Floor Coatings	100	
Form-Release Compounds	250	
Graphic Arts Coatings or Sign Paints	500	
High Temperature Coatings	420	
Industrial Maintenance Coatings	250	
Low Solids Coatings *	120	
Magnesite Cement Coatings	450	
Mastic Texture Coatings	100	
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Pre-Treatment Wash Primers	420	
Primers, Sealers And Undercoaters	100	
Reactive Penetrating Sealers	350	
Recycled Coatings	250	
Roof Coatings	50	

VOC COATING CATEGORY	EFFECTIVE 7/1/11	EFFECTIVE 1/1/12
Rust Preventative Coatings	400	250
Shellacs, Clear	730	
Shellacs, Opaque	550	
Specialty Primers, Sealers, and Undercoaters	350	100
Stains	250	
Stone Consolidants	450	
Swimming Pool Coatings	340	
Traffic Marking Coatings	100	
Tub and Tile Refinish Coatings	420	
Waterproof Membranes	250	
Wood Coatings	275	
Wood Preservatives	350	
Zinc-Rich Primers	340	

* Limit is expressed as VOC Actual

Effective July 1, 2011, the following coating categories in the Table of Standards 1 are eliminated, and these coatings will be subject to the VOC limit for the applicable category in the Table of Standards 2, except as provided in Sections 302 and 303:

Antenna
Antifouling
Clear brushing lacquers
Clear wood coatings
Fire retardant coatings
Flow coatings
Lacquer
Quick-dry enamel
Quick-dry primer, sealer, and undercoater
Sanding sealer
Swimming pool repair and maintenance coatings
Temperature-indicator safety coatings
Varnish
Waterproofing concrete/masonry sealer
Waterproofing sealer

302 MOST RESTRICTIVE VOC LIMITS: If anywhere on the container of any architectural coating or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, or any representation that is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the tables in Section 301, then the most restrictive VOC content limit shall apply. This provision does not apply to the coating categories specified in Section 302.1 through 302.12.

302.1 Aluminum roof coatings;

302.2 Bituminous roof primers;

302.3 High temperature coatings;

302.4 Industrial maintenance coatings;

302.5 Low-solids coatings;

302.6 Metallic pigmented coatings;

302.7 Pretreatment wash primers;

302.8 Shellacs;

302.9 Specialty primers, sealers, and undercoaters;

302.10 Wood coatings;

302.11 Wood preservatives;

302.12 Zinc-rich primers.

If a coating meets a definition in Section 200 for one or more specialty coating categories that are listed in the tables in Section 301 then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat-High Gloss Coatings, but is required to meet the VOC limit for the applicable specialty coating listed in the tables.

303 SELL-THROUGH OF COATINGS: Coatings manufactured prior to the effective date specified, for that coating, in the Table of Standards 2 in Section 301, and that complied with the standards in effect at the time the coating was manufactured, may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, any such coating may be applied at any time, both before and after the specified effective date. This subsection does not apply to any coating that does not display the date or date-code required by subsection 401.1.

304 PAINTING PRACTICES: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.

305 THINNING: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards 1 or Table of Standards 2 in Section 301.

306 COATINGS NOT LISTED IN SECTION 301: For any coating that does not meet any of the definitions for the specialty coatings categories listed in Table of Standards 1 or Table of Standards 2 in Section 301, the VOC content limit shall be determined by classifying the coating as a Flat coating, or a Nonflat, or Nonflat-High Gloss coating, based on its gloss, as defined in Section 200, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limits in the Table of Standards 1 or Table of Standards 2 in Section 301 shall apply.

307 EARLY COMPLIANCE OPTION: Prior to July 1, 2011, any coating that meets a definition for a coating category listed in Table of Standards 2 and complies with the applicable VOC content limit in the Table of Standards 2 shall be considered in compliance.

400 ADMINISTRATIVE REQUIREMENTS

401 CONTAINER LABELING REQUIREMENTS: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections 401.1 through 401.12 on the coating container (or label) in which the coating is sold or distributed.

401.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the California Air Resources Board.

401.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.

401.3 VOC Content: VOC content shall be determined as defined in subsections 276 and 278. Each container of any coating subject to this rule shall display one of the following values in grams of VOC per liter of coatings:

401.3.1 Maximum VOC content as determined from all potential product formulations.

401.3.2 VOC content as determined from actual formulation data.

401.3.3 VOC content as determined using the test methods in Section 503.

If the manufacturer does not recommend thinning, the container must display the VOC content, as supplied. If the manufacturer recommends thinning, the container must display the VOC content, including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the container must display the VOC content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOC's during the curing process, the VOC content must include the VOC's emitted during curing.

401.4 Faux Finishing Coatings: Effective January 1, 2011, the labels of all clear topcoat faux finishing coatings shall prominently display the statement "This product can only be sold or used as part of a Faux Finishing coating system."

401.5 Industrial Maintenance Coatings: The labels of all industrial maintenance coatings shall prominently display the statement, "For Industrial Use Only" or "Professional Use Only" or "Not for Residential Use" or "Not Intended for Residential Use."

401.6 Clear Brushing Lacquers: The labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed." This category is deleted effective July 1, 2011.

401.7 Rust Preventive Coatings: The labels of all rust preventive coatings shall prominently display the statement "For Metal Substrates Only."

401.8 Specialty Primers, Sealers, and Undercoaters: Until July 1, 2011, the labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the descriptions listed in Sections 401.8.1 through 401.8.5.

Effective on July 1, 2011, the labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the descriptions listed in Sections 401.8.1 through 401.8.3.

After July 1, 2011, Sections 401.8.4 and 401.8.5 will no longer be effective.

401.8.1 Fire-damaged substrates.

401.8.2 Smoke-damaged substrates.

401.8.3 Water-damaged substrates.

401.8.4 Excessively chalky substrates.

401.8.5 Blocking stains.

401.9 Quick-Dry Enamels: The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time. This category is deleted effective July 1, 2011.

401.10 Reactive Penetrating Sealers: Effective July 1, 2011, the labels of all reactive penetrating sealers shall prominently display the statement "Reactive Penetrating Sealer".

401.11 Stone Consolidants: Effective July 1, 2011, the labels of all stone consolidants shall prominently display the statement, "Stone Consolidant - For Professional Use Only".

401.12 Nonflat-High Gloss Coatings: The labels of all nonflat-high coatings shall prominently display the words, "High Gloss".

401.13 Wood Coatings: Effective July 1, 2011, the labels of all wood coatings shall prominently display the statement, "For Wood Substrates Only".

401.14 Zinc-Rich Primers: Effective July 1, 2011, the labels of all zinc-rich primers shall prominently display the statement, "For Industrial Use Only" or "Professional Use Only" or "Not for Residential Use" or "Not Intended for Residential Use."

500 MONITORING AND RECORDS

501 REPORTING REQUIREMENTS:

501.1 Sales Data: A responsible official from each manufacturer shall upon request of the Executive Officer of the California Air Resources Board or the Air Pollution Control Officer provide data concerning the distribution and sales of architectural coatings. The responsible official shall within 180 days provide information, including, but not limited to:

501.1.1 Name and mailing address of the manufacturer.

501.1.2 Name, address, and telephone number of a contact person.

501.1.3 Name of the coating product as it appears on the label and the applicable coating category.

501.1.4 Whether or not the product is marketed for interior or exterior use or both;

501.1.5 The number of gallons sold in California in containers greater than one liter (1.057 quart) and equal to or less than one liter (1.057 quart).

501.1.6 The VOC actual content and the VOC regulatory content in grams per liter. If thinning is recommended, list the VOC actual and VOC regulatory content, after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed.

501.1.7 Names and CAS numbers of the VOC constituents in the product.

501.1.8 Names and CAS numbers of any compounds in the product specifically exempted from the VOC definition, as defined in Rule 102, DEFINITIONS.

501.1.9 Whether the product is marketed as solvent borne, waterborne or 100% solids.

501.1.10 Description of resin or binder in the product.

501.1.11 Whether the coating is a single-component or a multi-component product.

501.1.12 The density of the product in pounds per gallon.

501.1.13 The percent by weight of: solids, all volatile materials, water and any compounds in the product specifically exempted from the VOC definition, as defined in Rule 102, DEFINITIONS.

501.1.14 The percent by volume of: solids, water and any compounds in the product specifically exempted from the VOC definition, as listed defined in Rule 102, DEFINITIONS.

502 RECORDKEEPING: All sales data listed in subsection 501.1 shall be maintained by the responsible official for a minimum of three years. Sales data submitted by the responsible official to the Executive Officer of the California Air Resources Board may be claimed confidential and such information shall be handled in accordance with the procedure specified in Title 17, California Code of Regulations, Sections 91000 through 91022.

503 TEST METHODS AND COMPLIANCE PROVISIONS:

503.1 Calculation of VOC Content: For the purpose of determining compliance with the VOC content limits in Section 301, the VOC content of a coating shall be determined as defined in subsections 276 and 278. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC Content must be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the VOC content must be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOC's during the curing process, the VOC Content must include the VOC's emitted during curing.

503.2 Test Method for VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculation in subsections 276 or 278 the reference method for VOC content is U.S. Environmental Protection Agency Method 24, incorporated by reference in Subsection 503.5.8, except as provided in subsections 503.3 and 503.4. An alternative method to determine the VOC content of coatings is South Coast Air Quality Management District Method 304-91 (Revised 1996), incorporated by reference in subsection 503.5.9.

The exempt compounds content shall be determined by South Coast Air Quality Management District Method 303-91 (Revised 1993), Bay Area Air Quality Management District Method 43 (Revised 1996), or Bay Area Air Quality Management District Method 41 (Revised 1995), as applicable, incorporated by reference in Subsections 503.5.22, 503.5.23 and 503.5.24, respectively.

To determine the VOC content of a coating, the manufacturer may use U.S. Environmental Protection Agency Method 24, or an alternative method as provided in Section 503.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g. quality assurance checks, or recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved as specified in

Section 503.3. The Air Pollution Control Officer may require the manufacturer to conduct a Method 24 analysis.

503.3 Alternative Test Method: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with subsection 503.1, after review and approved in writing by the staffs of the District, the California Air Resources Board, and the U.S. Environmental Protection Agency, may also be used.

503.4 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. Environmental Protection Agency Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in Subsection 503.5.10. This method has not been approved for methacrylate multicomponent coatings used for purposes other than as traffic marking coatings or for other classes of multicomponent coatings.

503.5 Test Methods: The following test methods are incorporated by reference herein, and shall be used to test coatings subject to provisions of this rule:

503.5.1 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM Designation E84-07, "Standard Test Method for Surface Burning Characteristics of Building Materials", (see Section 223, Fire-Resistive Coating).

503.5.2 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E119-09c, "Standard Test Methods for Fire Tests of Building Construction and Materials", (see Section 223, Fire-Resistive Coating).

503.5.3 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999), "Standard Test Method for Specular Gloss", (see Section 225, Flat Coating, Section 240, Nonflat Coating, and Section 241, Nonflat-High Gloss Coating).

503.5.4 Metal Content of Coatings: The metallic content of a coating shall be determined by South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction", South Coast Air Quality Management District "Laboratory Methods of Analysis for Enforcement Samples" (see Section 203, Aluminum Roof, Section 222, Faux Finishing, and Section 238, Metallic Pigmented Coating).

503.5.5 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products", (see Section 246, Pre-Treatment Wash Primers).

502.5.6 Drying Times: The set-to-touch, dry-hard, dry-to-touch, and dry-to-recoat times of a coating shall be determined by ASTM Designation D1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature", (see Section 248, Quick-Dry Enamel and Section 249, Quick-Dry Primer, Sealer, and Undercoater). The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D1640-95.

502.5.7 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4214-98, "Standard Test Methods for

Evaluating the Degree of Chalking of Exterior Paint Films", (see Section 262, Specialty Primer, Sealer, and Undercoater).

503.5.8 VOC Content of Coatings: The VOC content of a coating shall be determined by U.S. Environmental Protection Agency Method 24 as it exists in appendix A of 40 Code of Federal Regulations (CFR) part 60; "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings" (see Section 503.2).

503.5.9 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. Environmental Protection Agency Method 24 or South Coast Air Quality Management District Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," South Coast Air Quality Management District "Laboratory Methods of Analysis for Enforcement Samples", (see Section 503.3).

503.5.10 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings", (see Section 503.4).

503.5.11 Hydrostatic Pressure for Basement Specialty Coatings: ASTM D7088-04, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry" (see Section 208, Basement Specialty Coating).

503.5.12 Tub and Tile Refinish Coating Adhesion: ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D3359-02, "Standard Test Methods for Measuring Adhesion by Tape Test" (see Section 270, Tub and Tile Refinish Coating).

503.5.13 Tub and Tile Refinish Coating Hardness: ASTM D3363-05, "Standard Test Method for Film Hardness by Pencil Test" (see Section 270, Tub and Tile Refinish Coating).

503.5.14 Tub and Tile Refinish Coating Abrasion Resistance: ASTM D4060-07, "Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser" (see Section 270, Tub and Tile Refinish Coating).

503.5.15 Tub and Tile Refinish Coating Water Resistance: ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D714-02e1, "Standard Test Method for evaluating Degree of Blistering of Paints" (see Section 270, Tub and Tile Refinish Coating).

503.5.16 Waterproofing Membrane: ASTM C836-06 "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course" (see Section 280, Waterproofing Membrane).

503.5.17 Mold and Mildew Growth for Basement Specialty Coatings: ASTM D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber", and ASTM D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation" (see Section 208, Basement Specialty Coating).

503.5.18 Reactive Penetrating Sealer Water Repellency: ASTM C67-07, "Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile", or ASTM C97-02, "Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone", or ASTM C140-06. "Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units" (see Section 250, Reactive Penetrating Sealer).

503.5.19 Reactive Penetrating Sealer Water Vapor Transmission: ASTM E96/E96M-05, "Standard Test Method for Water Vapor Transmission of Materials" (see Section 250, Reactive Penetrating Sealer).

503.5.20 Reactive Penetrating Sealer-Chloride Screening Applications: National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures" (see Section 250, Reactive Penetrating Sealer).

503.5.21 Stone Consolidants: ASTM E2167-01, "Standard Guide for Selection and Use of Stone Consolidants" (see Section 264, Stone Consolidant).

503.5.22 Exempt Compounds-Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance by Bay Area Air Quality Management District Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials", Bay Area Air Quality Management *District Manual of Procedures*, Volume III, adopted 11/6/96, (see Section 503.2).

503.5.23 Exempt Compounds-Parachlorobenzotrifluoride (PCBTF): The exempt compound PCBTF, shall be analyzed as an exempt compound for compliance by Bay Area Air Quality Management District Method 41, "Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride", Bay Area Air Quality Management District Manual of Procedures, Volume III, adopted 12/20/95, (see Section 503.2).

503.5.24 Exempt Compounds: The content of compounds exempt under U.S. Environmental Protection Agency Method 24 shall be analyzed by South Coast Air Quality Management District Method 303-91 (Revised 1993, "Determination of Exempt Compounds", South Coast Air Quality Management District "Laboratory Methods of Analysis for Enforcement Samples", (see Section 503.2).

RULE 219
ORGANIC SOLVENTS

Adopted 06-19-79
(Revised 05-20-85)

A. A person shall not discharge into the atmosphere more than 15 pounds of organic materials in any one day, nor more than 3 pounds in any one hour, from any article, machine, equipment or other contrivance, in which any organic solvent or any material containing solvent comes into contact with flame or is baked, heatcured or heat polymerized, in the presence of oxygen, unless said discharge has been reduced by at least 85 percent. Those portions of any series of articles, machines, equipment or other contrivances designed for processing a continuous web, strip or wire which emit organic materials and using operations described in this section, shall be collectively subject to compliance with this section.

B. A person shall not discharge into the atmosphere more than 40 pounds of organic materials in any one day, nor more than 8 pounds in any one hour, from any article, machine, equipment or other contrivance used under conditions other than described in Section (A) for employing, or applying, any photochemically reactive solvent, as defined in Section (H) or material containing such photochemically reactive solvent, unless said discharge has been reduced by at least 85 percent. Emissions of organic materials into the atmosphere resulting from air or heated drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in this section shall be included in determining compliance with this section. Emissions resulting from baking, heat-curing or heat-polymerizing as described in Section (A) shall be excluded from determination or compliance with this section. Those portions of any series of articles, machines, equipment or other contrivances designed for processing a continuous web, strip, or wire which emit organic materials using operations described in this section shall be collectively subject to compliance with this section.

C. A person shall not discharge into the atmosphere more than 3000 pounds of organic materials in any one day or more than 450 pounds in any one hour, from any article, machine, equipment or other contrivance in which any non-photochemically reactive organic solvent or any material containing such solvent is employed or applied, unless said discharge has been reduced by at least 85 percent. Emissions of organic materials into the atmosphere resulting from air or heated drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in this section shall be included in determining compliance with this section. Emissions resulting from baking, heat-curing, or heat-polymerizing as described in Section (A) shall be excluded from determination of compliance with this section. Those portions of any series of articles, machines, equipment, or other contrivance designed for processing a continuous web, strip or wire which emit organic materials and using operations described in this section shall be collectively subject to compliance with this section.

D. A person shall not, during any one day, dispose of a total of more than 1.5 gallons of any photochemically reactive solvent as defined in Section (H), or of any material containing more than 1.5 gallons of any such photochemically reactive solvent by means which will permit the evaporation of such solvent into the atmosphere.

E. Emissions of organic materials into the atmosphere from the cleanup with photochemically reactive solvent, as defined in Section (H), of any article, machine, equipment or other contrivance described in Sections (A), (B), or (C), shall be included with the other emissions of organic materials from that article, machine, equipment or other contrivance for determining compliance with this rule.

F. Emissions of organic materials into the atmosphere required to be controlled by Sections (A), (B) or (C) shall be reduced by:
   1. Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon monoxide, or
   2. Adsorption, or
   3. Processing in a manner determined by the Air Pollution Control Officer to be not less effective than (1) or

(2) above.

G. For the purposes of this rule, organic solvents include diluents and thinners and are defined as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers or cleaning agents, except that such materials which exhibit a boiling point higher than 221 degrees F at 0.5 millimeters mercury absolute pressure or having an equivalent vapor pressure shall not be considered to be solvents unless exposed to temperatures exceeding 221 degrees F.

H. For the purposes of this rule, a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of chemical compounds classified below or which exceed any of the following individual percentage composition limitations, referred to the total volume of solvent:
   1. A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation: **5 percent**.
   2. A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: **8 percent**.
   3. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: **20 percent**. Whenever any organic solvent or any constituents of any organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that group having the least allowable percent of the total volume of solvents.

I. For the purposes of this rule, organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

J. A person incinerating, adsorbing, or otherwise processing organic materials pursuant to this rule shall provide, properly install, and maintain in calibration, in good working order and in operation, devices specified in the Authority to Construct or the Permit to Operate or as specified by the Air Pollution Control Officer, for indicating temperatures, pressures, rates of flow or other operating conditions necessary to determine the degree of effectiveness of air pollution control.

K. Any person using organic solvents or any materials containing organic solvents shall supply the Air Pollution Control Officer, upon request, and in the manner and form prescribed by him, written evidence of the chemical composition, physical properties and amount consumed for each organic solvent used.

L. The provisions of this rule shall not apply to:
   1. The manufacturer of organic solvents, or the transport or storage of organic solvents or materials containing organic solvents.
   2. The spraying or other employment of insecticides, pesticides or herbicides.
   3. The employment, application, evaporation or drying of saturated halogenated hydrocarbons or perchloroethylene.
   4. The use of any material, in any article, machine, equipment or other contrivance described in Sections (A), (B), (C) or (E), if:
      a. The volatile content of such material consists only of water and organic solvents, and
      b. The organic solvents comprise not more than 20 percent by volume of said volatile content, and
      c. The volatile content is not photochemically reactive as defined in Section (H), and
      d. The organic solvent of any material containing organic solvent does not come into contact with flame.
   5. The use of any material, in any article, machine, equipment or other contrivance described in Sections (A), (B), (C) or (E), if:
      a. The organic solvent content of such material does not exceed 20 percent by volume of said materials, and
      b. The volatile content is not photochemically reactive as defined in Section (H), and
      c. The organic solvent or any material containing organic solvent does not come into contact with flame.

M. In addition to other restrictions contained in these rules and regulations:
   1. A person shall not use, in any dry cleaning operation, organic solvents containing 4 percent or more by volume of any photochemically reactive organic material as defined in Section (H) unless the emissions of the discharged organics are reduced by 90 percent or more by use of the methods described in Section (F).
   2. A person shall not discharge into the atmosphere any organic materials from surface degreasing operations unless they are either reduced by at least 85 percent, or unless such materials are not photochemically

reactive as defined in Section (H).

3. A person shall not manufacture, for use within Placer County, nor use any photochemically reactive solvent as defined in Section (H) for the purpose of thinning or diluting any metal surface coating.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 220
ABRASIVE BLASTING

Adopted 05-24-77
(Revised 06-19-79)

By reference Title 17 Subchapter 6 of the California Administrative Code shall apply.

RULE 221
COMPLIANCE TESTS

Adopted 06-19-79

Except as otherwise stated in these rules and regulations, performance tests undertaken to determine compliance of sources with Regulation II shall comply with the provisions of CFR 40, Part 60, Appendix A except that Method 5 shall be modified to include the impinger train catch.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 222
REDUCTION OF ANIMAL MATTER

Adopted 06-19-79

A person shall not operator or use any article, machine, equipment or other contrivance for the reduction of animal matter unless all gases, vapors and gas-entrained effluents from such an article, machine equipment or other contrivance are:

A. Incinerated at temperatures of not less than 1,200 degrees Fahrenheit for a period of not less than 0.3 seconds, or
B. Processed in a manner determined by the Air Pollution Control Officer to be as effective for the purpose of emission control than Subsection (A) above.

A person incinerating or processing gases, vapors, or gas-entrained effluents pursuant to this rule shall provide, properly install and maintain in calibration, in good working order and in operation, devices as specified in the Authority to Construct or Permit to Operate or as specified by the Air Pollution Control Officer, for indicating temperature, pressure or other operating conditions.

For the purposes of this rule, "reduction" is defined as any heated process, including rendering, cooking, drying, dehydration, digesting, evaporating and protein concentrating.

The provisions of this rule shall not apply to any article, machine, equipment or other contrivance used exclusively for the processing of food for human consumption.

RULE 223
METAL CONTAINER COATING

Adopted 04-21-81
(Revised 09-25-90, 10-19-93, 10-06-94)

100 GENERAL

101 APPLICABILITY: The provisions of this rule shall apply to all metal container coating operations that use volatile organic compounds.

200 DEFINITIONS

201 COATING APPLICATOR - An apparatus used to apply a surface coating.

202 COATING LINE - An operation or process for applying, drying, baking, and/or curing surface coatings, together with associated equipment including a coating applicator, flash-off area and oven.

203 CAN COATING -Any coating containing organic materials and applied or intended for application by spray, roller, or other means onto the interior and/or exterior of metal cans, drums, pails, or lids.

204 CLOSURE - Any component that is sued to close or seal a container

205 COIL - Any flat metal sheet or strip that is rolled or wound in concentric rings.

206 COIL COATING - Any coating applied to metal sheets or strips which are then rolled into coils for further industrial or commercial use.

207 CONTAINER - Any three-piece can, two-piece can, drum, pail or tube.

208 DRUM - Any cylindrical metal shipping container larger than 12 gallons capacity but not larger than 110 gallons capacity.

209 ENCLOSED GUN WASHER - A washing system that has an enclosed solvent container, and uses non-atomized solvent flow to flush the spray equipment and collects and returns discharged solvent to the enclosed container.

210 END SEALING COMPOUND - A compound which is coated onto can ends and which functions as a gasket when the end is assembled onto the can.

211 EXEMPT COMPOUNDS - For the purposes of this rule, exempt compounds are the following:

211.1 Methane

211.2 Carbon dioxide
211.3 Carbon monoxide
211.4 Carbonic acid
211.5 Metallic carbides or carbonates
211.6 Ammonium carbonate
211.7 1,1,1-trichloroethane
211.8 Methylene chloride
211.9 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
211.10 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
211.11 Trichlorofluoromethane (CFC-11)
211.12 Dichlorodifluoromethane (CFC-12)
211.13 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
211.14 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114)
211.15 Chloropentafluoroethane (CFC-115)
211.16 Pentafluoroethane (HFC-125)
211.17 1,1,2,2-tetrafluoroethane (HFC-134)
211.18 Tetrafluoroethane (HFC-134a)
211.19 1,1-dichloro-1-fluoroethane (HCFC-141b)
211.20 1-chloro-1,1-difluoroethane (HCFC-142b)
211.21 1,1,1-trifluoroethane (HFC-143a)
211.22 Chlorodifluoromethane (HCFC-22)
211.23 Trifluoromethane (HFC-23)
211.24 Difluoroethane (HFC-152a)
211.25 The following four classes of perfluorocarbon 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.
d. Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine. Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

212 EXTERIOR BASE COATING - A coating applied to the exterior of a container body to provide protection to the metal or to provide background for any lithographic or printing operation.

213 EXTERIOR BODY SPRAY - A coating sprayed on the exterior of a container body to provide a decorative or protective finish.

214 FOOD/BEVERAGE CAN - A metal container in which food or beverages intended for human consumption are packaged.

215 GRAMS OF VOC PER LITER OF COATING (AS APPLIED EXCLUDING WATER AND EXCLUDING EXEMPT COMPOUNDS) - The weight of VOC per combined volume of VOC and coating solids. This can be calculated by the following equation:

$$G_{voc} = (W_v - W_w - W_{ec}) / (V_m - V_w - V_{ec})$$

where:

G_{voc} = grams VOC per liter of coating less water and exempt compounds

W_v = weight of all volatile compounds in grams

W_w = weight of water in grams

W_{ec} = weight of exempt compounds in grams

V = volume of coating material in liters

m

V_w = volume of water in liters

V_{ec} = volume of exempt compounds in liters

216 GRAMS OF VOC PER LITER OF MATERIAL - The weight of VOC per combined volume of material. This can be calculated by the following equation:

$$G_{voc} = (W_v - W_w - W_{ec}) / V_m$$

where:

G_{voc} = grams VOC per liter of material

W_v = weight of all volatile compounds in grams

W_w = weight of water in grams

W_{ec} = weight of exempt compounds in grams

V_m = volume of material in liters

217 HIGH-VOLUME LOW-PRESSURE (HVLP) - A coating application system that is operated on a delivered air pressure between 0.1 and 10 psig air pressure.

218 INK - Any coating used in any operation that imparts color, design, alphabet, or numerals on an exterior surface of a metal container or closure.

219 INTERIOR BASE COATING - A coating applied to the interior of a container body to provide a protective lining between the product and the can.

220 INTERIOR BODY SPRAY - A coating sprayed on the interior of the container body to provide a protective film between the product and the can.

221 LUBRICANT APPLICATOR - An apparatus used to apply a surface lubricant to beverage container lid tabs.

222 NECKER LUBRICANT - Any fluid or solid applied to a can forming tool to reduce froiction while reducing the can diameter to form a neck.

223 OVERVARNISH - A coating applied directly over a design coating to reduce the coefficient of friction, to provide gloss and to protect the finish against abrasion and corrosion.

224 PAIL - Any metal container from 1 gallon to 12 gallon capacity and constructed of 29 gauge or heavier material.

225 RECONDITIONED DRUMS, PAILS, OR LIDS - Any drum, pail, or lid which is reused, recycled or remanufactured.

226 TAB PRESS LUBRICATION - The process that uses a lubricated mechanical press to create beverage container lid tabs from flat aluminum metal stock.

227 THREE-PIECE CAN SIDE-SEAM SPRAY - A coating sprayed on the interior and/or exterior of a welded, cemented or soldered seam to protect the exposed metal.

228 TWO-PIECE CAN EXTERIOR END COATING - A coating applied to the exterior end of a can to provide protection to the metal.

229 VOLATILE ORGANIC COMPOUND (VOC) - Any compound that contains at least one atom of carbon, except exempt compounds.

300 STANDARDS

301 VOC LIMITATIONS - Except as provided in Section 302, a person shall not use or apply any coating on any coating line of the type designated below that contains volatile organic compounds in excess of the following limits:

	Coating Category	**Grams of VOC/liter of coating as applied, excluding water and exempt compounds.**
301.1	Sheet basecoat (interior and exterior) and over-varnish	225
301.2	Two piece can exterior basecoat and over-varnish	250
301.3	Coil Coating	200
301.4	Interior body spray	420
	Two piece can	360
	Three piece can	
301.5	Three piece can side seam spray	660
301.6	End sealing compound:	440
	food / beverage	0
	non-food / non-beverage	
301.7	Exterior body spray	420
301.8	Reconditioned drums, pails and lids coatings:	510
	Interior	420
	Exterior	
301.9	New drums, pails and lids coatings:	340
	Exterior, Air Dried	340
	Exterior, Baked	420
	Interior	
301.10	Inks	225
301.11	Tab Press Lubricant	690
301.12	Necker Lubricants	100

302 EMISSION CONTROL SYSTEM: Alternatively, a person may comply with the provisions of Section 301 by using an emission control system, provided that the overall efficiency of the system (capture efficiency multiplied by control efficiency) shall not be less than 85 percent by weight in reducing emissions of organic compounds. The total VOC emissions from operations under this section, considering capture and control efficiencies, shall be equivalent to or less than the VOC emissions level that would be achieved by complying with Section 301. The emission control system shall be approved in writing by the Air Pollution Control Officer in accordance with Rule 501, GENERAL PERMIT REQUIREMENTS.

303 APPLICATION METHODS - Except for can interior and automatic triggered sideseam sprays, a person shall not apply coatings that contain volatile organic compounds unless the coating is applied with one of the following methods:

303.1 Electrostatic application operated in accordance with the manufacturer's recommendations.
303.2 Flow coat.
303.3 Roll coat.
303.4 Dip coat.
303.5 Squeegee pad.
303.6 High-volume low-pressure (HVLP) operated in accordance with the manufacturer's recommendations.

304 PROHIBITION OF SPECIFICATION: A person shall not solicit nor require for use nor specify the application of a coating to any metal container or closure if such use or application results in a violation of the provisions of this rule. The prohibition applies to all written or oral contracts under the terms of which any coating that is subject to the provisions of this rule is to be applied to any metal container or closure at any physical location within the District.

305 SURFACE PREPARATION AND CLEAN-UP SOLVENT - The requirements of this section shall apply to any person using VOC-containing materials for surface preparation and clean-up:

305.1 A person shall not use materials that have a VOC content in excess of 200 grams per liter of material for surface preparation.
305.2 A person shall use closed, nonabsorbent containers for the storage or disposal of cloth or paper used for clean-up.
305.3 A person shall not use volatile organic compounds for the clean-up of spray equipment, including paint lines, unless an enclosed gun washer or other low-emission washing system approved in writing by the Air Pollution Control Officer is used.
305.4 A person shall not use organic compounds with a composite vapor pressure equal to or greater than 45 mm Hg measured at 20C (68F) in a gun washing system.

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE

401.1 VOC LIMITATIONS: The VOC limitations described in Section 301, or alternatively Section 302, of this rule shall be achieved on or before October 6, 1995, with the exception of facilities subject to the Tab Press Lubricant limitation of Subsection 301.10, for which compliance is required no later than May 31, 1995.
401.2 APPLICATION METHODS: The application methods described in Section 303 of this rule shall be in use on or before October 6, 1995, with the exception of facilities subject to the Tab Press Lubricant limitation of Subsection 301.10, for which compliance is required no later than May 31, 1995.
401.3 SURFACE PREPARATION AND CLEAN-UP SOLVENTS: The surface preparation and clean-up solvents and gun washing system described in Sections 305.1, 305.3, and 305.4 shall be in use on or before October 6, 1995, with the exception of facilities subject to the Tab Press Lubricant limitation of Subsection 301.10, for which compliance is required no later than May 31, 1995.
401.4 Compliance with all other requirements of this rule shall become effective upon adoption.

402 OPERATION AND MAINTENANCE PLAN: A person using an emission control device as a means of complying with this rule, as provided in Section 302, shall submit an Operation and Maintenance Plan with the application for Authority to Construct for the emission control device.

402.1 The Operation and Maintenance Plan shall specify:
a. Operation and maintenance procedures that will demonstrate continuous operation of the emission control device during emission-producing operations;
b. Records that must be kept to document the operation and maintenance procedures.

402.2 The records must comply with Sections 502 and 503; and
402.3 The Operation and Maintenance Plan shall be implemented upon approval by the Air Pollution Control Officer.
402.4 After completing the construction of the emission control device, the Operation and Maintenance Plan shall be resubmitted annually for approval.

500 MONITORING AND RECORDS

501 RECORDKEEPING

501.1 A person who is subject to the limitations of this regulation shall comply with all applicable recordkeeping requirements as specified in Rule 410, RECORDKEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS.

502 CONTROL SYSTEM RECORDS

502.1 A person using an emission control device pursuant to Section 302 as a means of complying with this rule shall maintain records as required by the Operation and Maintenance Plan specified in Section 402 on a daily basis.
502.2 Compliance with the standards of Section 302 shall be demonstrated by conducting annual source testing of any emission control equipment as specified in Section 505 and by analyzing coating VOC content as specified in Section 504.

503 DURATION OF RECORDS: All records maintained pursuant to this rule shall be retained for at least two years from date of entry, with the exception that sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM, shall retain records at least five years. Records shall be made available for inspection by the Air Pollution Control Officer upon request.

504 TEST METHODS FOR VOC CONTENT

504.1 The VOC content of coatings subject to the provisions of this rule shall be analyzed using U.S. EPA Reference Method 24 as found in 40 CFR 60, Appendix A.

505 TEST METHOD FOR VAPOR PRESSURE - Composite vapor pressure of an organic solvent used in a gun washing system shall be determined in accordance with ASTM D2879-83 and the following equation:

Where:
VP_c = composite vapor pressure of an organic solvent, in mm Hg
W_i = weight of i^{th} compound, in grams
WM_i = molecular weight of i^{th} compound, in grams per gram-mole
P_i^{sat} = saturate vapor pressure of i^{th} compound, in mm Hg
W_w = weight of water, in grams
W_e = weight of exempt compounds, in grams
MW_w = molecular weight of water, in grams per mole
MW_e = molecular weight of exempt compounds, in grams per mole

506 TEST METHODS FOR CAPTURE AND CONTROL EFFICIENCY

506.1 Capture efficiency of the emission control system as specified in Section 302 shall be determined in accordance with the U.S. EPA protocols referenced in 40 CFR 52.741(a)(4)(iii).
506.2 Control efficiency as specified in Section 302 shall be determined by U.S. EPA Reference Methods 25 and 25A as found in 40 CFR Part 60, Appendix A, or ARB Method 100.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 225
WOOD FIRED APPLIANCES

Adopted 06-17-86

A. APPLICABILITY:

1. The provisions of this Rule shall apply to that area known as Squaw Valley as identified on Plate 4, page 58 of the 1983 Squaw Valley General Plan. The legal description of the area for the purpose of this Rule is as follows:

   S28 of T16N R16E;
   S 1/2 and NE 1/4 of S29 T16N R16E;
   SE 1/4 of S30 T16N R16E, NE 1/4 of S31 T16N R16E and the N 1/2 of S32 T16N R16E;
   and the NW 1/4 of S33 T16N R16E.
2. This regulation shall apply to all commercial and residential wood fired appliance installations.

B. DEFINITIONS:

1. For the purpose of this Rule "Wood Fired Appliance" is defined as an appliance with a closed combustion chamber which maintains an air-to-fuel ratio of less than 30 to 1 during the burning of 90% or more of the fuel mass consumed in the low firing cycle. The low firing cycle means less than or equal to 25% of the maximum burn rate achieved with doors closed or the minimum burn rate, whichever is greater.
2. For the purpose of this Rule "Fireplace" is defined as a combustion chamber which maintains an air to fuel ratio equal to or greater than 30 to 1 during the burning of 90% or more of the fuel mass consumed in the low firing cycle. The low firing cycle means less than or equal to 25% of the maximum burn rate achieved or the minimum burn rate, whichever is greater.
3. For the purpose of this Rule "Catalytic Combuster" is defined as any device coated with platinum, palladium or other rare metal located in the stack or combustion chamber of a wood fired appliance designed to cause relatively complete combustion at lower than normal temperatures.
4. For the purpose of this Rule "Single Family Residential" is defined as:
   a. A detached building designed for or occupied by one family and located on a parcel where the uses specified in Section 1606.1 of the Placer County Zoning Ordinance are allowable; or
   b. A detached building, under one roof, designed for or occupied exclusively by, two families living independently of each other and located on a parcel where the use specified in Section 1608.2 of the Placer County Zoning Ordinance is allow able.
5. For the purpose of this Rule "Multiple Unit Residential Development" is defined as dwelling groups or apartments with three or more total units located on a parcel where the use specified in Section 1608 and 1610 of the Placer County Zoning Ordinance is allowable.
6. For the purpose of this Rule "Public Area" is defined as an area of a multiple unit residential development, intended for use by groups of people, including but not limited to a lounge, a restaurant, and a lobby, specifically excluding an office space, a hallway, a bedroom and other associated living areas.

C. STANDARDS.

1. Except as otherwise stated in this Rule, the use of wood fired appliances shall be limited to one certified appliance per commercial or single family residential structure which is approved after July 1, 1986.
2. After July 1,1986, no person shall install and use in Squaw Valley, any wood fired appliance that is not certified by the State of Oregon, Department of Environmental Quality or as provided in Section C.6. to emit 15 grams per hour or less of particulate matter for non-catalytic equipped appliances, or 6 grams per hour or less for catalytic

equipped appliances.

3. After July 1, 1988, no person shall install and use in Squaw Valley any wood fired appliance that is not certified by the State of Oregon, Department of Environmental Quality or as provided in Section C.6. to emit 9 grams per hour or less of particulate matter for non-catalytic equipped appliances or 4 grams per hour or less for catalytic equipped appliances.
4. Wood fired appliances or fireplaces shall not be used in multiple unit residential developments approved after July 1, 1986 except in public areas.
5. The use of coal as a fuel is prohibited.
6. Certification: Each appliance proposed for installation shall be certified by the State of Oregon, Department of Environmental Quality as being within the emission limits established in Section C.2. and C.3. Alternative certification may be used if the Air Pollution Control Officer determines that: 1) the test methodology used for certification is equivalent to that used in the State of Oregon's certification program and, 2) the certified emission levels are no greater than those specified in Section C.2. or C.3. of this Rule.

D. EXCEPTIONS.

1. For single family residential use, approved after July 1, 1986, a person may install and use more than one appliance, as long as the total emissions do not exceed the emission standards specified by Section C.2. or C.3. of this Rule for non-catalytic equipped appliances.
2. For existing single family residential use, a person with an existing non-certified wood fired appliance may install and use one additional wood fired appliance if the additional appliance is certified to meet the emission standards specified by Section C.2. or C.3. of this Rule.
3. Existing wood fired appliances may be replaced on a one to one basis with appliances certified to meet the emission standards specified by Section C.2. or C.3. of this Rule.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 226
SULFUR CONTENT OF FUELS - LAKE TAHOE AIR BASIN

Adopted 06-19-79
(Revised 10-19-93)

This Rule shall apply to the Lake Tahoe Air Basin portion of the District.

A. A person shall not sell or burn any liquid fuel having a sulfur content in excess of 0.5% by weight.
B. A person shall not sell or burn any solid fossil fuel having a sulfur content in excess of 0.8% by weight.
C. A person shall not sell or burn any natural gas or substitute natural gas commercially sold containing sulfur compounds in excess of 120 ppm (parts per million) calculated as hydrogen sulfide (H_2S).
D. The provisions of Section C of this rule shall not apply to sewage digester gas.

RULE 228
FUGITIVE DUST - LAKE TAHOE AIR BASIN

Adopted 06-19-79
(Revised 10-19-93)

This Rule shall apply to the Lake Tahoe Air Basin portion of the District.

A. No person may cause, suffer, allow, or permit any fine material to be handled, transported, or stored without taking precautions determined by the Air Pollution Control Officer to be necessary. Such precautions may include, but are not limited to:
    1. Application of water or suitable chemicals or other specified covering on materials stockpiles, wrecking activity, excavation, grading, sweeping, clearing of land, solid waste disposal operation, or construction or demolition of building or structures;
    2. Installation and use of hoods, fans and filters to enclose, collect, and clean the emissions of dusty materials.
    3. Covering or wetting at all times when in motion of open-bodies trucks, trailers, or other vehicles transporting materials which can create airborne particulate matter in areas where the general public has access.
B. No person responsible for the ownership or maintenance of a road or thoroughfare may cause, suffer, allow, or permit a road or thoroughfare to be used, constructed, altered, or repaired without taking precautions determined by the Air Pollution Control Officer to be necessary. Such precautions may include, but are not limited to:
    1. Application of asphalt, oil, water or suitable chemicals on dirt roads;
    2. Paving of public or commercial parking surfaces;
    3. Removal from paved streets and parking surfaces of earth or other material which has a tendency to become airborne;
    4. Alternate means of control as approved by the Air Pollution Control Officer.
C. This rule shall not apply to fugitive dust from publicly maintained unpaved roads where no nuisance or health hazard is created by its usage or where it is demonstrated to the Air Pollution Control Officer that no means are available to finance the necessary road improvements immediately. A reasonable long range schedule for necessary road improvements must be submitted to support the Air Pollution Control Officer's granting such an exemption.

RULE 231 INDUSTRIAL, INSTITUTIONAL, AND COMMERCIAL BOILERS, STEAM GENERATORS, AND PROCESS HEATERS

Adopted 10-17-94
(Amended 10-9-97)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS,

200 DEFINITIONS

201 ANNUAL HEAT INPUT
202 BOILER OR STEAM GENERATOR
203 BRITISH THERMAL UNIT (BTU)
204 GAS
205 HEAT INPUT
206 HIGHER HEATING VALUE (HHV)
207 MUNICIPAL SOLID WASTE
208 NOx EMISSIONS (NOx)
209 NONGASEOUS FUEL
210 PARTS PER MILLION BY VOLUME (PPMV)
211 PROCESS HEATER
212 RATED HEAT INPUT CAPACITY
213 RESPONSIBLE OFFICIAL
214 STANDARD CONDITIONS
215 THERM
216 UNIT

300 STANDARDS

301 ANNUAL HEAT INPUTS. 90,000 THERMS
302 ANNUAL HEAT INPUTS < 90,000 THERMS
303 EQUIPMENT REQUIREMENTS

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE
402 COMPLIANCE DETERMINATION
403 COMPLIANCE COSTS
404 CERTIFICATION

500 MONITORING AND RECORDS

501 FUEL USAGE AND OPERATING HOURS
502 SOURCE TESTS
503 TUNING REPORTS
504 RETENTION OF RECORDS

600 TUNING PROCEDURE

601 GENERAL
602 PROCEDURES

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100 GENERAL

101 PURPOSE: To limit the emission of Nitrogen Oxides (NOx) from industrial, institutional and commercial, boilers, steam generators and process heaters.

102 APPLICABILITY:

102.1 Geographic: The provisions of this rule apply to facilities in all of Placer County.

102.2 General: This rule applies to boilers, steam generators, and process heaters with rated heat inputs of equal to or greater than 5 million BTU per hour, used in industrial, institutional, and commercial operations.

103 EXEMPTIONS:

103.1 Exemption, Biomass Boilers: The provisions of this rule do not apply to boilers subject to Rule 232, Biomass Suspension Boilers , or Rule 233, Biomass Boilers.

103.2 Exemption, Cement and Lime Kilns, Glass Melting Furnaces, and Smelters: The provisions of this rule do not apply to cement and lime kilns, glass melting furnaces and smelters.

103.3 Exemption, Direct-Contact Dryers: The provisions of this rule do not apply to dryers in which the material being dried is in direct contact with the products of combustion.

103.4 Exemption, Electric Utility Boilers: The provisions of this rule do not apply to boilers used by electric utilities to generate electricity.

103.5 Exemption, Medical Waste Incinerators: This rule shall not apply to those incinerators which are subject to the requirements of Rule 906, Airborne Toxic Control Measure - Medical Waste Incinerators

103.6 Exemption, Municipal Waste Incinerators: This rule shall not apply to boilers, steam generators, or process heaters whose primary purpose is to burn municipal solid waste, as defined in Section 206.

103.7 Exemption, Nongaseous Fuels: Units subject to the requirements of Section 301 that normally burn only gaseous fuel shall comply with a 150 ppmv, or 0.215 pound per million BTU of heat input, NOx emission limitation when burning nongaseous fuel, if gas is unavailable for purchase. This exemption is limited to not more than 168 hours of operation per calendar year, excluding equipment and emission testing time not exceeding 48 hours per calendar year.

103.8 Exemption, Waste Heat Recovery Boilers: The provisions of this rule do not apply to waste heat recovery boilers that are used to recover sensible heat from the exhaust of combustion turbines.

200 DEFINITIONS

201 ANNUAL HEAT INPUT: The 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.

202 BOILER OR STEAM GENERATOR: Any combustion equipment fired with any fuel and used to produce steam that is not used exclusively to produce electricity for sale.

203 BRITISH THERMAL UNIT (BTU): The amount of heat required to raise the temperature of one pound of water from 59□F to 60□F at one atmosphere.

204 GAS: Any fuel which is a gas at standard conditions.

205 HEAT INPUT: The chemical heat released due to fuel combustion in a unit, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.

206 HIGHER HEATING VALUE (HHV): The total heat liberated 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 their standard states at standard conditions. HHV shall be determined by one of the following test methods:

206.1 ASTM D 2015-85 for solid fuels; or

206.2 ASTM D 240-87 or ASTM D 2382-82 for liquid hydrocarbon fuels; or

206.3 ASTM D 1826-88 or ASTM D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.

207 MUNICIPAL SOLID WASTE: Household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single or multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, non-manufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes material discarded by schools, hospitals, prisons, and government facilities and other similar establishments or facilities. Municipal solid waste does not include landfill gas or digester gas or other fuels derived from decomposition of municipal solid wastes.

208 NO_X EMISSIONS (NO_X): The sum of nitric oxides and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide (NO_2).

209 NONGASEOUS FUEL: Any fuel which is not a gas at standard conditions.

210 PARTS PER MILLION BY VOLUME (PPMV): The ratio of the number of gas molecules of a given species, or group, to the number of millions of total gas molecules.

211 PROCESS HEATER: Any combustion equipment fired with any fuel, and which transfers heat from combustion gases to water or process streams.

212 RATED HEAT INPUT CAPACITY: The heat input capacity, in million BTU per hour, specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the maximum heat input shall be considered as the rated heat input.

213 RESPONSIBLE OFFICIAL: An individual with the authority to certify that a source complies with all applicable requirements, including the conditions of permits issued to sources in accordance with Regulation 5, PERMITS. A "responsible official" means one of the following:

213.1 For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

a. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

b. The delegation of authority to such representative is approved in advance by the Air Pollution Control Officer;

213.2 For a partnership or sole proprietorship, a general partner or the proprietor, respectively; or

213.3 For a municipality, state, federal, or other public agency, either a principal executive officer or a ranking elected official; or

214 STANDARD CONDITIONS: For purposes of this rule, a gas temperature of 68□ Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute.

215 THERM: One hundred thousand (100,000) BTU.

216 UNIT: Any boiler, steam generator or process heater as defined in Sections 202 and 211.

300 STANDARDS

301 ANNUAL HEAT INPUTS ≥ 90,000 THERMS: For units with rated heat inputs of greater than or equal to 5 million BTU per hour and annual heat inputs of greater than or equal to 90,000 therms per year , NOx emissions shall not exceed the following levels:

301.1 30 parts per million by volume (ppmv), or 0.036 pound per million BTU of heat input when operated on gas; or

301.2 40 parts per million by volume (ppmv), or 0.052 pound per million BTU of heat input, when operated on nongaseous fuel; or

301.3 The heat-input weighted average of the limits specified in 301.1 and 301.2, above, when operated on combinations of gas and nongaseous fuels.

301.4 Emissions from units subject to this section shall not exceed a carbon monoxide concentration of 400 parts per million by volume (ppmv).

302 ANNUAL HEAT INPUTS < 90,000 THERMS: Units with rated heat inputs of greater than or equal to 5 million BTU per hour and annual heat inputs of less than 90,000 therms per year shall be:

302.1 Operated in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3.00 percent by volume on a dry basis; or

302.2 Operated with a stack-gas oxygen trim system set at 3.00 percent by volume oxygen. The tolerance of this setting shall be plus or minus () five percent (i.e. 2.85 to 3.15 percent by volume oxygen); or

302.3 Tuned at least once per year by a technician that is qualified, to the satisfaction of the Air Pollution Control Officer, to perform tuning in accordance with Section 600; or

302.4 Operated in compliance with the applicable emission levels specified in Section 301.

303 EQUIPMENT REQUIREMENTS:

303.1 For units which simultaneously fire combinations of different fuels, and are subject to the requirements of Section 301, non-resettable totalizing mass flow rate meters shall be installed in each fuel line. Alternatively, non-resettable totalizing volumetric flow rate meters may be installed in conjunction with temperature and pressure meters in each fuel line.

303.2 For units which employ flue-gas NOx reducing technology, and are subject to the requirements of Section 301, meters, as applicable, shall be installed to allow instantaneous monitoring of the operational characteristics of the NOx reduction equipment.

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE:

401.1 By January 1, 1995, any person subject to this rule shall submit a plan containing the following:

a. A list of all units with their rated heat inputs and anticipated annual heat inputs.

b. For each unit subject to Section 301, the selected method of achieving compliance with the applicable standards of Section 301.

c. For each unit subject to Section 302, the selected option (one of four specified in Section 302) to achieve compliance with that section.

401.2 By May 31, 1995, any Major Source subject to this rule shall demonstrate final compliance with all applicable standards and requirements of Section 300. Subject to the approval of the Air Pollution Control Officer, testing conducted in the 18 months preceding May 31, 1995, may be used to demonstrate compliance provided such testing meets the requirements of Sections 502.1, using the test methods specified in Section 502.3.

401.3 By October 17, 1996, any non-Major Source subject to this rule shall submit an application for Authority to Construct for any modifications required to achieve compliance with the requirements of this rule.

401.4 By October 17, 1997, any non-Major Source subject to this rule shall demonstrate final compliance with all applicable standards and requirements of this rule.

401.5 Any non-Major Source subject to this rule installing a new or replacement boiler shall comply with this rule for the new or replacement boiler effective October 17, 1995.

401.6 A violation of the plan required under Section 401.1 shall constitute a violation of this rule.

402 COMPLIANCE DETERMINATION:

402.1 Any person subject to this rule shall have the option of complying with either the pounds-per-million-BTU emission rates or the parts-per-million-by-volume emission limits specified in Section 301.

402.2 All ppmv emission limits specified in Sections 106 and 301 are referenced at dry stack-gas conditions and 3.00 percent by volume stack-gas oxygen. Emission concentrations shall be corrected to 3.00 percent oxygen as follows:

$$[\text{ppm NOx}]_{\text{corrected}} = \frac{20.95\% - 3.00\%}{20.95\% - [\%\,O_2]_{\text{measured}}} \text{ x } [\text{ppm NOx}]_{\text{measured}}$$

$$[\text{ppm CO}]_{\text{corrected}} = \frac{20.95\% - 3.00\%}{20.95\% - [\%\,O_2]_{\text{measured}}} \text{ x } [\text{ppm CO}]_{\text{measured}}$$

402.3 All pounds-per-million-BTU emission rates shall be calculated as pounds of nitrogen dioxide (NO_2) per million BTU of heat input.

403 COMPLIANCE COSTS: A person operating a unit subject to this rule shall bear all expenses associated with compliance with the monitoring and reporting provisions of this rule.

404 CERTIFICATION: All reports submitted in accordance with this rule shall be signed by a responsible official who shall certify the truth, accuracy, and completeness of the report.

500 MONITORING AND RECORDS

501 FUEL USAGE AND OPERATING HOURS

501.1 Any person subject to this rule shall monitor and record for each unit the HHV and cumulative annual usage of each fuel.

501.2 The cumulative annual usage of each fuel shall be monitored from utility service meters, purchase, or tank fill records, or by any other acceptable methods approved by the Air Pollution Control Officer.

501.3 Any person subject to this rule, but exempt from Section 301 in accordance with Section 106, shall monitor and record for each unit the cumulative hours of operation on each nongaseous fuel. The records shall be updated weekly and made available to the District upon request.

502 SOURCE TESTS

502.1 Except for units in compliance with the tuning option of Section 302.3, a source test shall be conducted for all units subject to this rule to demonstrate compliance. A report of this source test shall include the operational characteristics of any flue-gas NOx reduction equipment. Additional source testing may be required by the Air Pollution Control Officer as necessary to ensure compliance with the standards set forth in Sections 301 and 302. Compliance source testing is required on an annual basis for sources subject to Rule 507, FEDERAL OPERATING PERMIT PROGRAM.

502.2 All source tests shall be made in the as-found operating condition, except that source tests shall include at least one test conducted at the maximum firing rate allowed by the District permit, and no source test shall be conducted within two hours after a continuous period in which fuel flow to the unit is zero, or shut off, for thirty minutes or longer. A separate source test shall be conducted for each fuel burned including standby fuel.

502.3 Compliance with NOx emission requirements and the stack-gas carbon monoxide and oxygen requirements of Section 300 shall be determined using the following test methods:

a. Oxides of Nitrogen - ARB Method 100, Title 17, CCR, Section 94114, Procedures for Continuous Emission Stack Sampling.

b. Carbon Monoxide - ARB Method 100.

c. Stack-Gas Oxygen - ARB Method 100.

d. NOx Emission Rate (Heat Input Basis) - EPA Method 19, 40 CFR Part 60, Appendix A.

502.4 All emission concentrations and emission rates shall be based on 15-consecutive-minute averages. These averages shall be calculated from no less than five data sets, recorded from samplings on intervals of no greater than three minutes.

502.5 Integrated sampling methods for oxides of nitrogen, stack-gas oxygen, and stack-gas carbon monoxide, as approved by the Air Pollution Control Officer, EPA and ARB, may be acceptable for determination of compliance with NOx emission concentration or rate limits.

503 TUNING REPORTS: Units covered under Section 302.3 shall be tuned not less than once every 12 months. Tuning verification reports shall be submitted not less than once every 12

months for each fuel burned. The first tuning verification report shall be submitted by October 17, 1997, for non-Major Sources, and by May 31, 1995, for Major Sources subject to this rule.

504 RETENTION OF RECORDS: All records maintained pursuant to this rule shall be retained for at least three years from date of entry, with the exception that sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM, shall retain records at least five years. Records shall be made available for inspection by the Air Pollution Control Officer upon request.

600 TUNING PROCEDURE

601 GENERAL: Nothing in this tuning procedure[1] shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division), the Federal Occupational Safety and Health Administration, or other relevant regulations and requirements.

602 PROCEDURES:

601.1 Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operations, operate the unit at its average firing rate.

601.2 At the firing rate established in Section 601.1, record stack-gas temperatures, oxygen concentration, and CO concentration (for gaseous fuels) or smoke-spot number[2] (for liquid fuels), and observe flame conditions after unit operation stabilizes at the selected firing rate. If the excess oxygen in the stack-gas is at the lower range of typical minimum values[3], and if CO emissions are low and there is no smoke, the unit is probably operating at near optimum efficiency - at this particular firing rate. However, complete the remaining portion of this procedure to determine whether still lower oxygen levels are practical.

602.3 Increase combustion air flow until the stack-gas oxygen levels increase by one or two percent over the level measured in Section 602.2. As in Section 602.2, record the stack-gas temperature, CO concentration (for gaseous fuels) or smoke-spot number (for liquid fuels), and observe flame conditions for these higher oxygen levels after unit operation stabilizes.

602.4 Decrease combustion air flow until the stack-gas oxygen is at the level measured in Section 602.2. From this level gradually reduce the combustion air flow, in small increments. After each increment, record the stack-gas temperature, oxygen concentration, CO concentration (for gaseous fuels), and smoke-spot number (for liquid fuels). Also, observe the flame and record any changes in its condition.

602.5 Continue to reduce combustion air flow stepwise, until one of the following limits is reached:

a. Unacceptable flame conditions - such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability;

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1 THIS TUNING PROCEDURE IS BASED ON A PROCEDURE DEVELOPED BY KVB, INC. FOR THE U.S. EPA.

2 THE SMOKE-SPOT NUMBER CAN BE DETERMINED WITH ASTM TEST METHOD D-2156 OR WITH THE BACHARACH METHOD. THE BACHARACH METHOD IS INCLUDED IN A TUNE-UP KIT THAT CAN BE PURCHASED FROM THE BACHARACH COMPANY.

3 TYPICAL MINIMUM OXYGEN LEVELS FOR UNITS AT HIGH FIRING RATES ARE:
A. FOR NATURAL GAS: 0.5 - 3%
B. FOR LIQUID FUELS: 2 - 4%.

b. Stack-gas CO concentrations greater than 400 ppm;

c. Smoking at stack;

d. Equipment-related limitations - such as low windbox/furnace pressure differential, built-in air-flow limits, etc.

602.6 Develop an O_2/CO curve (for gaseous fuels) or O_2/smoke curve (for liquid fuels) similar to those shown in Figures 1 and 2 using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.

602.7 From the curves prepared in Section 602.6, find the stack-gas oxygen levels where the CO emissions or smoke-spot number equal the following values:

Fuel	Measurement	Value
Gaseous	CO Emissions	400 PPM
#1 & #2 Oils	Smoke Spot Number	Number 1
#4 Oil	Smoke Spot Number	Number 2
#5 Oil	Smoke Spot Number	Number 3
Other Oils	Smoke Spot Number	Number 4

The above conditions are referred to as the CO or smoke-spot thresholds, or as the minimum excess oxygen levels. Compare this minimum value of excess oxygen to the expected value provided by the combustion unit manufacturer. If the minimum level found is substantially higher than the value provided by the manufacturer, burner adjustments can probably be made to improve fuel and air mix, thereby allowing operations with less air.

602.8 Add 0.5 to 2.0 percent to the minimum excess oxygen level found in Section 602.7 and reset burner controls to operate automatically at this higher stack-gas oxygen level. This margin above the minimum oxygen level accounts for fuel variations, variations in atmospheric conditions, load changes, and non-repeatability or play in automatic controls.

602.9 If the load of the combustion unit varies significantly during normal operation, repeat Sections 602.1-602.8 for the firing rates that represent the upper and lower limits of the range of the load. Because control adjustments at one firing rate may affect conditions at other firing rates, it may not be possible to establish the optimum excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give the best performance over the range of the firing rates. If one firing rate predominates, the setting should optimize the conditions at the rate.

602.10 Verify that the new settings can accommodate the sudden load changes that may occur in daily operation without adverse effects. Do this by increasing and decreasing load rapidly while observing the flame and stack. If any of the conditions in Section 602.5 result, reset the combustion controls to provide a slightly higher level of excess oxygen at the affected firing rates. Next, verify these new settings in a similar fashion. Then make sure that the final control settings are recorded at steady-state operating conditions for future reference.

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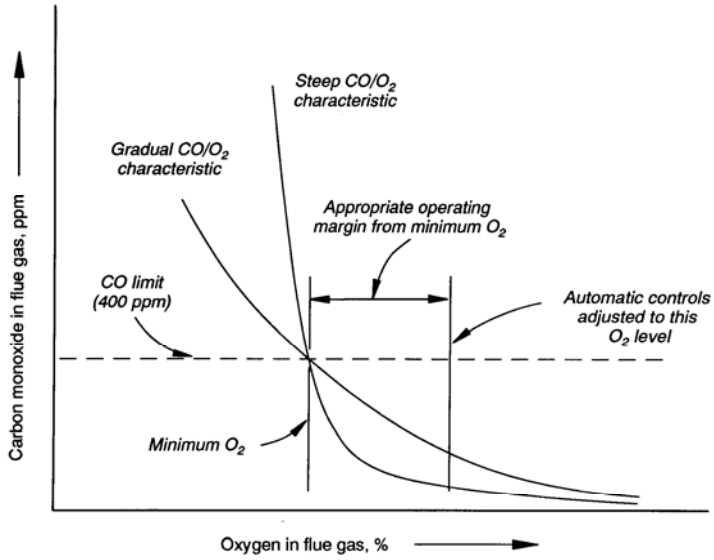
Figure 1



SOURCE: KVB INC.

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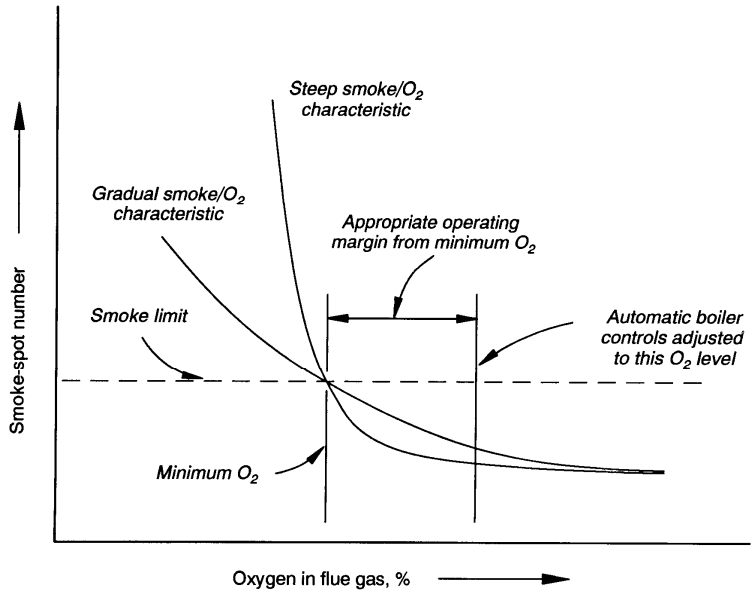
Figure 2
Oxygen(O_2)/Smoke Characteristic Curve

SOURCE: KVB INC.



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RULE 233 BIOMASS BOILERS

Adopted 10-6-94
(Amended 10-11-07, 12-10-09, 6-14-12)

CONTENTS

100 GENERAL

101 APPLICABILITY
102 FEDERAL REGULATIONS
103 EXEMPTION, BOILERS, STEAM GENERATORS, AND PROCESS HEATERS
104 EXEMPTION, MUNICIPAL SOLID WASTE
105 EXEMPTION, WASTE HEAT RECOVERY BOILERS

200 DEFINITIONS

201 BIOMASS
202 BIOMASS BOILER OR STEAM GENERATOR
203 BLOCK 24-HOUR AVERAGE
204 BRITISH THERMAL UNIT
205 CIRCULATING FLUIDIZED BED BOILER
206 CURING STARTUP
207 HEAT INPUT
208 HIGHER HEATING VALUE (HHV)
209 MUNICIPAL SOLID WASTE
210 NO_X EMISSIONS
211 PARTS PER MILLION BY VOLUME (PPMV)
212 RATED HEAT INPUT CAPACITY
213 RESPONSIBLE OFFICIAL
214 SHUTDOWN
215 STARTUP
216 STOKER BOILER
217 UNIT
218 WOOD

300 STANDARDS

301 LIMITATIONS
302 STARTUP AND SHUTDOWN PROVISIONS

400 ADMINISTRATIVE REQUIREMENTS

401 OPERATION AND MAINTENANCE PLAN
402 COMPLIANCE COSTS
403 CERTIFICATION

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 CONTINUOUS EMISSIONS MONITORING
503 INITIAL COMPLIANCE TEST
504 TEST METHODS
505 DURATION OF RECORDS

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100 GENERAL

101 APPLICABILITY: This rule applies to stoker and circulating fluidized bed boilers and steam generators which have a heat input rating of less than 500 million Btu per hour and a potential to emit, as defined in Rule 502, NEW SOURCE REVIEW, 25 tons or more of NO_x emissions and which have a primary energy source of biomass consisting of a minimum of 75 percent of the total annual heat input.

102 FEDERAL REGULATIONS: Compliance with this rule shall not exempt a person from complying with any federal regulation promulgated pursuant to the Clean Air Act (42 U.S.C. Section 7401 et seq.).

103 EXEMPTION, BOILERS, STEAM GENERATORS, AND PROCESS HEATERS: This rule shall not apply to boilers, steam generators, and process heaters subject to Rule 231, INDUSTRIAL, INSTITUTIONAL, AND COMMERCIAL BOILERS, STEAM GENERATORS, AND PROCESS HEATERS.

104 EXEMPTION, MUNICIPAL SOLID WASTE: This rule shall not apply to combustion units whose primary purpose is to burn municipal solid waste, as defined in Section 209.

105 EXEMPTION, WASTE HEAT RECOVERY BOILERS: The provisions of this rule do not apply to waste heat recovery boilers used to recover sensible heat from the exhaust of combustion turbines or unfired waste heat recovery boilers used to recover sensible heat from the exhaust of any combustion equipment.

200 DEFINITIONS

201 BIOMASS: Any organic material not derived from fossil fuels, such as agricultural crop residues, bark, lawn, yard and garden clippings, leaves, silvicultural residue, tree and brush pruning, wood and wood chips, and wood waste, including these materials when separated from other waste streams. Biomass does not include material containing sewage sludge, industrial sludge, medical waste, hazardous waste, or radioactive waste.

202 BIOMASS BOILER OR STEAM GENERATOR: Any combustion equipment used in any industrial, institutional, or commercial operation designed to burn biomass to produce steam, heat water or other fluids, and/or produce electricity.

203 BLOCK 24-HOUR AVERAGE: The arithmetic average of the hourly air pollution emission rates of discharge as measured over 24 contiguous one-hour periods from 00:00:00 to 23:59:59, 24-hour clock time.

204 BRITISH THERMAL UNIT (BTU): The amount of heat required to raise the temperature of one pound of water from 59 degrees F to 60 degrees F at one atmosphere.

205 CIRCULATING FLUIDIZED BED BOILER: A boiler that burns solid fuel in a moving suspension of inert materials, forced through upward blowing of air jets, and where the ash and inerts are captured and recirculated back into the moving fluidized bed.

206 CURING STARTUP: A startup which includes heating the boiler at predetermined rate and holding temperature at several points to allow for insulating materials to cure in the boiler refractory. A curing startup shall not exceed 96 hours.

207 HEAT INPUT: The chemical heat released due to fuel combustion in a boiler, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.

208 HIGHER HEATING VALUE (HHV): The total heat liberated 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 their standard states at standard conditions. HHV shall be determined by one of the following test methods:

208.1 ASTM E711 for biomass; or

208.2 ASTM D 240-87 or ASTM D 2382-82 for liquid hydrocarbon fuels; or

208.3 ASTM D 1826-88 or ASTM D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.

209 MUNICIPAL SOLID WASTE: Household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single or multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, non-manufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes material discarded by schools, hospitals, prisons, and government facilities and other similar establishments or facilities.

210 NO_X EMISSIONS: The sum of nitric oxides and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide (NO_2).

211 PARTS PER MILLION BY VOLUME (PPMV): The ratio of the number of gas molecules of a given species, or group, to the number of millions of total gas molecules.

212 RATED HEAT INPUT CAPACITY: The heat input capacity, in million BTU per hour, specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the input capacity specified on the nameplate, and this alteration or modification has been approved by the Air Pollution Control Officer and made a limiting condition of operation, then the new maximum heat input shall be considered as the rated heat input capacity.

213 RESPONSIBLE OFFICIAL: An individual with the authority to certify that a source complies with all applicable requirements, including the conditions of permits issued to sources in accordance with Regulation 5, PERMITS. A "responsible official" means one of the following:

213.1 For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

213.1.1 The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

213.1.2 The delegation of authority to such representative is approved in advance by the Air Pollution Control Officer;

213.2 For a partnership or sole proprietorship, a general partner or the proprietor, respectively; or

213.3 For a municipality, state, federal, or other public agency, either a principal executive officer or a ranking elected official; or

213.4 For an acid rain unit subject to Title IV (Acid Deposition Control) of the Clean Air Act, the "responsible official" is the designated representative of that unit for any purposes under Title IV and Rule 507, FEDERAL OPERATING PERMITS PROGRAM.

214 SHUTDOWN: A shutdown starts when fuel feed is curtailed and the unit begins cooling from the unit's normal operating temperature, as specified by the manufacturer, and ends when steam flow is zero or 24 hours has elapsed since the start of the shutdown, whichever occurs first.

215 STARTUP: The period of time a unit is heated to the normal operating temperature, as specified by the manufacturer. A normal startup shall not exceed 24 hours. A curing startup shall not exceed 96 hours.

216 STOKER BOILER: A boiler that burns solid fuel on a stationary or moving grate located at the bottom of the furnace, and where the fuel is supplied and ash removed continuously.

217 UNIT: Any biomass boiler or steam generator as defined in Sections 202.

218 WOOD: Wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

300 STANDARDS

301 LIMITATIONS:

No person shall allow the discharge of NO_x and CO emissions into the atmosphere from a biomass boiler or steam generator in excess of the following standards, excluding startup and shutdown conditions:

Type of Boiler	NOx (Emission limits effective until December 31, 2012)	NOx (Emission limits effective January 1, 2013)	CO
Circulating Fluidized Bed (<500 MMBtu/hour)	115 ppmv corrected to 12% CO2 (3 hour rolling average)	115 ppmv corrected to 12% CO2 (3 hour rolling average)	400 ppmv corrected to 12% CO2 (3 hour rolling average)
		68 ppmv corrected to 12% CO2 (24 hour block average)	
Stoker (<500 MMBtu/hour)	115 ppmv corrected to 12% CO2 (3 hour rolling average)	115 ppmv corrected to 12% CO2 (3 hour rolling average)	1000 ppmv corrected to 12% CO2 (3 hour rolling average)
		68 ppmv corrected to 12% CO2 (24 hour block average)	

302 STARTUP AND SHUTDOWN PROVISIONS

The emission limits of Section 301 shall not apply during startup or shutdown provided the following requirements are met:

302.1 CO_2 emissions are 10 percent or less by volume stack gas on a one-hour average dry basis.

302.2 During startup and shutdown, the mass emissions of NOx and CO shall not exceed the levels shown below. The block averaging time starts at the beginning of either the startup or the shutdown.

Type of Boiler	NOx	CO
Circulating Fluidized Bed (<500 MMBtu/hour)	35 pounds per hour (24 hour block average)	56 pounds per hour (24 hour block average)
	35 pounds per hour (72 hour block average during curing startup)	56 pounds per hour (72 hour block average during curing startup)
Stoker (<500 MMBtu/hour)	37.6 pounds per hour (3 hour rolling average)	170 pounds per hour (3 hour rolling average)

302.3 A normal startup shall not exceed 24 hours. A startup which involves curing of refractory shall not exceed 96 hours.

400 ADMINISTRATIVE REQUIREMENTS

401 OPERATION AND MAINTENANCE PLAN: Any person installing an emission control device as a means of complying with the emission limitations of Section 301 shall submit an Operation and Maintenance Plan with the application for Authority to Construct for the emission control device.

401.1 The Operation and Maintenance Plan shall specify:

401.1.1. Operation and maintenance procedures that will demonstrate continuous operation of the emission control device during emission-producing operations; and

401.1.2 Records that must be kept to document the operation and maintenance procedures.

401.1.3. Each source must provide to the District a description of the actions that will be taken to minimize emissions during startup and shutdown events.

401.2 The records must comply with Sections 501, 502, and 505.

401.3 The Operation and Maintenance Plan shall be implemented upon approval by the Air Pollution Control Officer.

401.4 Subsequent to the construction of any emission control device used for demonstrating compliance with the emission limitation of Section 301, an Operation and Maintenance Plan shall be submitted or resubmitted in conjunction with any changes in the procedures addressed in the plan, or upon the request of the Air Pollution Control Officer.

402 COMPLIANCE COSTS: A person operating a unit subject to this rule shall bear all expenses associated with compliance with the monitoring and reporting provisions of this rule.

403 CERTIFICATION: All reports submitted in accordance with this rule shall be signed by a responsible official who shall certify the truth, accuracy, and completeness of the report.

500 MONITORING AND RECORDS

501 RECORDKEEPING: A person operating a unit subject to this rule shall keep the following records for each unit:

501.1 Calendar date of record.

501.2 Number of hours the unit is operated during each day.

501.3 Boiler load.

501.4 Fuel types, including supplementary gaseous or liquid fuels.

501.5 Duration of startups and shutdowns.

501.6 Type and duration of maintenance and repairs.

501.7 Results of compliance tests.

501.8 Three-hour average NOx emission concentration (expressed as NO2 and corrected to 12 percent by volume stack gas CO2).

501.9 Twenty-four hour average NOx emission concentration (expressed as NO2 and corrected to 12 percent by volume stack gas CO2).

501.10 Three-hour average CO emission concentration (corrected to 12 percent by volume stack gas CO2).

501.11 Startup and shutdown emissions records using averaging periods as required in Section 302.1.

501.12 Identification of time periods during which NOx and CO emission limitations are exceeded, the reason for the exceedance, and a description of corrective action taken.

501.13 Identification of time periods during which operating condition and pollutant emission data were not obtained, the reason for not obtaining this information, and a description of corrective action taken.

501.14 If zero steam flow is used to determine the end of a shutdown, then steam flow must be recorded.

502 CONTINUOUS EMISSIONS MONITORING

502.1 A person operating a unit subject to this rule shall install, calibrate, operate, and maintain a Continuous Emissions Monitoring System (CEMS) in accordance with applicable requirements of Appendices B and F of Title 40 Code of Federal Regulations Part 60 (40 CFR 60).

502.2 The CEMS shall include equipment that measures and records the following:

502.2.1. Continuous exhaust gas NOx and CO concentrations corrected to 12 percent by volume stack gas CO2 dry basis.

502.2.2. Average NOx and CO concentrations calculated on a three-hour rolling average basis.

502.2.3 Average NOx concentrations calculated on a twenty-four hour block average basis.

502.3 A person operating a CEMS shall submit an excess emissions and monitoring systems performance report to the Air Pollution Control Officer within 30 days after the end of each calendar quarter in accordance with 40 CFR 60, Section 60.7(c) and (d) and Section 60.13.

502.4 The enhanced monitoring requirements of Sections 113 and 114 of the Federal Clean Air Act shall take precedence over the requirements of this Section for facilities subject to Rule 507, FEDERAL OPERATING PERMIT PROGRAM.

503 INITIAL COMPLIANCE TEST

503.1 An initial compliance test shall be conducted within 60 days of achieving the maximum firing rate at which the unit will be operated, but not later than 180 days after initial startup.

503.1.1 Each emission test run shall be conducted while the unit is operated within 10% of the maximum steady-state steam production rate. No emission test shall be conducted during startup, shutdown, or under breakdown conditions for the purpose of the initial compliance test.

503.1.2. The initial compliance test shall be conducted for NOx and CO using the test methods specified in Section 504.

503.2 At least sixty (60) days prior to the initial compliance test, a written test plan detailing the test methods and procedures to be used shall be submitted for approval by the Air Pollution Control Officer. The plan shall cite the test methods to be used for the determination of compliance with the emission limitations of this rule. The plan shall provide the proposed procedures for the characterization of the representative biomass materials to be burned during testing.

504 TEST METHODS: A person conducting source tests shall use the following test methods:

504.1 Nitrogen Oxides (NO_X): ARB Test Method 100, Title 17, CCR, Section 94114, Procedures for Continuous Emission Stack Sampling, or EPA Test Method 7E, 40 CFR 60, Appendix A. A violation determined by any of these test methods shall constitute a violation of this rule.

504.2 Carbon Monoxide (CO): ARB Test Method 10, Title 17, CCR, Section 94109, Determination of Carbon Monoxide Emissions from Stationary Sources, or ARB Test Method 100, or EPA Test Method 10, 40 CFR 60, Appendix A. A violation determined by any of these test methods shall constitute a violation of this rule.

504.3 Carbon Dioxide (CO_2): ARB Test Method 100, Title 17, CCR, Section 94114, Procedures for Continuous Emission Stack Sampling, or EPA Test Method 3A, 40 CFR 60, Appendix A.

505 DURATION OF RECORDS: All records maintained pursuant to this rule shall be retained for at least two years from date of entry, with the exception that sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM, shall retain records at least five years. Records shall be made available for inspection by the Air Pollution Control Officer upon request.

RULE 234 AUTOMOTIVE REFINISHING OPERATIONS

Adopted 11-03-94
(Amended 8-24-95, 8-8-96, 4-9-98, 10-14-10 [Effective 7-1-11])

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 SEVERABILITY
104 EXEMPTIONS

200 DEFINITIONS

201 ADHESION PROMOTER
202 AEROSOL COATING PRODUCT
203 ASSSEMBLY LINE
204 ASSOCIATED PARTS AND COMPONENTS
205 AUTOMOTIVE COATING
206 AUTOMOTIVE COATING COMPONENT
207 AUTOMOTIVE REFINISHING FACILITY
208 CAPTURE EFFICIENCY
209 CLEANING OPERATIONS
210 CLEAR COATING
211 COATING
212 COLOR COATING
213 CONTROL EFFICIENCY
214 ELECTROSTATIC SPRAY APPLICATION
215 EMISSION CONTROL SYSTEM
216 EXEMPT COMPOUNDS
217 GRAPHIC DESIGN APPLICATION
218 HIGH VOLUME, LOW PRESSURE (HVLP) SPRAY EQUIPMENT
219 LACQUER
220 MOBILE EQUIPMENT
221 MOTOR VEHICLE
222 MULTI COLOR COATING
223 PRETREATMENT COATING
224 PRIMER
225 PRIMER SEALER
226 REDUCER
227 SINGLE STAGE COATING
228 SOLVENT
229 SPOT REPAIR
230 TEMPORARY PROTECTIVE COATING
231 TRANSFER EFFICIENCY
232 TRUCK BED LINER COATING
233 UNDERBODY COATING
234 UNIFORM FINISH COATING
235 VOLATILE ORGANIC COMPOUNDS (VOC)
236 VOC CONTENT

300 STANDARDS

301 LIMITS

302 MOST RESTRICTIVE VOC LIMIT
303 APPLICATION REQUIREMENTS
304 EMISSION CONTROL SYSTEM
305 SOLVENT LIMITS AND EVAPORATIVE LOSS MINIMIZATION
306 TOXIC AIR CONTAMINANT

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF POSSESSION
402 PROHIBITION OF SPECIFICATION
403 PROHIBITION OF SALE OR MANUFACTURE
404 VOC COMPLIANCE STATEMENT REQUIREMENT
405 LABELING REQUIREMENTS
406 HVLP MARKING

500 MONITORING AND RECORDS

501 USER COATING RECORDS
502 EMISSION CONTROL EQUIPMENT RECORDS
503 SALES RECORDS
504 PROHIBITION OF SALE OR MANUFACTURE RECORDS
505 BURDEN OF PROOF
506 MAINTENANCE OF RECORDS
507 TEST METHODS

100 GENERAL

101 PURPOSE: To limit the emission of volatile organic compounds from coating and solvent operations associated with motor vehicles, mobile equipment, and associated parts and components.

102 APPLICABILITY: The provisions of this rule apply to any person who uses, applies or solicits the use or application of any automotive coating or associated solvent; or any person who supplies, sells, offers for sale, manufacturers or distributes for use or application within the District, any automotive coating or associated solvent.

103 SEVERABILITY: If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity to the remaining portions of the rule.

104 EXEMPTIONS

104.1 Exemption From Rule 219: The provisions of Rule 219, ORGANIC SOLVENTS, shall not apply to the operations subject to this rule.

104.2 Exemption, Small Quantity: The provisions of this rule shall not apply to any automotive coating that is sold, supplied, or offered for sale in 0.5 fluid ounce or smaller containers intended to be used by the general public to repair tiny surface imperfections.

104.3 Exemption, Assembly Line: The provisions of this rule shall not apply to any coating applied to motor vehicles or mobile equipment, or their associated parts and components during manufacture on an assembly line.

104.4 Exemption, Aerosol Products Coating: The provisions of this rule shall not apply to the application of aerosol coating products from non-refillable aerosol containers having a capacity of one liter (34 fluid ounces), or less.

104.5 Exemption, Use Outside of District: The provisions of this rule shall not apply to any automotive coating or associated solvent that is offered for sale, sold, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or packing.

200 DEFINITIONS

201 ADHESION PROMOTER: A coating which is labeled and formulated to be applied to uncoated plastic surfaces to facilitate bonding of subsequent coatings, and on which, a subsequent coating is applied.

202 AEROSOL COATING PRODUCT: A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a non-refillable can for hand-held application, or for use in specialized equipment for ground traffic/marking applications.

203 ASSEMBLY LINE: An arrangement of industrial equipment and workers in which the product passes from one specialized operation to another until complete, by either automatic or manual means.

204 ASSOCIATED PARTS AND COMPONENTS: Any structures, devices, pieces, modules, sections, assemblies, sub-assemblies, or elements of motor vehicles or mobile equipment

that are designed to be a part of motor vehicles or mobile equipment but which are not attached to motor vehicles or mobile equipment at the time of coating the structure, device, piece, module, section assembly, sub-assembly, or element. “Associated parts and components” does not include circuit boards.

205 AUTOMOTIVE COATING: Any coating or coating component used or recommended for use in motor vehicle or mobile equipment refinishing, service, maintenance, repair, restoration, or modification, except metal plating activities. Any reference to automotive refinishing or automotive coating made by a person on the container or in product literature constitutes a recommendation for use in motor vehicle or mobile equipment refinishing.

206 AUTOMOTIVE COATING COMPONENT: Any portion of a coating including, but not limited to, a reducer or thinner, toner, hardener, and additive, which is recommended by any person to distributors or end-users for use in an automotive coating, or which is supplied for or used in an automotive coating. The raw materials used to produce the components are not considered automotive coating components.

207 AUTOMOTIVE REFINISHING FACILITY: Any shop, business, location, or parcel of land where motor vehicles or mobile equipment or their associated parts and components are coated, including autobody collision repair shops. “Automotive Refinishing Facility” does not include the original equipment manufacturing plant where the motor vehicle or mobile equipment is completely assembled.

208 CAPTURE EFFICIENCY: The fraction, in percent, of all VOC's generated by a process that is directed to an abatement or recovery device.

209 CLEANING OPERATIONS: Involves the removal of loosely held uncured adhesives, inks, coatings, or contaminants, including, but not limited to, dirt, soil, or grease, from motor vehicles, mobile equipment, associated parts and components, substrates, parts, products, tools, machinery, equipment, or general work areas.

210 CLEAR COATING: Any coating that contains no pigments and is labeled and formulated for application over a color coating or clear coating.

211 COATING: A material which is applied to a surface and forms a film in order to beautify, preserve, repair, and/or protect such surface.

212 COLOR COATING: Any pigmented coating, excluding adhesion promoters, primers, and multi-color coatings, that requires a subsequent clear coating and which is applied over a primer, adhesion promoter, or color coating. Color coatings include metallic/iridescent color coatings.

213 CONTROL EFFICIENCY: The fraction, in percent, of pollution prevented by a control device and the pollution introduced to the control device.

214 ELECTROSTATIC SPRAY APPLICATION: Any method of spray application of coatings where an electrostatic attraction is created between the part to be coated and the paint particles.

215 EMISSION CONTROL SYSTEM: Any combination of capture systems and control devices used to reduce VOC emissions from automotive coating operations.

216 EXEMPT COMPOUNDS: For the purpose of this Rule, exempt compounds are as defined in Rule 102, DEFINITIONS.

217 GRAPHIC DESIGN APPLICATION: The application of logos, letters, numbers, and graphics to a painted surface, with or without the use of a template by brush, roller, or airbrush.

218 HIGH VOLUME, LOW PRESSURE (HVLP) SPRAY EQUIPMENT: Spray equipment, permanently labeled as such, used to apply coatings by means of a gun which is designed to be operated and which is operated between 0.1 and 10 pounds per square inch, gauge, (psig) air atomized pressure, measured dynamically at the center of the air cap and at the air horns.

219 LACQUER: A coating that dries primarily by solvent evaporation and is resoluble in its original solvent.

220 METALLIC/IRIDESCENT COLOR COATING: Any coating that contains more than 0.042 pounds per gallon (5 grams per liter) of metal or iridescent particles as applied, where such particles are visible in the dried film.

221 MOBILE EQUIPMENT: Equipment which may be drawn or is capable of being driven on rails or on a roadway, including, but not limited to, trains, railcars, truck bodies, truck trailers, camper shells, mobile cranes, bulldozers, street cleaners, golf carts, and implements of husbandry or agriculture.

222 MOTOR VEHICLE: Any self-propelled vehicle, including, but not limited to cars, trucks, buses, golf carts, vans, motorcycles, tanks, and armored personnel carriers.

223 MULTI COLOR COATING: Any coating that exhibits more than one color in the dried film after a single application, is packaged in a single container, and hides surface defects on areas of heavy use, and which is applied over a primer or adhesion promoter.

224 PRETREATMENT COATING: A coating which contains a minimum of one-half (0.5) percent acid by weight, and not more than 16 percent solids by weight, to provide surface etching, and which is labeled and formulated to be applied directly to bare metal surfaces to provide corrosion resistance and topcoat adhesion.

225 PRIMER: Any coating, which is labeled and formulated for application to a substrate to provide: (1) a bond between the substrate and subsequent coats, (2) corrosion resistance, (3) a smooth substrate surface, or (4) resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented.

226 PRIMER SEALER: Any coating which is labeled and formulated for application prior to the application of a color coating for the purpose of color uniformity, or to promote the ability of the underlying coating to resist penetration by the color coating.

227 REDUCER: Products used to thin a coating.

228 SINGLE-STAGE COATING: Any pigmented coating, excluding primers and multi-color coatings, labeled and formulated for application without a subsequent clear coat. Single-stage coatings include single-stage metallic/iridescent coatings.

229 SOLVENT: A VOC-containing fluid used to perform surface preparation and cleaning operations.

230 SPOT REPAIR: Repair of an area on a motor vehicle, piece of mobile equipment, or associated parts or components of less than 1 square foot (929 square centimeters).

231 TEMPORARY PROTECTIVE COATING: Any coating which is labeled and formulated for the purpose of temporarily protecting areas from overspray or mechanical damage.

232 TRANSFER EFFICIENCY: The ratio of the amount of coating solids adhering to the object being coated to the total amount of coating solids sprayed, expressed as a percentage.

233 TRUCK BED LINER COATING: Any coating, excluding clear, color, multi-color, and single stage coatings, labeled and formulated for application to a truck bed to protect it from surface abrasion.

234 UNDERBODY COATING: Any coating labeled and formulated for application to wheel wells, the inside of door panels or fenders, the underside of a trunk or hood, or the underside of the motor vehicle.

235 UNIFORM FINISH COATING: Any coating labeled and formulated for application to the area around a spot repair for the purpose of blending a repaired area's color or clear coat to match the appearance of an adjacent area's existing coating.

236 VOLATILE ORGANIC COMPOUNDS (VOC): Any chemical compound containing at least one atom of carbon except for the Exempt Compounds listed in Rule 102, DEFINITIONS.

237 VOC CONTENT:

237.1 VOC Regulatory Content: The weight of VOC per combined volume of VOC and coating solids, calculated with the following equation:

VOC Regulatory Content = (Ws – Ww – Wec) / (Vm – Vw – Vec)

237.2 VOC Actual Content: The weight of VOC per volume of material, calculated with the following equation:

VOC Actual Content = (Ws – Ww – Wec) / Vm

Where:

Ws	=	Weight of volatile compounds in grams
Ww	=	Weight of water in grams
Wec	=	Weight of exempt compounds in grams
Vm	=	Volume of material in liters
Vw	=	Volume of water in liters
Vec	=	Volume of exempt compounds, as defined in Rule 102, DEFINITIONS, in liters

300 STANDARDS

301 LIMITS: No person shall apply to any motor vehicle, mobile equipment, or associated parts and components, any coating with a VOC regulatory content, as calculated pursuant to Section 237.1 for VOC regulatory, in excess of the following limits, except as provided in Section 304.

Coating Category	Regulatory VOC Content g/l (lb/gal)
Adhesion Promoter	540 (4.5)
Clear Coating	250 (2.1)
Color Coating	420 (3.5)
Multi-Color Coating	680 (5.7)
Pretreatment Coating	660 (5.5)

Coating Category	Regulatory VOC Content g/l (lb/gal)
Primer	250 (2.1)
Primer Sealer	250 (2.1)
Single-Stage Coating	340 (2.8)
Temporary Protective Coating	60 (0.5)
Truck Bed Liner Coating	310 (2.6)
Underbody Coating	430 (3.6)
Uniform Finish Coating	540 (4.5)
Any Other Coating Type	250 (2.1)

302 MOST RESTRICTIVE VOC LIMIT: If anywhere on the container of any automotive coating, or any label or sticker affixed to the container, or in any sales, advertising or technical literature supplied by a person, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Section 301, then the lowest VOC content limit shall apply.

303 APPLICATION REQUIREMENTS: No person shall apply a coating to any motor vehicle, mobile equipment, or associated parts and components unless one of the following application methods is used:

303.1 Brush, dip, or roller;

303.2 Electrostatic spray application equipment, operated in accordance with the manufacturer's recommendations;

303.3 High Volume Low Pressure (HVLP) spray equipment, operated in accordance with the manufacturer's recommendations;

303.4 Spray gun, demonstrated to meet the HVLP definition in Section 218 in design and use;

303.5 Any other equivalent coating application method which has been demonstrated to have a transfer efficiency equivalent to or higher than, the application methods listed in this Section, as determined per subsection 507.2, Determination of Transfer Efficiency, and which has been submitted to and approved in writing prior to use by the Air Pollution Control Officer.

304 EMISSION CONTROL SYSTEM: In lieu of complying with VOC content limits of Section 301, a person may use a VOC emission control system that controls emissions from the source operation provided the following conditions are met:

304.1 The VOC emission control system shall be approved in writing by the Air Pollution Control Officer.

304.2 The VOC emission control system shall be operated with an overall control efficiency (capture and control), as determined in Sections 507.3 and 507.4, of at least 85 percent by weight, during periods of emission producing activity. The approved emission control system must be maintained and used at all times in proper working condition.

304.3 Submit an Operation and Maintenance Plan at least 90 days in advance of the date on which VOC emission control system is to be used in lieu of compliance with VOC content limitations. The Plan shall specify operation and maintenance procedures which will demonstrate continuous operation and compliance of the emissions control

equipment during periods of emissions-producing operations. The Plan shall also specify which daily records must be kept to document these operations and maintenance procedures. These records shall comply with the requirements of Section 502. The Plan shall be implemented upon approval by the Air Pollution Control Officer.

304.4 Submittal of an application for Authority to Construct per Rule 501, GENERAL PERMIT REQUIREMENTS, prior to control system construction.

305 SOLVENT LIMITS AND EVAPORATIVE LOSS MINIMIZATION:

305.1 Closed, non-leaking, non-absorbent containers shall be used for the storage or disposal of VOC-laden materials, including cloth or paper used for solvent surface preparation and cleanup.

305.2 Fresh or spent solvent, coating, catalyst, thinner, or reducer, shall be stored in closed vapor-tight containers when not in use. Containers may only be open when adding or removing contents. Disposal shall be done in a manner to prevent evaporation of VOCs into the atmosphere at the facility.

305.3 Solvents shall not be used for the cleanup of spray equipment including paint lines unless an enclosed system or other system, that has been approved in writing for use by the Air Pollution Control Officer, is used for cleanup. The system must enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures. Equipment used shall minimize the evaporation of organic compounds to the atmosphere. Spray equipment may be cleaned without the use of an enclosed system if cleaning solutions are used that do not contain VOCs.

305.4 For solvent cleaning operations other than for bug and tar removal, solvents must have VOC content less than 25 g/l, as calculated using the equation listed in Section 237.2 for VOC actual content. For solvents used for bug and tar removal, the VOC content shall meet requirements for such products under the Consumer Products Regulation (California Code of Regulations Section 94509, with a maximum limit of 40% volatile organic compound by weight).

306 TOXIC AIR CONTAMINANT: No person shall apply a coating to any motor vehicle, mobile equipment, or associated parts and components, containing cadmium or hexavalent chromium.

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF POSSESSION: No person shall possess at any automotive refinishing facility, any VOC-containing product that is not in compliance with Section 301 or 304 or 305.4, as applicable.

402 PROHIBITION OF SPECIFICATION: No person shall solicit or require for use or specify the application of any coating or solvents to a motor vehicle, mobile equipment, or part or component if such use results in a violation of the provisions of this rule. The prohibition of this Section will apply to all written or oral contracts, including but not limited to, job orders, under the terms of which any coating which is subject to the provisions of this rule is to be applied to any motor vehicle, mobile equipment, or part or component at any physical location within the District.

403 PROHIBITION OF SALE OR MANUFACTURE:

403.1 No person shall manufacture, blend, repackage for sale, supply, sell, offer for sale, or distribute within the District, any coating with a VOC content in excess of the limits specified in Section 301. This shall apply to the sale of any coating which will be applied at any physical location within the jurisdiction of the District.

403.2 The provision of Section 403.1 shall not apply to the application of coatings where either: (a) The product is used exclusively within a emission control systems as allowed in Section 304; or (b) For coatings for use outside of the District.

404 VOC COMPLIANCE STATEMENT REQUIREMENT: The manufacturer or repackager of automotive coatings and automotive coating components and solvents subject to this rule shall provide the following product information to the purchaser, on product data sheets, or equivalent medium (including in electronic or web media format), for each coating, coating component, solvent, and ready to spray mixture:

404.1 VOC actual content and VOC regulatory content, expressed in grams per liter or pounds per gallon;

404.2 Weight percentage of volatiles, water, and exempt compounds;

404.3 Volume percentage of water and exempt compounds;

404.4 Density of the material, in grams per liter.

405 LABELING REQUIREMENTS: The manufacturer and repackager of automotive coatings and automotive coating components and solvents shall include on all containers the material type (applicable use category(ies)), and the VOC actual content and VOC regulatory content for coatings and solvents, as supplied, expressed in grams per liter or pounds per gallon. For products manufactured prior to July 1, 2011, labeling does not need to identify the material type (applicable coating category(ies)).

406 HVLP MARKING: A person shall not sell, offer for sale, or distribute for use within the District any HVLP gun without a permanent marking, or accurate information provided on company letterhead or in the form of technical literature clearly identifying the spray gun manufacturer, salesperson or distributer, denoting the maximum inlet air pressure in psig at which the gun will operate within the parameters specified in Section 218.

500 MONITORING AND RECORDS

501 USER COATING RECORDS: Operators of facilities subject to this Rule shall maintain, and have available at all times on the site, the following:

501.1 A current listing of all VOC containing materials in use at their facility. This listing shall include, for each product:

501.1.1 Material name and manufacturer identification;

501.1.2 Application method;

501.1.3 Material type (applicable use category(ies)), mix ratio, and specific use instructions;

501.1.4 Specific mixing instructions;

501.1.5 VOC actual content and VOC regulatory content.

501.2 Current manufacturing specification sheets, technical data sheets, material data sheets, or current air quality data sheets, which list the VOC actual content and VOC regulatory content of each material ready to spray coating (based on the manufacturer's stated mix ratio) and automotive coating component, and VOC content of each solvent.

501.3 Records on a monthly basis for the quantity and material type (applicable use category(ies)) of each coating applied, and total facility VOC emissions. These records shall be summarized for the previous calendar year and submitted to the District by June 1.

501.4 Purchase records identifying the coating or solvent material type (applicable use category(ies)), product name and/or identification number, product volume, and name and address of the seller, The material type (applicable use category(ies)) may be contained on product data sheets or manufacturer specification sheets. Purchase records may be stored offsite.

502 EMISSION CONTROL EQUIPMENT RECORDS: Any person using emissions control equipment pursuant to Section 304 as a means of complying with this rule shall maintain such records as required by the Operation and Maintenance Plan in Section 304, Section 501, and also including:

502.1 Monthly usage records of all materials used such as coatings, catalysts, additives, and reducers.

502.2 Daily records of key operating parameters such as temperatures, pressures, flowrates, and hours of operation of the control device to verify compliance of the capture and control device.

502.3 Maintenance work which interferes with the operation of the control device.

503 SALES RECORDS: Any person within the District selling coatings subject to this Rule shall maintain the following records for on-site sales, for a three-year period, and make such records available on request to the Air Pollution Control Officer:

503.1 Business name, street address, phone number, and either business license or drivers license;

503.2 Product name and volume;

503.3 VOC content and material type (applicable use category(ies)). This information must be available on-site, and does not need to be included in each sales transaction;

503.4 Date of sale.

504 PROHIBITION OF SALE OR MANUFACTURE RECORDS: Any person claiming an exemption under subsection 403.2 shall keep a detailed log of each automotive coating component and automotive coating manufactured, blended, repackaged for sale, supplied, sold, offered for sale, or distributed showing:

504.1 Quantity, including size, and number of containers;

504.2 Regulatory and actual VOC content for coatings;

504.3 Purchaser, including name, address, phone number, and retail tax license number;

504.4 The specific exemption being utilized under Section 403.

505 BURDEN OF PROOF: Any person claiming an exemption pursuant to Section 104 shall have information available including product data or material data safety sheets or records that allow the Air Pollution Control Officer to verify eligibility of the exemption.

506 MAINTENANCE OF RECORDS: Records required by this rule shall be retained for a minimum of three years, except for sources subject to Rule 507, FEDERAL OPERATING PERMIT PROGRAM, which shall retain records for five (5) years. Records shall be made available to the Air Pollution Control Officer upon request.

507 TEST METHODS: The following test methods are incorporated by reference, and shall be used to test coatings and solvents subject to the provisions of this rule. A source is in violation of this rule if any measurement by any of the listed applicable test methods exceeds the standards of this rule.

507.1 Determination of VOC Content: The VOC content of coatings or solvents, subject to the provisions of this Rule, shall be determined by procedures contained in U.S. EPA Reference Test Method 24 (40 CFR 60), "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings".

507.2 Determination of Transfer Efficiency: Transfer efficiency as required in Section 303 of this rule shall be determined in accordance with the South Coast Air Quality Management District Test Method "Spray Equipment Transfer Efficiency (TE) Test Procedure for Equipment User," May 24, 1989, or other equivalent method which has been approved in writing by the Air Pollution Control Officer and submitted to and approved by U.S. EPA.

507.3 Determination of Control Efficiency: Control efficiency as required by Section 304 of this rule, shall be determined in accordance with U.S. EPA Method 25 25A, or 25B; and U.S. EPA Method 2 or 2C (whichever is applicable). U.S. EPA Method 18 or CARB Method 422 "Determination of Volatile Organic Compounds Emissions from Stationary Sources" may be used to determine emissions of exempt compounds.

507.4 Determination of Capture Efficiency: Capture efficiency as required in Section 304, of this rule shall be determined by and reported in accordance with U.S. EPA "Guidelines for Determining Capture Efficiency", January 9, 1995, and 40 CFR 51, Appendix M, Methods 204-204f, as applicable.

507.5 Determination of Acid Concentration: Acid concentration in pretreatment wash primer as defined in Section 223, of this rule shall be determined by ASTM Test Method D-1613-06 "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products", 2006.

507.6 HVLP Equivalency: Spray equipment HVLP equivalency shall be determined using South Coast Air Quality Management District "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficiency Spray Guns", September 26, 2002.

507.7 Determination of Exempt Compounds: Measurement of exempt compounds shall be determined by using CARB Method 432, "Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings," September 12, 1998"; ARB Method 422 "Determination of Volatile Organic Compounds in Emission from Stationary Sources", January 22, 1987; or South Coast Air Quality Management District Method 303-91, "Determination of Exempt Compounds", February 1993.

507.8 Determination of Methyl Acetate, Acetone, t-Butyl Acetate, and parachlorobenzotrifluoride (PCBTF) Content: Measurement of methyl acetate, acetone t-butyl acetate and PCBTF, shall be determined using ASTM D6133-02, "Standard Test Method for Acetone, p-chlorobenzoftrifluoride, Methyl Acetate or t-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection into a Gas Chromatograph", February 2003.

507.9 Multiple Test Methods: When more than one test method or a set of test methods is specified for any testing, 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.

507.10 Alternative Test Methods: The use of other test methods which are determined to be equivalent or better and approved, in writing, by the Air Pollution Control Officer, and U.S. EPA may be used in place of test methods specified in this rule.

RULE 235 ADHESIVES

Adopted 06-08-95
(Amended 04-10-97, 04-08-04, 10-11-12)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 SEVERABILITY
104 EXEMPTIONS

200 DEFINITIONS

201 ACRYLONITRILE-BUTADIENE-STYRENE (ABS) WELDING ADHESIVE
202 ADHESIVE
203 ADHESIVE OR SEALANT PRODUCT
204 ADHESIVE PRIMER
205 AEROSOL ADHESIVE or ADHESIVE PRIMER
206 AEROSOL CLEANING SOLVENT
207 AIRLESS SPRAY
208 APPLICATION EQUIPMENT
209 ARCHITECTURAL
210 AUTOMOTIVE GLASS ADHESIVE PRIMER
211 CERAMIC TILE ADHESIVE
212 CHLORINATED POLYVINYL CHLORIDE (CPVC) WELDING ADHESIVE
213 CHLORINATED POLYVINYL CHLORIDE (CPVC) PLASTIC
214 CLEANUP SOLVENT
215 CLOSED CONTAINER
216 COMPUTER DISKETTE JACKET MANUFACTURING ADHESIVE
217 CONTACT ADHESIVE
218 CONTROL DEVICE
219 COVE BASE ADHESIVE
220 CURED
221 CYANOACRYLATE ADHESIVE
222 DRYWALL
223 ENCLOSED GUN CLEANER
224 ETHYLENE PROPYLENE DIENE MONOMER (EPDM) ROOF MEMBRANE
225 EXEMPT COMPOUNDS
226 FIBERGLASS
227 FLEXIBLE VINYL
228 FLEXIBLE VINYL ADHESIVE
229 HAND APPLICATION METHODS
230 HIGH PRESSURE LAMINATE
231 HIGH-VOLUME LOW-PRESSURE (HVLP) APPLICATION EQUIPMENT
232 HOUSEHOLD ADHESIVE
233 INDOOR CARPET ADHESIVE
234 INDOOR FLOOR COVERING ADHESIVE
235 KEY SYSTEM OPERATING PARAMETER
236 LEAK
237 LOW-SOLIDS MATERIAL
238 MARINE DECK SEALANT/SEALANT PRIMER
239 MATERIAL
240 METAL TO URETHANE/RUBBER MOLDING OR CASTING ADHESIVE
241 MOTOR VEHICLE
242 MOTOR VEHICLE ADHESIVE
243 MOTOR VEHICLE WEATHERSTRIP ADHESIVE

244 MULTIPURPOSE CONSTRUCTION ADHESIVE
245 NONCOMPLIANT MATERIAL
246 NON-MEMBRANE ROOF ADHESIVE/SEALANT
247 NON-POROUS MATERIAL
248 OUTDOOR FLOOR COVERING ADHESIVE
249 PANEL INSTALLATION
250 PERIMETER BONDED SHEET FLOORING ADHESIVE
251 PLASTIC
252 PLASTIC CEMENT WELDING ADHESIVE
253 PLASTIC CEMENT WELDING ADHESIVE PRIMER
254 PLASTIC FOAM
255 PLASTICIZER
256 POLYVINYL CHLORIDE (PVC) WELDING ADHESIVE
257 POROUS MATERIAL
258 PROPELLANT
259 REACTIVE ADHESIVE
260 REINFORCED PLASTIC COMPOSITE
261 ROADWAY SEALANT
262 RUBBER
263 RUBBER FLOORING
264 RUBBER VULCANIZATION BONDING
265 SEALANT
266 SEALANT PRIMER
267 SHEET RUBBER LINING INSTALLATION
268 SINGLE-PLY ROOF MEMBRANE
269 SINGLE-PLY ROOF MEMBRANE ADHESIVE
270 SINGLE-PLY ROOF MEMBRANE ADHESIVE PRIMER
271 SINGLE-PLY ROOF MEMBRANE SEALANT
272 SOLID MATERIAL
273 SOLVENT WELDING
274 STATIONARY SOURCE
275 STRIPPER
276 STRUCTURAL GLAZING ADHESIVE
277 STRUCTURAL WOOD MEMBER ADHESIVE
278 SUBFLOOR
279 SUBSTRATE
280 SURFACE PREPARATION SOLVENT
281 THIN METAL LAMINATING ADHESIVE
282 TIRE REPAIR
283 TIRE RETREAD ADHESIVE
284 TOP AND TRIM ADHESIVE
285 TRAFFIC MARKING TAPE ADHESIVE PRIMER
286 VCT AND ASPHALT TILE ADHESIVE
287 VOC COMPOSITE PARTIAL PRESSURE
288 VOLATILE ORGANIC COMPOUND (VOC)
289 VOC CONTENT
290 WATERPROOF RESORCINOL GLUE
291 WIPE CLEANING
292 WOOD FLOORING

300 STANDARDS

301 MATERIAL APPLICATION METHODS
302 VOC CONTENT LIMITS, ADHESIVES, ADHESIVE PRIMERS, SEALANTS AND SEALANT PRIMERS
303 VOC CONTENT LIMITS FOR AEROSOL ADHESIVES
304 VOC CONTENT LIMITS, SURFACE PREPARATION, CLEANUP AND STRIPPING SOLVENTS

305 WORK PRACTICES FOR ADHESIVE PRODUCTS, SEALANT PRODUCTS, AND SOLVENT CLEANING MATERIALS
306 EMISSION CONTROL EQUIPMENT

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SALE
402 PROHIBITION OF SPECIFICATION
403 HVLP MARKING
404 CALCULATION FOR DETERMINING PERCENT CONTROL EFFICIENCY AND VOC MASS EMISSION RATE
405 LABELING REQUIREMNTS

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 TEST METHODS

100 GENERAL

101 PURPOSE: To limit emissions of volatile organic compounds (VOCs) from the application of commercial and industrial adhesive or sealant products, and from related solvents and strippers.

102 APPLICABILITY: The provisions of this rule apply to any person who uses, applies or solicits the use or application of any adhesive or sealant product or associated solvent; or any person who supplies, sells, offers for sale, manufacturers or distributes for use or application within the District, any adhesive or sealant product or associated solvent.

103 SEVERABILITY: If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity of the remaining portions of the rule.

104 EXEMPTIONS

104.1 Aerosol Cleaning Solvents: The requirements of Section 303 shall not apply to the use of aerosol cleaning solvents at the stationary source provided that the total usage of the aerosol cleaning solvents does not exceed 160 fluid ounces per day, averaged over a calendar month.

104.2 Consumer Products Contact Adhesives: The requirements of Section 302 shall not apply to contact adhesives subject to the Consumer Product Safety Commission regulations in 16 Code of Federal Regulations, Part 1302, provided that adhesives are sold in packages of 128 fluid ounces or less and have a flash point greater than 20°F as determined pursuant to those regulations, and that are used at a home, a construction site, or at any location other than a stationary source.

104.3 Cyanoacrylate Adhesives: The requirements of this rule shall not apply to cyanoacrylate adhesives.

104.4 Equipment Cleanup: The VOC requirements in Section 304 shall not apply to ethyl acetate used to clean adhesive application equipment when:

104.4.1 The equipment is used in the manufacturing of transdermal drug delivery products, and

104.4.2 Fewer than 3 gallons per day of ethyl acetate, averaged over a calendar month, are used.

104.5 Household Adhesives: The requirements of this rule shall not apply to household adhesives that are regulated by the State of California and that are defined in Section 232.

104.6 Low Usage: The requirements of Sections 302, 303 and 304.1 shall not apply to the materials used by the stationary source, if the total combined volume of these materials used at the stationary source does not exceed 55 gallons during any calendar year. Commercial and industrial operations that use such materials and that are exempted pursuant to this section shall comply with Section 501.

104.7 Low VOC Materials: The requirements of this rule shall not apply to materials containing 20 grams/liter or less (0.17 pounds/gallon) of VOC actual content.

104.8 Materials Regulated Under Other District Rules: The requirements of this rule shall not apply to any material specifically regulated under any of the other District's Rules.

104.9 Medical Equipment Manufacturing: The requirements of this rule shall not apply to solvent welding operations used in the manufacturing of medical devices, including, but not limited to, catheters, heart valves, blood cardioplegia machines, tracheotomy tubes, blood oxygenators, and cardiatory reservoirs.

104.10 Research and Development Operations: Except for the work practices required pursuant to Section 305, Sections 302, 303 and 304.1 shall not apply to the testing and evaluation of materials in research and development laboratories, quality assurance laboratories, or analytical laboratories, provided that these sources maintain records that comply with Section 501.

104.11 Small Container: The requirements of this rule shall not apply to materials sold or supplied in non-reusable containers that are designed to hold no more than 8 fluid ounces of materials.

104.12 Tire Repair: The requirements of this rule shall not apply to materials used for tire repair if such products are labeled by the manufacturer: "For Tire Repair Only."

104.13 Undersea Weapons: The requirements of this rule shall not apply to the manufacture, maintenance, or repair of undersea-based weapon systems.

104.14 Ultraviolet Light-Cured Adhesives: The requirements of this rule shall not apply to reactive adhesives that are cured through the application of ultraviolet light, electron beam, visible light, radio frequency, or microwaves.

200 DEFINITIONS

201 ACRYLONITRILE-BUTADIENE-STYRENE (ABS) WELDING ADHESIVE: Any adhesive intended by the manufacturer to weld ABS pipe. ABS pipe is made by reacting monomers of acrylonitrile, butadiene, and styrene and is normally identified with an "ABS" marking.

202 ADHESIVE: Any substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

203 ADHESIVE OR SEALANT PRODUCT: Any adhesive, adhesive primer, aerosol adhesive, aerosol adhesive primer, sealant, or sealant primer, as sold by the manufacturer or as applied.

204 ADHESIVE PRIMER: A coating applied to a substrate, prior to the application of an adhesive, to provide a bonding surface.

205 AEROSOL ADHESIVE or ADHESIVE PRIMER: An adhesive or adhesive primer packaged as an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for handheld application without the need for ancillary hoses or spray equipment. Aerosol adhesives include special purpose spray adhesives, mist spray adhesives, and web spray adhesives, as defined in the California Air Resources Board consumer products regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507.

206 AEROSOL CLEANING SOLVENT: A material used as a surface preparation solvent, a cleanup solvent, or as a stripper and packaged as an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for handheld application without the need for ancillary hoses or spray equipment.

207 AIRLESS SPRAY: A spray method in which a pump forces the adhesive through an atomizing nozzle at high pressure (1,000 to 6,000 pounds per square inch, gauge, (psig)).

208 APPLICATION EQUIPMENT: A device such as a spray gun, pot, hose, brush, roller, electrostatic sprayer, non-propellant spray bottle, or squeegee, used to apply an adhesive or sealant product, a surface preparation solvent, a cleanup solvent, or a stripper.

209 ARCHITECTURAL: Pertaining to stationary structures, including mobile homes, and their appurtenances. Appurtenances to an architectural structure include, but are not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts, and windows.

210 AUTOMOTIVE GLASS ADHESIVE PRIMER: An adhesive primer labeled by the manufacturer to be applied to automotive glass prior to installation of the glass using an adhesive/sealant. This primer improves the adhesion to pinch weld and blocks ultraviolet light.

211 CERAMIC TILE ADHESIVE: Any adhesive intended by the manufacturer for the installation of ceramic tiles.

212 CHLORINATED POLYVINYL CHLORIDE (CPVC) WELDING ADHESIVE: Any adhesive intended by the manufacturer to weld CPVC plastic pipe.

213 CHLORINATED POLYVINYL CHLORIDE (CPVC) PLASTIC: CPVC plastic is a polymer of the monomer that contains 67 percent chlorine and is normally identified with a CPVC marking.

214 CLEANUP SOLVENT: A VOC-containing material used to:

214.1 Remove a loosely held uncured (i.e., not dry to the touch) adhesive or sealant from a substrate, or

214.2 Clean equipment that was used to apply an adhesive or sealant product.

215 CLOSED CONTAINER: A covered receptacle, which has no visible gaps where the cover and the main body of the receptacle meet.

216 COMPUTER DISKETTE JACKET MANUFACTURING ADHESIVE: Any adhesive intended by the manufacturer to bond the fold-over flaps to the body of a vinyl computer diskette jacket.

217 CONTACT ADHESIVE: An adhesive, also known as Contact Bond Adhesive, that is intended by the manufacturer for application to both surfaces to be bonded together, is allowed to dry before the two surfaces are placed in contact with each other, forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other, and does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces. Contact adhesive does not include rubber cements that are primarily intended for use on paper substrates. Contact adhesive also does not include vulcanizing fluids that are designed and labeled for tire repair only.

218 CONTROL DEVICE: Equipment that is utilized as part of an emission control system, and which destroys, absorbs or otherwise eliminates or reduces the emission of Volatile Organic Compounds from adhesive/sealant operations.

219 COVE BASE INSTALLATION ADHESIVE: Any adhesive intended by the manufacturer for the installation of cove base (or wall base), which is generally made of vinyl or rubber, onto a wall or vertical surface at floor level.

220 CURED: Dry to the touch.

221 CYANOACRYLATE ADHESIVE: An adhesive with a cyanoacrylate content of at least 95% by weight.

222 DRYWALL: The installation of gypsum drywall to studs or solid surfaces.

223 ENCLOSED GUN CLEANER:

223.1 A device that is used for the cleaning of spray guns, pots, cups, and hoses, that has a closed solvent container, is not open to the ambient air when in use, and has a mechanism to force the cleanup material through the gun while the cleaner is in operation; or

223.2 A device that is used for the cleaning of spray guns, pots, cups, and hoses, that has a closed solvent container, uses non-atomized solvent flow to flush the spray equipment, and collects and returns the discharged solvent to the closed container.

224 ETHYLENE PROPYLENE DIENE MONOMER (EPDM) ROOF MEMBRANE: A prefabricated sheet of elastomeric material composed of ethylene propylene diene monomer and that is field applied to a building roof using one layer of membrane material.

225 EXEMPT COMPOUNDS: For the purposes of this rule, "Exempt Compounds" are as defined in Rule 102, Definitions.

226 FIBERGLASS: A fiber made of fine filaments of glass that is similar in appearance to wool or cotton fiber.

227 FLEXIBLE VINYL: A nonrigid polyvinyl chloride plastic with at least five percent, by weight, of plasticizer content, as determined per Section 502.8.

228 FLEXIBLE VINYL ADHESIVE: An aerosol adhesive designed to bond flexible vinyl to substrates.

229 HAND APPLICATION METHODS: The application of an adhesive or sealant product by manually held equipment. Such equipment includes: paint brushes, hand rollers, trowels, spatulas, daubers, rags, sponges, and mechanically or pneumatically driven syringes that do not atomize the applied products.

230 HIGH PRESSURE LAMINATE: Sheets of materials, consisting of paper, fabric, or other core material that have been laminated at temperatures exceeding 265 degrees F, and at pressures between 1,000 and 1,400 pounds per square inch.

231 HIGH-VOLUME LOW-PRESSURE (HVLP) APPLICATION EQUIPMENT: Spray equipment, permanently labeled as such, used to apply coating by means of a spray gun which is designed to be operated and which is operated between 0.1 and 10.0 psig air atomized pressure, measured dynamically at the center of the air cap and at the air horns.

232 HOUSEHOLD ADHESIVE: An adhesive subject to, the Air Resources Board consumer products regulation, Sections 94507-94517, Title 17, California Code of Regulations. Household adhesives do not include units of product, less packaging, that weigh more than one pound or contain more than 16 fluid ounces.

233 INDOOR CARPET ADHESIVE: An adhesive intended by the manufacturer to be used during the installation of a carpet that is in an enclosure and is not exposed to ambient weather conditions during normal use.

234 INDOOR FLOOR COVERING ADHESIVE: Any adhesive intended by the manufacturer for the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl backed carpet, resilient sheet and roll, or artificial grass. Such installed materials are in an enclosure and are not exposed to ambient weather conditions during normal use. Adhesives used to install ceramic tile and perimeter bonded sheet flooring with vinyl backing onto a non-porous substrate, such as flexible vinyl, are excluded from this category.

235 KEY SYSTEM OPERATING PARAMETER: A variable that is critical to the operation of an emission control system and that ensures both operation of the system within the system manufacturer's specifications, and compliance with the control equipment efficiency and emission collection system efficiency standard required by Section 306. Such variables may include, but are not limited to, hours of operation, temperature, flow rate, and pressure.

236 LEAK: A visible liquid solvent loss or a solvent vapor (mist) loss from unintended openings in a container.

237 LOW-SOLIDS MATERIAL: A material containing no more than 120 grams of solids per liter (1.0 pound of solids per gallon) of product.

238 MARINE DECK SEALANT/SEALANT PRIMER: Any sealant or sealant primer intended by the manufacturer to seal gaps on wooden marine decks.

239 MATERIAL: Any material containing VOC including but not limited to, an adhesive, adhesive primer, aerosol adhesive, aerosol adhesive primer, sealant, sealant primer, catalyst, colorant, stripper, or solvents used in cleaning.

240 METAL TO URETHANE/RUBBER MOLDING OR CASTING ADHESIVE: Any adhesive intended by the manufacturer to bond metal to high-density or elastomeric urethane or molded rubber materials, in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper handling equipment.

241 MOTOR VEHICLE: Any self-propelled vehicle, including, but not limited to cars, trucks, buses, golf carts, vans, motorcycles, tanks, and armored personnel carriers.

242 MOTOR VEHICLE ADHESIVE: An adhesive, including glass bonding adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied for the purpose of bonding two vehicle surfaces together without regard to the substrates involved.

243 MOTOR VEHICLE WEATHERSTRIP ADHESIVE: An adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to weather stripping materials for the purpose of bonding the weather strip material to the surface of the vehicle.

244 MULTIPURPOSE CONSTRUCTION ADHESIVE: Any adhesive intended by the manufacturer for the installation or repair of various construction materials, including, but not limited to, drywall, subfloor, panel, fiberglass reinforced plastic, ceiling tile, and acoustical tile.

245 NONCOMPLIANT MATERIAL: A material that:

245.1 Exceeds the VOC content limits specified in Sections 302, 303, and 304.1, and is not exempt pursuant to Section 104 and which is not used with emission control equipment pursuant to Section 306; or

245.2 Exceeds the VOC content limit and/or composite vapor pressure limit, as applicable, in Section 304.1 and which is not used with emission control equipment pursuant to Section 306.

246 NON-MEMBRANE ROOF ADHESIVE/SEALANT: Any adhesive or sealant intended by the manufacturer for the installation or repair of non-membrane roofs, but is not intended for the installation of prefabricated single-ply roof membrane. With regard to non-membrane roof installation/repair adhesives, this category includes plastic or asphalt roof cement, asphalt roof coatings, and cold application cement.

247 NON-POROUS MATERIAL: A material which does not have tiny openings, often microscopic, to allow the absorption or discharge of fluids.

248 OUTDOOR FLOOR COVERING ADHESIVE: Any adhesive intended by the manufacturer for the installation of floor covering that is not in an enclosure and is exposed to ambient weather conditions during normal use. Outdoor floor covering installation does not include ceramic tile installation or subfloor installation.

249 PANEL: The installation of plywood, pre-decorated hardboard, tile board, fiberglass reinforced plastic, and similar pre-decorated or non-decorated panels to studs or solid surfaces.

250 PERIMETER BONDED SHEET FLOORING ADHESIVE: The installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to four inches wide around the perimeter of the sheet flooring.

251 PLASTIC: A synthetic material chemically formed by the polymerization of organic (carbon-based) substances.

252 PLASTIC CEMENT WELDING ADHESIVE: Any adhesive made of resins and solvents that is formulated to dissolve the surfaces of plastic, except ABS, PVC, and CPVC plastic, to form a bond between mating surfaces.

253 PLASTIC CEMENT WELDING ADHESIVE PRIMER: Any primer intended by the manufacturer to prepare plastic substrates prior to bonding or welding.

254 PLASTIC FOAM: A foam constructed of plastic material.

255 PLASTICIZER: A material, such as a high boiling point organic solvent, that is incorporated into a vinyl to increase its flexibility, workability, or distensibility, as determined by ASTM Method E-260-96.

256 POLYVINYL CHLORIDE (PVC) WELDING ADHESIVE: Any adhesive intended by the manufacturer to weld PVC plastic pipe.

257 POROUS MATERIAL: A material whose surface is permeable to liquids; such materials include, but are not limited to, paper and cardboard. For purposes of this rule, porous material does not include wood.

258 PROPELLANT: A fluid under pressure that expels the contents of a container when a valve is opened.

259 REACTIVE ADHESIVE: An adhesive containing 20 grams or less per liter (0.17 lbs/gal) of VOCs actual content, that cures upon exposure to ultraviolet light, electron beam, visible light, radio frequency, or microwave.

260 REINFORCED PLASTIC COMPOSITE: A composite material consisting of plastic reinforced with fibers.

261 ROADWAY SEALANT: Any sealant intended by the manufacturer to be applied to public streets, highways, and related surfaces such as curbs, berms, driveways, and parking lots.

262 RUBBER: Any natural or manmade rubber substrate, including, but not limited to: styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene, and ethylene propylene diene terpolymer.

263 RUBBER FLOORING: Flooring material in which both the back and the top surface are made of synthetic rubber, and which may be in sheet or tile form.

264 RUBBER VULCANIZATION BONDING: The bonding of rubber to metal, rubber, or polyester or nylon fabrics during one or more of the following vulcanization processes:

264.1 Molded vulcanization: The application of heat and pressure to uncured rubber in a mold;

264.2 Sheet-applied vulcanization: The application of heat after rubber stock sheets have been adhered to the walls of tanks, tankers, elbow joints, protective earthquake building pads, or rail cars; or the application of heat after one or more layers of rubber stock sheets have been built up to form a rubber product;

264.3 Cold vulcanization: The chemical reaction of an adhesive with rubber stock sheets that are adhered to earthmoving equipment, other high impact/abrasion devices, or industrial belting devices, without the application of heat or pressure. Rubber vulcanization bonding does not include tire retreading.

265 SEALANT: Any material with adhesive properties that is applied as a rope or bead and that is formulated for use primarily to fill, seal, waterproof, or weatherproof gaps or joints between two surfaces. Sealants include caulks. Sealants do not include sealers that are applied as continuous coatings.

266 SEALANT PRIMER: Any material intended by the manufacturer for application to a substrate, prior to the application of a sealant, to enhance the bonding surface.

267 SHEET RUBBER LINING INSTALLATION: The process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand.

268 SINGLE-PLY ROOF MEMBRANE: A prefabricated single sheet of rubber, normally ethylene-propylenediene terpolymer, that is field applied to a building roof using one layer of membrane material. For the purposes of this rule, single-ply roof membrane does not include membranes prefabricated from ethylene-propylene diene monomer (EPDM).

269 SINGLE-PLY ROOF MEMBRANE ADHESIVE: An adhesive intended by the manufacturer, and so labeled, for use in the installation or repair of single-ply roof membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes and ducts that protrude through the membrane. Repair includes gluing the edges of torn membrane together, attaching a patch over a hole and reapplying flashings to vents, pipes or ducts installed through the membrane.

270 SINGLE-PLY ROOF MEMBRANE ADHESIVE PRIMER: A primer intended by the manufacture for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding, and labeled as such.

271 SINGLE-PLY ROOF MEMBRANE SEALANT: A sealant intended by the manufacturer to be used for the installation or repair of single-ply roof membrane to the edge of the roof and applying flashings to vents, pipes, or ducts that protrude through the membrane.

272 SOLID MATERIAL: The nonvolatile portion of an adhesive or sealant product, surface preparation solvent, cleanup solvent, or stripper that remains after heating a sample of the product at 110°C for one hour.

273 SOLVENT WELDING: The softening of the surfaces of two substrates by wetting them with a solvent and/or adhesive, and joining them together with a chemical and/or physical reaction(s) to form a fused union.

274 STATIONARY SOURCE: Any building, structure, facility, or emissions unit which emits or may emit any pollutant directly or as a fugitive emission. This includes all pollutant-emitting activities which:

274.1 Belong to the same industrial grouping, and

274.2 Are located on one property or on two or more contiguous properties, and

274.3 Are under the same or common ownership, operation, or control or which are owned or operated by entities, which are under common control.

Pollutant-emitting activities shall be considered as part of the same industrial grouping if they:

274.4 Belong to the same two-digit standard industrial classification code, or

274.5 Are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material.)

275 STRIPPER: A liquid used to remove cured adhesives and/or cured sealants.

276 STRUCTURAL GLAZING ADHESIVE: Any adhesive intended by the manufacturer to adhere glass, ceramic, metal, stone, or composite panels to exterior building frames.

277 STRUCTURAL WOOD MEMBER ADHESIVE: An adhesive intended by the manufacturer to be used for the construction of a load bearing joint in wooden joists, trusses, or beams.

278 SUBFLOOR: The installation of subflooring material, typically plywood, over flooring joists. Subfloor installation includes the construction of any load bearing joints in joists or trusses. Subflooring is covered by a finished surface material.

279 SUBSTRATE: The material onto which an adhesive or sealant product, surface preparation solvent, cleanup solvent, or stripper is applied.

280 SURFACE PREPARATION SOLVENT: Any VOC-containing material used to remove contaminants such as dust, soil, oil, grease, etc., from a substrate prior to the application of an adhesive or sealant product.

281 THIN METAL LAMINATING ADHESIVE: Any adhesive intended by the manufacturer to bond multiple layers of metal to metal or metal to plastic in which the thickness of the bond line(s) is less than 0.025 mils (0.000025 inches).

282 TIRE REPAIR: To mend a hole, tear, fissure, blemish, or defect in a tire casing by grinding and/or gouging, applying adhesive, and attaching replacement rubber.

283 TIRE RETREAD ADHESIVE: An adhesive applied to the back of precured tread rubber and to the casing and cushion rubber. Tire retread adhesive may also be used to seal buffed tire casings to prevent oxidation while the tire is being prepared for a new tread.

284 TOP AND TRIM ADHESIVE: An adhesive intended by the manufacturer to be used for installing automotive or marine trim, including, but not limited to headliners, vinyl tops, vinyl trims, sunroofs, dash covering, door covering, floor covering, panel covering and upholstery.

285 TRAFFIC MARKING TAPE ADHESIVE PRIMER: An adhesive primer intended by the manufacturer to be applied to surfaces prior to the installation of traffic marking tape. Traffic marking tape is a pre-formed reflective film intended by the manufacturer to be applied to public streets, highways, and other surfaces including, but not limited to, curbs, berms, driveways, and parking lots. It is not one of the "Traffic Coatings" included in and defined in Rule 218, ARCHITECTURAL COATINGS.

286 VCT AND ASPHALT TILE ADHESIVE: An adhesive intended by the manufacturer for the installation of vinyl composite tile or asphalt tile flooring.

287 VOC COMPOSITE PARTIAL PRESSURE: The VOC composite partial pressure is the sum of the partial pressures of the compounds defined as VOCs, and shall be calculated by the following equation:

$$PP_c = \frac{\sum_{i=1}^{n} \frac{(W_i)(VP_i)}{MW_i}}{\frac{W_w}{MW_w} + \sum_{e=1}^{n} \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where: PP_c = VOC composite partial pressure at 20°C, in mm Hg.
W_i = Weight of the "i"th VOC compound, in grams, as determined by ASTM E 260-96
W_w = Weight of water, in grams as determined by ASTM D 3792-99.
W_e = Weight of the "e"th exempt compound, in grams, as determined
MW_i = Molecular weight of the "i"th VOC compound, in grams per g-mole, as given in chemical reference literature.
MW_w = Molecular weight of water, 18 grams per g-mole.
Mw_e = Molecular weight of the "e"th exempt compound, in grams per g-mole, as given in chemical reference literature.
Vp_i = Vapor pressure of the "i"th VOC compound at 20°C, in mm Hg, as determined by Section 502.10 of this rule.

288 VOLATILE ORGANIC COMPOUND (VOC): Any chemical compound containing at least one atom of carbon, except for the exempt compounds listed in Rule 102, DEFINITIONS.

289 VOC CONTENT:

289.1 <u>VOC Regulatory Content:</u> The weight of VOC per combined volume of VOC and material, calculated with the following equation:

VOC Regulatory Content = (Ws – Ww – Wec) / (Vm – Vw – Vec)

289.2 <u>VOC Actual Content:</u> The weight of VOC per volume of material, calculated with the following equation:

VOC Actual Content = (Ws – Ww – Wec) / Vm

Where:

Ws = Weight of volatile compounds in grams
Ww = Weight of water in grams
Wec = Weight of exempt compounds in grams
Vm = Volume of material in liters

Vw = Volume of water in liters
Vec = Volume of exempt compounds, as defined in Rule 102, DEFINITIONS, in liters

289.3 Percent of VOC by Weight: The ratio of the weight of the VOC to the weight of the material, expressed as a percent. The percent of VOC by weight shall be calculated as follows:

$$Percent\ of\ VOC\ by\ Weight = \frac{W_{voc}}{W_p}\ x\ 100$$

Where: W_{voc} = Weight of VOCs in grams
W_p = Weight of material in grams

290 WATERPROOF RESORCINOL GLUE: A two-part resorcinol resin based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

291 WIPE CLEANING: The method of cleaning a surface by physically rubbing it with a material such as a rag, paper, abrasive pad, brush, or a cotton swab moistened with a solvent.

292 WOOD FLOORING: A wood floor surface, which may be in the form of parquet tiles, planks, or strip-wood.

300 STANDARDS

301 MATERIAL APPLICATION METHODS:

301.1 A person shall not use any methods to apply any adhesive or sealant product except the following:

301.1.1 Hand application

301.1.2 Dip coat

301.1.3 Flow coat

301.1.4 Brush or roll coat

301.1.5 Electrodeposition

301.1.6 Electrostatic spray

301.1.7 High-volume low-pressure (HVLP) application equipment

301.1.8 Aerosol cans

301.1.9 Airless spray, air-assisted airless spray, air-atomized spray, only for applying adhesives and sealants with a viscosity greater than 200 centipoise, or for applying contact adhesives

301.1.10 Any other equivalent method approved in writing by the Air Pollution Control Officer and submitted to and approved by the United States Environmental Protection Agency.

301.2 A person shall not use any methods to apply any surface preparation solvent, cleanup solvent, or stripper except the following:

301.2.1 Wipe cleaning.

301.2.2 Non-propellant spray bottles or containers.

301.2.3 An enclosed gun cleaner as defined by Section 223.

301.2.4 Soaking application equipment parts in a closed container.

302 VOC CONTENT LIMITS, ADHESIVES, ADHESIVE PRIMERS, SEALANTS AND SEALANT PRIMERS:

302.1 No person shall apply a material that has a VOC regulatory content, or a VOC actual content for low-solids material only, in excess of the following limits. VOC regulatory and VOC actual shall be calculated pursuant to Section 289.1 and Section 289.2, respectively, as applied including thinners, reducers, hardeners, retarders, catalysts, and additives.

TABLE 302-1
VOC CONTENT LIMITS

Product Category	VOC Content g/l (lb/gal)
Architectural Adhesives Products:	
Multipurpose Construction	200 (1.7)
Ceramic Title	130 (1.1)
Cove Base	150 (1.3)
Dry Wall and/or Panel	50 (0.4)
Flooring:	
Outdoor Floor Covering	250 (2.1)
Indoor Floor Covering	150 (1.3)
Ceramic Tile	130 (1.1)
Indoor Carpet or Carpet Pad	150 (1.3)
Rubber Flooring	150 (1.3)
Perimeter Bonded Sheet Vinyl Flooring	660 (5.5)
Subfloor	50 (0.4)
VCT and Asphalt Tile	50 (0.4)
Roofing:	
Single-Ply Roof Membrane	250 (2.1)
Non-Membrane Roof	300 (2.5)
Structural Glazing	100 (0.8)
Structural Wood Member Glazing	140 (1.2)
Plastic Welding:	
ABS Welding	400 (3.3)
CPVC Welding	490 (4.1)
PVC Welding	510 (4.3)
Plastic Cement Welding Primer	400 (3.3)
Other Plastic Cement Welding	450 (3.8)
Specialty:	
Contact Adhesive including Specialty Substrates	200 (1.7)
Rubber Vulcanization Bonding	850 (7.1)
Tire Retread	100 (0.8)
Motor Vehicle	250 (2.1)
Motor Vehicle Weather Strip	750 (6.3)
Top and Trim	540 (4.5)
Thin Metal Laminating	780 (6.5)

TABLE 302-1 VOC CONTENT LIMITS	
Product Category	**VOC Content g/l (lb/gal)**
Computer Diskette Jacket Manufacturing	850 (7.1)
Metal to Urethane/Rubber Molding or Casting	250 (2.1)
Waterproof Resorcinol Glue	170 (1.4)
Adhesive Primers:	
Automotive Glass	700 (5.8)
Single-Ply Roof Membrane	250 (2.1)
Traffic Marking Tape	150 (1.3)
Other	250 (2.1)
Sealants:	
Architectural	250 (2.1)
Marine Deck	760 (6.3)
Non-Membrane Roof	300 (2.5)
Roadway	250 (2.1)
Single-Ply Roof Membrane	450 (3.8)
Other	420 (3.5)
Sealant Primers:	
Architectural - Non-Porous	250 (2.1)
Architectural - Porous	775 (6.5)
Marine Deck	760 (6.3)
Other	750 (6.3)

302.2 The standards in Table 302-2 apply to applications not specifically identified in Table 302-1. In Table 302-2, if an adhesive is used to bond two different types of substrates with different VOC limits, then the higher of the two VOC limits shall apply.

TABLE 302-2 VOC CONTENT LIMITS FOR ADHESIVE APPLICATIONS ONTO SUBSTRATES	
Substrate	**VOC Content g/l (lb/gal)**
Flexible Vinyl	250 (2.1)
Fiberglass	200 (1.7)
Metal	30 (0.3)
Porous Material (except wood)	120 (1.0)
Plastic Foam	80 (0.7)
Wood	30 (0.3)
Reinforced Plastic Composite	200 (1.7)
Rubber	250 (2.1)
Other	250 (2.1)

303 VOC CONTENT LIMITS FOR AEROSOL ADHESIVES

303.1 A person shall not use an aerosol adhesive unless the adhesive complies with the VOC limit specified in the California Air Resources Board consumer products regulation found in Title 17 of the California Code of Regulations, sections 94507 – 94517, and listed in the table below, in percent by weight, as determined by Sections 289.3 and 502.2.

TABLE 303-1 VOC CONTENT LIMITS FOR AEROSOL ADHESIVES	
Type of Aerosol Adhesive	**VOC % by Weight**
Adhesives – Aerosol:	
Mist Spray Adhesives	65%
Web Spray Adhesives	55%
Special Purpose Spray Adhesives:	
Mounting, Automotive Engine Compartment, and Flexible Vinyl Adhesives	70%
Polystyrene Foam and Automobile Headliner Adhesives	65%
Polyolefin and Laminate Repair/Edgebanding Adhesives	60%

303.2 No person shall manufacture for use in the District any aerosol adhesive which contains methylene chloride, perchloroethylene, or trichloroethylene, except that an aerosol adhesive manufactured before January 1, 2002 may be sold, supplied, or offered for sale until January 1, 2005, as long as the product container or package displays the date on which the product was manufactured, or a code indicating such date.

304 VOC CONTENT LIMITS, SURFACE PREPARATION, CLEANUP, AND STRIPPER SOLVENTS: A person shall comply with the following requirements:

304.1 Materials used for surface preparation, cleaning, or stripping shall not exceed the VOC actual content or the VOC composite partial pressure limits specified in the table below. Where VOC limits are shown as both VOC actual content (grams/liter) and VOC composite partial pressure, either may be used as the content limit for the specific application shown. The VOC actual content shall be calculated pursuant to Section 289.2. The composite partial pressure shall be determined using Section 502.9.

TABLE 304-1 VOC CONTENT LIMITS FOR SURFACE PREPARATION, CLEANUP, AND STRIPPER SOLVENTS		
Adhesive or Sealant Product Activity For Which the Solvent Is Used	**Actual VOC Content g/l (lb/gal)**	**VOC Composite Partial Pressure Millimeters of Mercury at 20°C (68°F)**
Substrate Preparation		
Single-Ply Roof Membrane Installation/Repair	--	45
Electrical Apparatus Components and Electronic Components	500 (4.2)	18
Medical Devices and Pharmaceuticals	800 (6.7)	33
Other Substrates	70 (0.6)	--
Cleanup		
Application Equipment		
Spray Gun in an Enclosed Gun Cleaner	--	45
Soaking in a Closed Container	--	9.5
Other	70 (0.6)	--
Other (Not Application Equipment)	--	45
Solvent Stripping Activity		
Wood Substrates	350 (2.9)	2
Other	--	9.5

304.2 A person applying any surface preparation solvent, cleanup solvent, or any stripper must use only the following methods:

304.2.1 Wipe cleaning.

304.2.2 Non-propellant spray bottles or containers.

304.2.3 An enclosed gun cleaner as defined by Section 223.

304.2.4 Soaking application equipment parts in a closed container provided that the container does not exceed five gallons in size and the container is kept tightly covered at all times except when accessing the container.

305 WORK PRACTICES FOR ADHESIVE PRODUCTS, SEALANT PRODUCTS, AND SOLVENT CLEANING MATERIALS: A person applying any adhesive products, sealant products, surface preparation, solvent cleaning, cleanup solvent, or any stripper shall comply with the following:

305.1 Closed containers or pipes shall be used for the disposal of all VOC-containing cloth, sponges, papers, or other materials used for solvent cleaning.

305.2 All VOC-materials shall be stored in closed containers except when adding, removing, or mixing contents.

305.3 Minimize spills of all VOC-containing materials.

305.4 Convey all VOC-containing materials from one location to another in closed containers or pipes.

305.5 Minimize VOC emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

306 EMISSION CONTROL EQUIPMENT: As an alternative to utilizing materials that comply with the VOC limits in Sections 302 through 304.1, a person may use approved air pollution control equipment provided that the following conditions are met:

306.1 The air pollution control equipment is approved by the Air Pollution Control Officer pursuant to Rule 501, GENERAL PERMIT REQUIREMENTS, and

306.2 The air pollution control equipment is designed and operated with:

306.2.1 A control equipment efficiency of at least 95 percent on a mass basis, as determined pursuant to Sections 404 and 502.5, and

306.2.2 An emission collection efficiency of at least 90 percent on a mass basis, as determined pursuant to Section 502.6.

306.3 Submit an Operation and Maintenance Plan to the Air Pollution Control Officer for approval at least 90 days in advance of the date on which VOC emission control system is to be used in lieu of compliance with VOC content limitations. The plan shall specify operation and maintenance procedures that demonstrate continuous operation and compliance of the emissions control equipment during periods of emissions-producing operations. The Plan shall specify key system operating parameters necessary to determine compliance with this rule and describe in detail procedures to maintain the approved control equipment. The plan shall also specify which records must be kept to document these operations

and maintenance procedures. The records shall comply with the requirements of Section 501. This Plan shall be implemented upon approval by the Air Pollution Control Officer.

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SALE: A person shall not supply, sell, solicit, or offer for sale, any noncompliant materials as defined in Section 245. The prohibition in this section shall apply to any material, which will be applied at any physical location within the District.

402 PROHIBITION OF SPECIFICATION: No person shall solicit, require the use of, or specify the application of any material subject to this rule, if the use or application would violate this rule. The prohibition in this section shall also apply to all written or oral contracts under the terms of which any such product or solvent is to be applied within the District.

403 HVLP MARKING: A person shall not sell, offer for sale, or distribute for use within the District any HVLP gun without a permanent marking, or accurate information provided on company letterhead or in the form of technical literature clearly identifying the spray gun manufacturer, salesperson or distributer, denoting the maximum inlet air pressure in psig at which the gun will operate within the parameters specified in Section 231.

404 CALCULATION FOR DETERMINING PERCENT CONTROL EFFICIENCY AND VOC MASS EMISSION RATE: The VOC mass emission rate shall be calculated both upstream and downstream of the emissions control device and shall be based on the VOC mass concentration and volumetric flowrate, pursuant to Section 502.5 and the following equations:

404.1 VOC Mass Emission Rate:

$$M = (Q) * (C) * (60 \frac{m}{hr}) \ (calculated\ upstream\ and\ downstream)$$

Where: M = VOC mass emission rate (upstream and downstream), in lb/hr.
Q = the volumetric flowrate at the inlet (upstream) or exhaust stack outlet (downstream), in standard cubic feet per minute as determined by Section 502.5.
C = the VOC mass concentration at the inlet (upstream) or outlet (downstream), in pounds per standard cubic feet, as determined pursuant to Section 502.5.

404.2 The percent control efficiency is calculated as follows:

$$\%CE = \left(\frac{M_u - M_d}{M_u} \right) * 100$$

Where: CE = control efficiency.
M_u = the upstream VOC mass emission rate, in lb/hr.
M_d = the downstream VOC mass emission rate, in lb/hr.

405 LABELING REQUIREMENTS: Any material subject to this rule shall be labeled pursuant to Sections 405.1 through 405.4 as appropriate.

405.1 VOC Content: Each container of any material subject to this rule shall display the maximum VOC regulatory content, or the maximum VOC actual content for solvents and low-solids products, expressed in grams per liter or pounds per gallon.

405.2 For Materials Subject to Section 304.1: Manufacturers of any solvents subject to this rule shall indicate on the solvent container, or on a separate product data sheet or material safety data sheet, the name of the solvent, manufacturer's name, the maximum VOC actual content, density of the solvent, and the total VOC composite partial pressure of the material. The VOC actual content shall be displayed as grams per liter or pounds per gallon. The composite partial pressure shall be displayed in millimeters of mercury at 20 ^{o}C (68 ^{o}F) as determined pursuant to Section 502.9.

405.3 Thinning Recommendation: Each container of adhesive product or sealant product subject to this rule shall display a statement of a manufacture's recommendations regarding thinning, or reducing, or mixing of the adhesive product with any other VOC containing material. Mixing recommendations shall specify a ratio which results in a compliant, as applied, adhesive product, or sealant product.

405.4 Labeling Requirements for Aerosol Adhesives: All aerosol adhesives regulated under Section 303 shall comply with the labeling requirements, applicable to aerosol adhesives, specified in the California Air Resources Board consumer products regulation found in Title 17 of the California Code of Regulations.

500 MONITORING AND RECORDS

501 RECORDKEEPING: In addition to any applicable recordkeeping requirements of either Rule 502, NEW SOURCE REVIEW, Rule 507, FEDERAL OPERATING PERMIT PROGRAM, Rule 511, POTENTIAL TO EMIT, or any other District rule which may be applicable, any person applying adhesive or sealant products, surface preparation solvents, cleanup solvents, or strippers subject to any provision of this rule shall maintain the following records, for non-exempt materials in order to evaluate compliance:

501.1 Product Data: A list of currently used adhesive or sealant products, surface preparation solvents, cleanup solvents, or strippers shall be provided and maintained. The list shall include all of the following items for each material used:

501.1.1 The material's manufacturer, product name, and product number or code.

501.1.2 Classification according to the terminology used in Sections 302, 303, and 304. of this rule (e.g.,"PVC Welding Adhesive", "Adhesive Applied to Metal", "Substrate Preparation", "Medical Devices", etc.).

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501.1.3 The material's VOC regulatory content, or VOC actual content, or weight percentage of volatiles, determined according to Sections 289.1, 289.2, and 289.3, when used in the mixing ratios recommended by the manufacturer. Labeling of aerosol adhesive containers shall comply with the requirements of Section 405.4.

501.1.4 The actual mixing ratio, if different from the manufacturer's recommendation, used in applying the material.

501.2 Product Usage and Frequency: Any person using materials regulated by this rule shall record and maintain records of the monthly usage of each individual material as listed pursuant to Section 501.1.

501.3 Emission Control Equipment Records:

501.3.1 A person using emission control equipment as a means of alternate compliance pursuant to Section 306, shall maintain records on a

daily basis, showing the type and volume of coatings and solvents used.

501.3.2 A person using emission control equipment as a means of alternate compliance with this rule pursuant to Section 306, shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control system during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with the requirements of Section 306, and are defined in Section 235.

501. 4 Retention of Records: All records required by this rule shall be retained for at least three years, except for sources subject to Rule 507, FEDERAL OPERATING PERMIT PROGRAM, which shall be retained for at least five years. Such records shall be made available to the Air Pollution Control Officer upon request.

502 TEST METHODS:

502.1 Determination of VOC Content: Except as provided in Sections 502.2 and 502.3, VOC content of non-aerosol adhesive or sealant products, surface preparation solvents, cleanup solvents, or strippers shall be determined in accordance with United States Environmental Protection Agency (U.S. EPA) Method 24 or U.S. EPA Method 24A.

502.2 Determination of VOC Content of Aerosol Adhesives Primers: The VOC content of aerosol adhesive primers shall be determined using South Coast Air Quality Management District Test Method 305, "Determination of Volatile Organic Compounds (VOC) in Aerosol Applications," California Air Resources Board Method 310, "Products and Reactive Organic Compounds (VOC) in Consumer Products," or equivalent methods approved by the U.S. EPA.

502.3 Determination of VOC Content of Plastic Welding Cement Adhesive/Primer: The VOC content of ABS, CPVC, PVC, or other plastic welding cement adhesive or any plastic welding cement primer shall be determined by using the South Coast Air Quality Management District's "Determination of Volatile Organic Compounds (VOC) in Materials Used for Pipes and Fittings", Method 316A.

502.4 Determination of Compounds Exempt From VOC Definition: Exempt compounds referenced in Section 225 and listed in Rule 102, DEFINITIONS, shall be determined in accordance with ASTM Method D4457-85, "Test Method for Determination of Dichloromethane and 1,1,1-Tricholoroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph," or California Air Resources Board Method 432, "Determination of Dichloromethane and 1,1,1-Trichoroethane in Paint and Coatings." If any of the perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the U.S. EPA approved test method used to make the determination of these compounds.

502.5 Determination of Control Efficiency: Control efficiency of emissions control equipment shall be determined in accordance with U.S. EPA Method 18, 25, or 25A; or U.S. EPA 2 or 2C (whichever is applicable). The U.S. EPA Method 18 or CARB Method 422 "Determination of Volatile Organic Compounds Emissions from Stationary Sources" shall be used to determine emissions of exempt compounds.

502.6 Determination of Collection Efficiency: Efficiency of the collection system shall be determined in accordance with the U.S. EPA "Guidelines for Determining Capture Efficiency, January 9, 1995". Individual collection efficiency test runs subject to the U.S. EPA technical guidelines shall be determined by:

502.6.1 Applicable U.S. EPA Methods 204, 204A, 204B, 204C, 204E, and/or 204F; or

502.6.2 The South Coast Air Quality Management District "Protocol for Determination of Volatile Organic Compound (VOC) Capture Efficiency"; or

502.6.3 Any other method approved by the U.S. EPA, the California Air Resources Board, and the Air Pollution Control Officer.

502.7 Determination of VOC Content of Emissions: The VOC content of emissions shall be determined by U.S. EPA Method 18.

502.8 Determination of Plasticizer Content: The test method used to determine plasticizer content of flexible vinyls shall be ASTM Method E260-96, "General Gas Chromatography Procedures".

502.9 Determination of VOC Composite Partial Pressure: VOC composite partial pressure shall be determined in accordance with ASTM Method E260-96 for organic compounds, and ASTM Method D3792-86, "Test Method for Water and Water Reducible Paints by Direct Injection into a Gas Chromatograph", and Sections 288, and 502.10 of this rule.

502.10 Determination of Vapor Pressure: Vapor pressure of a VOC shall be determined in accordance with ASTM Method D2879-10, "Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature or Liquids by Isoteniscope", or may be obtained from standard reference texts, such as:

502.10.1 "The Vapor Pressure of Pure Substances", Boublik, Fried, and Hala; Elsevier Scientific Publishing Company, New York.

502.10.2 "Perry's Chemical Engineer's Handbook", McGraw-Hill Book Company.

502.10.3 "CRC Handbook of Chemistry and Physics", Chemical Rubber Publishing Company.

502.10.4 "Lange's Handbook of Chemistry", John Dean, editor, McGraw-Hill Book Company.

502.11 Determination of VOC Content of Cyanoacrylate Adhesives: The VOC content of cyanoacrylate adhesives shall be determined by the South Coast Air Quality Management District's Method 316B.

502.12 Determination of Viscosity: The viscosity shall be determined by ASTM Method D1084-88, "Standard Test Methods for Viscosity of Adhesives".

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RULE 236 WOOD PRODUCTS COATING OPERATIONS

Adopted 11-03-94
(Amended 2-09-95, 4-10-97, 8-14-97, 10-14-10 [Effective 7-1-11])

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 SEVERABILITY
104 EXEMPTIONS

200 DEFINITIONS

201 AEROSOL-SPRAY COATING
202 AFFECTED POLLUTANT
203 AIR ASSISTED AIRLESS SPRAY
204 BINDERS
205 CAPTURE EFFICIENCY
206 CLEANUP MATERIAL
207 CLEAR TOPCOAT
208 CLOSED CONTAINER
209 COATING
210 CONTROL DEVICE EFFICIENCY
211 CONVERSION VARNISH
212 CRACKLE LACQUER
213 DETAILING OR TOUCH-UP GUNS
214 DIP COAT
215 ELECTROSTATIC APPLICATION
216 EMISSIONS UNIT
217 EMISSION CONTROL SYSTEM
218 ENCLOSED GUN CLEANER
219 EXEMPT COMPOUNDS
220 FAUX FINISH
221 FILLER
222 FLOW COATING
223 HIGH-SOLIDS
224 HIGH-VOLUME-LOW-PRESSURE (HVLP) SPRAY
225 IMITATION WOOD GRAIN
226 INKS
227 LEAF FINISH
228 LOW-SOLIDS COATING
229 LOW-VOLUME, LOW-PRESSURE (LVLP) EQUIPMENT
230 MOLD-SEAL COATING
231 MULTI-COLORED COATING
232 NEW WOOD PRODUCT
233 NON-SHOP ARCHITECTURAL COATING OPERATIONS
234 OPAQUE STAINS
235 PIGMENTED COATINGS
236 REACTIVE DILUENT
237 REFINISHING OPERATION
238 REPAIR
239 ROLL COATER
240 SEALER
241 SEMITRANSPARENT STAIN

242 SIMULATED WOOD MATERIALS
243 STAIN
244 STENCIL COATING
245 STRIPPER
246 SURFACE PREPARATION MATERIAL
247 TINT
248 TONER
249 TOUCH-UP
250 VOC COMPOSITE PARTIAL VAPOR PRESSURE
251 VOLATILE ORGANIC COMPOUND (VOC)
252 VOC CONTENT
253 WASH COAT
254 WOOD PANEL
255 WOOD PRODUCTS
256 WOOD PRODUCT COATING APPLICATION OPERATIONS

300 STANDARDS

301 APPLICATION EQUIPMENT REQUIREMENTS
302 LIMITS FOR VOC CONTENT OF COATINGS FOR NEW WOOD PRODUCTS
303 LIMITS FOR VOC CONTENT OF COATINGS FOR REFINISHING, REPAIRING, PRESERVING, OR RESTORING WOOD PRODUCTS
304 LIMITS OF VOC CONTENT FOR STRIPPERS
305 EMISSION CONTROL SYSTEM
306 REQUIREMENTS FOR SURFACE PREPARATION AND CLEANUP MATERIALS

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION
402 PROHIBITION OF POSSESSION
403 PROHIBITION OF SALE OR MANUFACTURE
404 LABELING REQUIREMENTS, VOC CONTENT
405 OPERATION AND MAINTENANCE PLAN

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 RETENTION OF RECORDS
503 TEST METHODS

100 GENERAL

101 PURPOSE: To establish limits on the emission of volatile organic compounds (VOC) from coatings and strippers used on wood products, and from products used in surface preparation and cleanup.

102 APPLICABILITY:

102.1 Business Category: The provisions of this rule shall apply to any person who uses, manufactures, blends, sells, repackages, distributes, or specifies wood products coatings and/or strippers to be used for the coating and/or surface preparation of wood products, including furniture, cabinets, and custom replica furniture.

103 SEVERABILITY: If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity to the remaining portions of the rule.

104 EXEMPTIONS:

104.1 Exemption, Residential: Residential non-commercial operations are exempt from all provisions of this rule.

104.2 Exemption, Non-Shop Architectural Coating Operations: The coating of stationary structures and their appurtenances in a non-shop environment, is subject to Rule 218, ARCHITECTURAL COATINGS, and is exempt from all provisions of this rule.

104.3 Exemption, Aerosol Spray Coatings: Aerosol wood products coatings sold in non-refillable aerosol containers are exempt from all provisions of this rule.

104.4 Exemption, Panels and Siding: The factory application of wood products coatings in the manufacturing of finished wood panels intended for attachment to the inside walls of buildings, including, but not limited to, homes and office buildings, mobile homes, trailers, prefabricated buildings and similar structures, is subject to Rule 238, FACTORY COATING OF FLAT WOOD PANELING, and is exempt from all provisions of this rule.

104.5 Exemption, Other: The application of coatings by template or stencil to add designs, letters or numbers to wood products, and the application of coatings to wooden musical instruments are exempt from all provisions of this rule.

104.6 Partial Exemption, Low Volume: Businesses using less than 55 gallons per year of wood products coatings and/or strippers (singly or in any combination) are exempt from all provisions of this rule with the exception of Section 501, Recordkeeping.

104.7 Partial Exemption, Specific Finishes: Coatings used to produce the following finishes are exempt from the provisions of Sections 302, 303 and 304, provided that records are maintained as specified in Section 501, Recordkeeping:

104.7.1 Crackle lacquers;

104.7.2 Faux finishes;

104.7.3 Imitation wood grain;

104.7.4 Leaf finishes.

104.8 Exemption, Tints: Tints applied to stains in quantities not to exceed one pint of tint in any operating day are exempt from all provisions of this rule, except for records. Records shall be maintained and reported as specified in Sections 501.1.4 and 501.2.2

104.9 Exemption From Requirements of Other District Rules: Any wood products coating, stripper or cleaning solvent subject to the VOC limitations of this rule, Sections 302, 303, and 304, is exempt from the requirements of Rule 219, ORGANIC SOLVENTS.

200 DEFINITIONS

201 AEROSOL-SPRAY COATING: A coating which is sold in a hand-held, pressurized, non-refillable container of 1 liter (1.1 quarts) or less, and which is expelled from the container in a finely divided spray when a valve on the container is depressed.

202 AFFECTED POLLUTANT: Volatile organic compounds (VOC), as defined in Section 251.

203 AIR ASSISTED AIRLESS SPRAY: Equipment used to apply coatings that uses fluid pressure to atomize coating and air pressure between 0.1 and 20 psig to adjust the spray pattern.

204 BINDERS: Non-volatile polymeric organic materials (resins) which form surface film in coating applications.

205 CAPTURE EFFICIENCY: Expressed in percent, capture efficiency is the ratio of the weight of the VOC in the effluent stream entering a control device to the weight of the VOC emitted from wood product coating operations, both measured simultaneously in accordance with Section 503.4, and calculated by the following equation:

$$\text{Capture Efficiency} = \frac{W_c}{W_e} \times 100$$

Where: W_c = Weight of VOC entering the control device
W_e = Weight of VOC discharged from the coating operations

206 CLEANUP MATERIAL: A VOC-containing material used to clean application equipment used in wood products coating operations.

207 CLEAR TOPCOAT: The final coating which contains binders, but not opaque pigments, and is specifically formulated to form a transparent or translucent solid protective film.

208 CLOSED CONTAINER: A container which has a cover where the cover meets with the main body of the container without any gaps between the cover and the main body of the container.

209 COATING: A material which is applied to a surface and which forms a film in order to beautify and/or protect such surface. "Coating" includes, but is not limited to, materials such as topcoats, stains, sealers, fillers, conversion varnish, pigmented coating, multicolored coating, moldseal coating, washcoat, and toner.

210 CONTROL DEVICE EFFICIENCY: Expressed in percent, control device efficiency is the ratio of the weight of the VOC removed by the control device from the effluent stream entering the control device to the weight of VOC in the effluent stream entering the control device, both measured simultaneously in accordance with Section 503.5, and calculated by the following equation:

$$\text{Control Device Efficiency} = \frac{(W_c - W_a)}{W_c} \times 100$$

Where: W_c = Weight of VOC entering the control device
W_a = Weight of VOC discharged from the control device

211 CONVERSION VARNISH: A coating comprised of a homogeneous (alkyd-amino resin) liquid which, when acid catalyzed and applied, hardens upon exposure to air or heat, by evaporation and polymerization, to form a continuous film that imparts protective or decorative properties to wood surfaces. When used as a self sealing system or as a pigmented coating, conversion varnish shall not be subject to the July 1, 2005 VOC limit for Sealers or for Pigmented Coatings, as specified in Section 302.

212 CRACKLE LACQUER: A clear or pigmented topcoat intended to produce a cracked or crazed appearance when dry.

213 DETAILING OR TOUCH-UP GUNS: Small air spray equipment, including air brushes, that operates at no greater than five (5) cfm air flow and no greater than 50 psig air pressure and is used to repair or touch-up portions of wood products.

214 DIP COAT: A coating which is applied by dipping an object into a vat of coating material and allowing any excess coating material to drain off.

215 ELECTROSTATIC APPLICATION: The electrical charging of atomized coating droplets for deposition by electrostatic attraction.

216 EMISSIONS UNIT: An identifiable operation or piece of process equipment such as an article, machine, or other contrivance which controls, emits, may emit, or results in the emissions of any affected pollutant directly or as fugitive emissions.

217 EMISSION CONTROL SYSTEM: A system for reducing emissions of VOC from coating operations. It consists of (1) equipment which captures drying oven exhaust and fugitive emissions from the line and transports them to the control device, and (2) a VOC control device which destroys the VOC or otherwise limits the emission of VOC to the atmosphere. The capture efficiency and the control device efficiency are calculated in accordance with Sections 205 and 210, respectively.

The Emission Control System Efficiency is calculated by the following equation:

Efficiency = Capture Efficiency X Control Device Efficiency / 100

218 ENCLOSED GUN CLEANER:

218.1 A device that is used for the cleaning of spray guns, pots and hoses, that has an enclosed solvent container, is not open to the ambient air when in use, and has a mechanism to force the cleanup material through the gun while the cleaner is in operation; or

218.2 A device that is used for the cleaning of spray guns, pots and hoses, that has an enclosed solvent container, uses non-atomized solvent flow to flush the spray equipment and collects and returns the discharged solvent to the enclosed container.

219 EXEMPT COMPOUNDS: For the purposes of this rule, exempt compounds are as described in Rule 102, DEFINITIONS.

220 FAUX FINISH: A finish intended to simulate a surface other than wood, including stone, sand, slate, marble, metal, metal flake or leather.

221 FILLER: A preparation used to fill in cracks, grains, etc., of wood before applying a coating.

222 FLOW COATING: A coating application system where paint flows over the part and the excess coating drains back into the collection system.

223 HIGH-SOLIDS: A coating containing more than one (1) pound of solids per gallon of coating, by weight, when measured in accordance with Section 503.1, and which can include wiping stains, glazes, and opaque stains.

224 HIGH-VOLUME-LOW-PRESSURE (HVLP) SPRAY: Equipment used to apply coatings by means of a spray gun which is designed to be operated and which is operated between 0.1 and 10 psig air pressure measured dynamically at the center of the air cap and at the air horns.

225 IMITATION WOOD GRAIN: A hand applied finish that simulates the appearance of a specific natural wood grain.

226 INKS: A fluid that contains dyes and/or colorants and is used to make markings but not to protect surfaces.

227 LEAF FINISH: A finish used in conjunction with metal leaf or foil.

228 LOW-SOLIDS COATING: A coating containing one (1) pound of solids per gallon of coating or less, by weight, when measured in accordance with Section 503.1, and which can include semi-transparent stains, toners, and washcoats.

229 LOW-VOLUME, LOW-PRESSURE (LVLP) EQUIPMENT: Spray coating application equipment with air pressure between 0.1 and 10.0 psig and air volume less than 15.5 cfm per spray gun and which operates at a maximum fluid delivery pressure of 50 psig.

230 MOLD-SEAL COATING: The initial coating applied to a new mold or repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.

231 MULTI-COLORED COATING: A coating which exhibits more than one (1) color when applied and which is packaged in a single container and applied in a single coat.

232 NEW WOOD PRODUCT: A wood product which has not been previously coated or a wood product from which uncured coatings have been removed to repair flaws in initial coatings applications.

233 NON-SHOP ARCHITECTURAL COATING OPERATIONS: The commercial application of coatings to stationary structures and/or their appurtenances, to mobile homes, to pavements, or to curbs, and not conducted inside, or on the premises of, a factory or shop building facility.

234 OPAQUE STAINS: Stains not classified as semitransparent stains, which contain pigments which give character to wood.

235 PIGMENTED COATINGS: Opaque coatings which contain binders and colored pigments which are formulated to hide the wood surface, either as an undercoat or topcoat.

236 REACTIVE DILUENT: A liquid component of a coating which is a VOC during application, and one in which, through chemical or physical reactions, such as polymerization, becomes an integral part of a finished coating.

237 REFINISHING OPERATION: The steps necessary to remove cured coatings and to repair, preserve, or restore a wood product.

238 REPAIR: Recoating portions of previously coated product to cover mechanical damage to the coating following normal painting operations.

239 ROLL COATER: A series of mechanical rollers that forms a thin coating film on the surface of roller, which is applied to a substrate by moving the substrate underneath the roller.

240 SEALER: A coating containing binders, which seals the wood prior to application of the subsequent coatings.

241 SEMITRANSPARENT STAIN: A stain containing dyes and/or semi-transparent pigments which are formulated to enhance wood grain and change surface color but not to conceal surface grain, and include sap stain and non-grain raising stains. Semitransparent stains with greater than one (1) pound of solids per gallon of coating shall be considered opaque stains.

242 SIMULATED WOOD MATERIALS: Materials, such as plastic, glass, metal, etc., that are made to give a wood-like appearance or are processed like a wood product.

243 STAIN: A semitransparent or opaque coating labeled and formulated to change the color of a surface, but not conceal the grain pattern or texture.

244 STENCIL COATING: An ink or a pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to wood products.

245 STRIPPER: A liquid used to remove cured coatings, cured inks, and/or cured adhesives.

246 SURFACE PREPARATION MATERIAL: A VOC-containing material applied to the surface of any wood product, prior to the application of coatings, to clean the wood product or to promote the adhesion of subsequent coatings.

247 TINT: A colorant added in small quantities to a stain to achieve a particular color for a finished product.

248 TONER: A wash coat which contains binders and dyes or pigments to add tint to a coated surface.

249 TOUCH-UP: A coating used to cover minor coating imperfections appearing after the main coating operation.

250 VOC COMPOSITE PARTIAL VAPOR PRESSURE: VOC composite partial vapor pressure for determination of compliance with Section 304 shall be calculated by the following equation:

$$PP_c = \frac{\sum_{i=1}^{n}(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^{n} WSUB\frac{i}{MW_i}}$$

Where: PP_c = VOC composite partial pressure at 20°C, in mm Hg
W_i = Weight of the "I"$_{th}$ VOC compound, in grams
W_w = Weight of water, in grams
W_e = Weight of exempt compounds, in grams
MW_i = Molecular weight of the "I"$_{th}$ VOC compound, in (g/g-mole)
MW_w = Molecular weight of water, in (g/g-mole)
MW_e = Molecular weight of exempt compound, in (g/g-mole)
Vp_i = Vapor pressure of the "I"$_{th}$ VOC compound at 20°C, in mmHg

251 VOLATILE ORGANIC COMPOUND (VOC): Any chemical compound containing at least one atom of carbon, except for the Exempt Compounds listed in Rule 102, DEFINITIONS.

252 VOC CONTENT:

252.1 Regulatory VOC Content: The weight of VOC per combined volume of VOC and coating solids, shall be calculated by the following equation:

$$G_1 = \frac{W_v - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where: G_1 = Weight of VOC per liter of coating, less water and less exempt compounds
W_v = Weight of all volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of coating material, in liters
V_w = Volume of water, in liters
V_{ec} = Volume of exempt compounds, in liters

252.2 Actual VOC Content: The weight (in grams) of VOC per liter of wood products coating material is expressed as grams VOC per liter of material, and shall be calculated using the following:

$$G_A = \frac{(W_v - W_w - W_{ec})}{v_m}$$

Where: G_A = Weight of VOC per liter of total coating
W_v = Weight of all volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of material, including any added VOC-containing solvents or reducers but excluding any colorants added to tint the base, in liters

253 WASH COAT: A coating, containing binders, which penetrates into and seals wood, prevents undesired staining, and seals in wood pitch. Washcoats with greater than one (1) pound of solids per gallon of coating shall be considered sealers.

254 WOOD PANEL: Any piece of wood, or wood composition, which is solid or laminated, and which is larger than 10 square feet in size, and which is not subsequently cut into smaller pieces.

255 WOOD PRODUCTS: Surface-coated objects such as cabinets (kitchen, bath and vanity), tables, chairs, beds, sofas, shutters, doors, trim, containers, tools, ladders, art objects, and any other objects made of solid wood and/or wood composition and/or of simulated wood material used in combination with solid wood or wood composition.

256 WOOD PRODUCT COATING APPLICATION OPERATIONS: A combination of coating application steps which may include use of spray guns, flash-off areas, spray booths, ovens, conveyors, and/or other equipment operated for the purpose of applying coating to wood products.

300 STANDARDS

301 APPLICATION EQUIPMENT REQUIREMENTS: A person subject to the provisions of this rule shall not apply any wood product coating to any wood products, unless one of the following application methods is used:

301.1 Hand application methods, such as brush or roller;

301.2 Roll coater;

301.3 Dip coat;

301.4 Flowcoat;

301.5 High Volume Low Pressure spray equipment;

301.6 Low Volume Low Pressure spray equipment;

301.7 Air assisted airless, for touch-up and repair only;

301.8 Electrostatic application equipment;

301.9 Any other equivalent method which has been approved in writing by the Air Pollution Control Officer.

302 LIMITS FOR VOC CONTENT OF COATINGS FOR NEW WOOD PRODUCTS: Except as provided in Sections 103 and 305, no person shall apply any coatings to a new wood product, or use VOC-containing solvents, if such materials have a VOC content exceeding the applicable limits specified in the following table. The VOC content of coatings, except low-solid stains, toners, washcoats and solvents, shall be determined in accordance with Sections 252.1 (VOC regulatory content) and 503.1. The VOC content of low-solid stains, toners washcoats and solvents, shall be determined in accordance with Sections 252.2 (VOC actual content) and 503.1. VOC limits expressed in grams VOC per liter of coating shall be used.

LIMITS FOR VOC CONTENT OF COATINGS FOR NEW WOOD PRODUCTS

SPECIFIC MATERIAL	VOC LIMITS VOC Regulatory Content, Grams VOC Per Liter of Coating Less Water and Exempt Compounds, as defined in Section 252.1 (lb/gal)
Clear Topcoats	275 (2.3)
Conversion Varnish	550***** (4.6)
Filler	275 (2.3)
High-Solid Stain	350 (2.9)
Inks	500 (4.2)
Mold-Seal Coating	750 (6.2)
Multi-colored Coating	275 (2.3)
Pigmented Coating	275* (2.3)
Sealer	275*** (2.3)**
	VOC LIMITS **VOC Actual Content, Grams VOC per Liter of Material, as defined in Section 252.2 (lb/gal)**
Low Solid Stains, Toners and Washcoats	120 (1.0)
	VOC LIMITS **VOC Actual Content, Grams VOC Per Liter of Material, as defined in Section 252.2 (lb/gal)**
Surface Prep and Clean-up Solvents Containing VOC's	25 (0.2)

***** (See Section 211 for special conditions for Conversion Varnish)

302.1 Notwithstanding the VOC limits specified in this section, a person may apply a sealer with a VOC content not exceeding 680 grams/liter, provided that the topcoat used on the same wood product does not exceed 275 grams/liter.

303 **LIMITS FOR VOC CONTENT OF COATINGS FOR REFINISHING, REPAIRING, PRESERVING, OR RESTORING WOOD PRODUCTS:** Except as provided in Sections 103 and 305, no person shall apply any coatings to refinish, repair, preserve, or restore a wood product, or use VOC-containing solvents, if such materials have a VOC content exceeding the applicable limits specified in the following table. The VOC content of coatings, except low-solid stains, toners, and washcoats, shall be determined in accordance with Sections 252.1 and 503.1. The VOC content of low-solid stains, toners and washcoats and VOC-containing solvents shall be determined in accordance with Sections 252.2 and 503.1. VOC limits expressed in grams per liter shall be used.

LIMITS FOR VOC CONTENT OF COATINGS TO REFINISH, REPAIR, PRESERVE OR RESTORE

SPECIFIC MATERIAL	VOC LIMITS VOC Regulatory Content, Grams VOC Per Liter of Coating Less Water and Exempt Compounds, as defined in Section 252.1 (lb/gal)
Clear Topcoats	680 (5.7)
Conversion Varnish	550* (4.6)
Filler	500 (4.2)
High-Solid Stain	700 (5.9)
Inks	500 (4.2)
Mold-Seal Coating	750 (6.3)
Multi-colored Coating	680 (5.7)
Pigmented Coating	600* (5.0)
Sealer	680* (5.7)
	VOC LIMIT **VOC Actual Content, Grams VOC Per Liter of Material, as defined in Section 252.2 (lb/gal)**
Low Solid Stains, Toners and Washcoats	480 (4.0)
	VOC LIMIT **VOC Actual Content, Grams VOC Per Liter of Material, as defined in Section 252.2 (lb/gal)**
Surface Prep or Clean-up Solvents Containing VOC's	25 (0.2)

* (See Section 211 for special conditions for Conversion Varnish)

304 LIMITS OF VOC CONTENT FOR STRIPPERS: A person shall not use a stripper on wood products unless:

304.1 The stripper contains less than 350 grams of VOC per liter of material; or

304.2 The VOC composite partial vapor pressure for the stripper is 2 mm Hg (0.04 psia) or less at 20^{o}C (68^{o}F), as calculated pursuant to Section 250.

305 EMISSION CONTROL SYSTEM:

305.1 As an alternative, a person may comply with the VOC limits specified in Sections 302, 303, and 304, by using an approved air pollution control system consisting of a capture system and a control device, which reduces VOC emissions from the application of wood products coatings or strippers by an equivalent or greater amount than the limits specified in Sections 302, 303, and 304, with the written approval of

the Air Pollution Control Officer. In order to achieve an equivalent or greater level of VOC reduction, the minimum allowable emission control system efficiency of such a system, when calculated pursuant to Section 217, shall be the efficiency calculated by the following equation:

$$C.E. = 1 - \left(\frac{(VOC_{LWc})}{(VOC_{LWn,Max})} X \frac{(1 - (VOC_{LWn,Max} / (D_{n,Max})}{(1 - (VOC_{LWc} / D_c)} \right) X100$$

Where:

$C.E.$	=	Minimum allowable emission control system efficiency, percent
VOC_{LWc}	=	VOC Limit of Rule 236, less water and less exempt compounds, pursuant to Sections 302, 303, and/or 304
$VOC_{LWn,Max}$	=	Maximum VOC content of non-compliant coating used in conjunction with a control device, less water and less exempt compounds
$D_{n,Max}$	=	Density of solvent, reducer, or thinner contained in the non-compliant coating, containing the maximum VOC content of the multi-component coating, g/L
D_c	=	Density of corresponding solvent, reducer, or thinner used in the compliant coating system (= 880 g/L)

305.2 The capture system shall vent all drying oven exhaust to the control device and shall have one or more inlets for collection of fugitive emissions; and

305.3 During any period of operation of a thermal incinerator, combustion temperature shall be continuously monitored; and

305.4 During any period of operation of a catalytic incinerator, exhaust gas temperature shall be continuously monitored; and

305.5 Written approval for the use of such equipment is obtained from the Air Pollution Control Officer prior to installation or use of the equipment.

306 REQUIREMENTS FOR SURFACE PREPARATION AND CLEANUP MATERIALS: Any person subject to this rule shall comply with the following requirements:

306.1 Spray gun nozzles only, may be soaked in solvent-based materials for cleaning, provided the container (not to exceed five (5) gallons in size) is kept tightly covered at all times except when accessing the container.

306.2 Closed, non leaking, and non-absorbent containers shall be used for the disposal of cloth or paper used for surface preparation, cleanup, and coating removal.

306.3 VOC-containing materials shall be stored in containers, which are closed when not in use, and shall be disposed of in a manner that the VOC's are not emitted into the atmosphere.

306.4 A person shall not use solvent-based VOC-containing materials for the cleanup of spray equipment used in wood products coating application operations, unless the spray equipment is disassembled and cleaned in an enclosed gun cleaner.

306.5 A person shall not perform surface preparation or cleanup with a material containing VOC's in excess of 25 grams per liter in accordance with VOC limit standards in Sections 302 and 303.

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION: No person shall require for use or specify the application of any coating subject to the provisions of this rule that does not meet the limits and requirements of this rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating is to be applied to any wood product at any physical location within the District.

402 PROHIBITION OF POSSESSION: No person shall possess any coating subject to the provisions of this rule that does not meet the limits and requirements of the rule.

403 PROHIBITION OF SALE OR MANUFACTURE:

403.1 No person shall manufacture, blend, repackage for sale, supply, sell, offer for sale, or distribute within the District, any coating with a VOC content in excess of the limits specified in Section 302 or 303 or 304. This shall apply to the sale of any non-compliant coating which will be applied at any physical location within the jurisdiction of the District.

403.2 The provision of Section 403.1 shall not apply to the application of coatings where either: (a) The product is used exclusively within a emission control systems as allowed in Section 305; or (b) For coatings for use outside of the District.

404 LABELING REQUIREMENTS, VOC CONTENT: Each container of any coating, surface preparation material, or cleanup material, or stripper manufactured shall display its maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer, or shall have this information provided in a product data sheet supplied with the container. VOC content shall be displayed as grams of VOC per liter of coating (less water and less exempt solvent, and excluding any colorant added to tint bases), surface preparation and cleanup material, or stripper. VOC content displayed may be calculated using product formulation data, or may be determined using the test method in Section 503.1. Alternatively, containers for strippers subject to the provisions of Section 304 may display only the partial vapor pressure.

405 OPERATION AND MAINTENANCE PLAN: A person using an emission control system pursuant to Section 305, as a means of alternate compliance with this rule, as provided in Sections 302, 303 and 304, must submit an Operation and Maintenance Plan for the emission control system to the Air Pollution Control Officer for approval. A person proposing to install a new emission control system as a means of alternate compliance with this rule shall submit in addition to an Operation and Maintenance Plan, an application for Authority to Construct, pursuant to Rule 501, GENERAL PERMIT REQUIREMENTS. The Plan shall specify operating and maintenance procedures which will demonstrate continuous operation of the emission control system during periods of emissions-producing operations. The Plan shall also specify which records must be kept to document these operating and maintenance procedures. These records shall comply with the requirements of Sections 501 and 502. The Plan shall be implemented upon approval of the Air Pollution Control Officer.

500 MONITORING AND RECORDS

501 RECORDKEEPING: In addition to any applicable record keeping requirements of either Rule 502, NEW SOURCE REVIEW, Rule 507, FEDERAL OPERATING PERMIT PROGRAM, and Rule 511, POTENTIAL TO EMIT, or any other District rule which may be applicable, any

person subject to this rule shall maintain the following records in order to evaluate compliance:

501.1 Product Data:

501.1.1 A data sheet, material list, or invoice giving material name, manufacturer identification, material application, and VOC content.

501.1.2 Any catalysts, reducers, or other components used, and the mix ratio.

501.1.3 The applicable VOC limit from Section 302 or 303 and the actual VOC content of the wood product coating as applied.

501.1.4 Name, description, container size and actual VOC content of any tints used to color stains for coating wood products.

501.2 Product Usage and Frequency:

501.2.1 For persons using coatings or materials which comply with the VOC limits specified in Sections 302, 303, and 304, records shall be maintained on a monthly basis, showing the type and volume of coatings, strippers and surface preparation and cleanup materials used. Coating type shall be designated according to the coating categories as listed in Sections 302, 303, and 304.

501.2.2 Persons using stains and/or tints and subject to this rule shall maintain records on a monthly basis that provide the following information as applicable:

Name, description, container size, and actual VOC content of any tints used to color stains.

Usage of any tint is limited to one pint of tint in any operating day. Records of any tint use shall be maintained on a monthly basis and submitted to the District when requested.

501.2.3 If at any time a person uses coatings or materials exceeding the VOC limits specified in Sections 302, 303, and 304, records shall be maintained on a daily basis showing the type and volume of materials used.

501.2.4 For persons using tints to color stains, usage is limited to one pint or less in any operating day. Records of any tint use shall be maintained on a daily basis and submitted monthly to the Placer Air Pollution Control District.

501.3 Emission Control System:

501.3.1 A person using an emission control system as a means of alternate compliance pursuant to Section 305, shall maintain records on a monthly basis, showing the type and volume of coatings and solvents used.

501.3.2 A person using an emission control system as a means of alternate compliance with this rule pursuant to Section 305, shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control system during periods of emission-producing activities. Key

system operating parameters are those necessary to ensure compliance with the requirements of Section 305.

502 RETENTION OF RECORDS: All records required by this rule shall be retained for at least three years, except for sources subject to Rule 507, FEDERAL OPERATING PERMIT PROGRAM, which shall be retained for at least five years. Such records shall be made available to the Air Pollution Control Officer upon request.

503 TEST METHODS

503.1 Determination of VOC Content: VOC content, solids content, and water content of wood product coatings, strippers, and surface preparation and cleanup materials, subject to this rule, shall be determined in accordance with United States Environmental Protection Agency (U.S. EPA) Method 24 and Sections 252, 253 or 254 of this rule, as applicable.

503.2 Determination of Composition of VOC: The composition of VOC shall be as specified on the manufacturer's label or data sheet, or as determined by ASTM Method E260-96, "Standard Practice for Packed Column Gas Chromatograph".

503.3 Determination of Compounds Exempt From VOC Definition: Exempt Compounds per Section 219 of this rule, and as defined in Rule 102, DEFINITIONS, shall be determined in accordance with ASTM D4457-85, "Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph", or ARB Method 432. If any of the perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the U.S. EPA-approved test method used to make the determination of these compounds.

503.4 Determination of Capture Efficiency: Efficiency of the capture system shall be determined in accordance with U.S. EPA "Guidelines for Determining Capture Efficiency, January 9, 1995". Individual capture efficiency test runs subject to the U.S. EPA technical guidelines, calculated in accordance with Section 205, shall be determined by:

503.4.1 40 CFR 51, Appendix M, Methods 204-204F; or

503.4.2 The South Coast Air Quality Management District "Protocol for Determination of Volatile Organic Compound (VOC) Capture Efficiency"; or

503.4.3 Any other method approved by the U.S. EPA, the California Air Resources Board, and the Air Pollution Control Officer.

503.5 Determination of Control Device Efficiency: Efficiency of the emission control device shall be based upon test measurements made in accordance with (1) U.S. EPA Method 25 or 25A, for VOC concentration, and (2) U.S. EPA Method 2 or 2C for flow rates, as applicable, and calculated in accordance with Section 210. U.S. EPA Method 18 or CARB Method 422 "Determination of Volatile Organic Compounds in Emissions from Stationary Sources" may be used to determine emissions of exempt compounds.

503.6 Vapor Pressure: Vapor pressures may be obtained from standard reference texts or may be determined by ASTM D2879-97, "Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope".

503.7 Volatile Content of Radiation Curable Materials: Volatile content of radiation curable materials shall be obtained in accordance with ASTM D5403-93, "Standard Test Methods for Volatile Content of Radiation Curable Materials".

503.8 Multiple Test Methods: When more than one test method or a set of test methods is specified for any testing, 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.

RULE 238 FACTORY COATING OF FLAT WOOD PANELING

Adopted 11-03-94
(Amended 2-09-95, 6-08-95, 8-14-97, 02-18-04, 10-14-10 [Effective 7-1-11])

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 ADHESIVE
202 CAPTURE EFFICIENCY
203 COATING
204 CONTROL DEVICE EFFICIENCY
205 DIP COATER
206 ELECTROSTATIC SPRAY APPLICATION
207 EMISSION CONTROL SYSTEM
208 EXEMPT COMPOUNDS
209 FLATWOOD PANELING
210 FLOW COATER
211 HAND APPLICATION METHODS
212 HARDBOARD
213 HARDWOOD PLYWOOD
214 HIGH VOLUME, LOW PRESSURE (HVLP) SPRAY EQUIPMENT
215 INK
216 LOW SOLIDS COATING
217 NATURAL FINISH HARDWOOD PLYWOOD PANELS
218 NON-HEAT-SET INK
219 PANEL
220 PRINTED INTERIOR PANELS
221 ROLL COATER
222 SEMI-TRANSPARENT STAIN
223 SIMULATED WOOD MATERIALS
224 STAIN
225 THIN PARTICLEBOARD
226 TILEBOARD
227 TINT
228 VOC CONTENT
229 VOLATILE ORGANIC COMPOUND (VOC)
230 WOOD FLAT STOCK

300 STANDARDS

301 GENERAL REQUIREMENTS
302 APPLICATION EQUIPMENT REQUIREMENTS
303 CLEANUP AND STORAGE PROCEDURES

400 ADMINISTRATIVE REQUIREMENTS

401 OPERATION AND MAINTENANCE PLAN

500 MONITORING AND RECORDS

501 COATING LIST
502 RECORDKEEPING
503 RECORDKEEPING OF STAINS AND TINTS
504 EMISSION CONTROL SYSTEM RECORDS
505 RETENTION OF RECORDS
506 TEST METHODS

100 GENERAL

101 PURPOSE: The purpose of this Rule is to limit the emission of volatile organic compounds (VOC) from the factory application of coatings and inks to flatwood paneling as defined in Section 209, and to wood flat stock, as defined in Section 230.

102 APPLICABILITY:

102.1 Business Category: The provisions of this rule shall apply to any person who applies in a shop or factory facility, coatings or inks used to coat any products defined in Section 209 or 231, or who manufactures, blends, sells, repackages, distributes, or specifies such coatings and inks. Standard Industrial Code (SIC) classifications covering these coating processes are 2431, 2435, 2436, 2492 and 2499.

103 EXEMPTIONS:

103.1 Exemption, Furniture, and Cabinet Components: Surface coating of wood flat stock intended to be used as furniture or cabinet components, is subject to Rule 236, WOOD PRODUCTS COATING OPERATIONS, and is exempt from all provisions of this rule.

103.2 Exemption, Non-Shop Architectural Coatings: The coating of stationary structures and their appurtenances in a non-shop operation is subject to Rule 218, ARCHITECTURAL COATINGS, and is exempt from all provisions of this rule.

103.3 Exemption, Adhesives: The use of adhesives to manufacture flatwood panels or wood flat stock is subject to Rule 235, ADHESIVES, and is exempt from all provisions of this rule.

103.4 Exemption From Requirements of Other District Rules: Any coating, ink or cleanup material, which contains compounds that are subject to the VOC provisions of this rule, is exempt from the provisions of Rule 219, ORGANIC SOLVENTS.

103.5 Exemption, Residential, Non-Commercial Operations: Residential, non-commercial flatwood coating operations are exempt from all provisions of this rule.

103.6 Partial Exemption, Low Volume: Businesses using less than 55 gallons per year of coatings, inks and VOC-containing cleanup solvents or strippers, (singularly or in combination) are exempt from the provisions of this rule, except for Recordkeeping, Section 502.

103.7 Exemption, Aerosol Spray Coatings for Touch-Up: Aerosol spray coatings for touch up and repair are exempt from all provisions of this rule.

103.8 Exemption, Tints: Tints applied to stains in quantities not to exceed one pint of tint in any operating day, are exempt from all provisions of this rule, except for recordkeeping. Records shall be maintained and reported as specified in Section 503.

103.9 Exemption, Other: The application of coatings by template in order to add designs, letters, or numbers to wood products, is exempt from all provisions of this rule.

200 DEFINITIONS

201 ADHESIVE: Any substance that is applied for the primary purpose of bonding surfaces together.

202 CAPTURE EFFICIENCY: Expressed in percent, capture efficiency is the ratio of the weight of the VOC in the effluent stream entering a control device to the weight of the VOC emitted from flatwood paneling coating operations, both measured simultaneously in accordance with subsection 506.2, and can be calculated by the following equation:

$$\text{Capture Efficiency} = \frac{W_c}{W_e} \times 100$$

Where: W_c = Weight of VOC entering the control device
W_e = Weight of VOC discharged from the coating operations

203 COATING: Any coating applied on any flatwood paneling or wood flat stock including but not limited to water repellant preservative, semitransparent stains, opaque stains, filler, or clear top coat.

204 CONTROL DEVICE EFFICIENCY: Expressed in percent, control device efficiency is the ratio of the weight of the VOC removed by the control device from the effluent stream entering the control device to the weight of VOC in the effluent stream entering the control device, both measured simultaneously in accordance with subsection 506.3, and can be calculated by the following equation:

$$\text{Control Device Efficiency} = \frac{(W_c - W_a)}{W_c} \times 100$$

Where: W_c = Weight of VOC entering the control device
W_a = Weight of VOC discharged from the control device

205 DIP COATER: To dip an object into a vat of coating material and drain off any excess coating.

206 ELECTROSTATIC SPRAY APPLICATION: Any method of spray application of coatings where an electrostatic attraction is created between the part to be coated and the paint particles.

207 EMISSION CONTROL SYSTEM: A system for reducing emissions of VOC from flatwood paneling coating operations. It consists of (1) a capture device or system which collects all drying oven exhaust and fugitive emissions from the line and transports them to the control device, and (2) a VOC control device which destroys the VOC or otherwise limits the emission of VOC to the atmosphere. The individual efficiencies are calculated in accordance with Sections 202 and 204.

The overall efficiency of the emission control system is calculated by the following equation:

$$\text{Overall Efficiency} = \frac{\text{Capture Efficiency} \times \text{Control Device Efficiency}}{100}$$

208 EXEMPT COMPOUNDS: For the purposes of this rule, exempt compounds are as defined in Rule 102, DEFINITIONS.

209 FLATWOOD PANELING: Printed interior panels made of hardwood plywood and thin particle board, natural finish hardwood plywood, hardwood paneling, baseboard, wood flat stock, veneers, doors, door skins, wood flat product skins, tileboard and wallboard.

210 FLOW COATER: To coat an object by flowing a stream of coating over an object and draining off any excess coating.

211 HAND APPLICATION METHODS: The application of coatings, sealants, or adhesives by manually held, non-mechanically-operated equipment. Such equipment includes paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags, and sponges.

212 HARDBOARD: A panel manufactured primarily from inter-felted ligno-cellulosic fibers which are consolidated under heat and pressure in a hot press.

213 HARDWOOD PLYWOOD: Plywood whose surface layer is a veneer of hardwood.

214 HIGH VOLUME, LOW PRESSURE (HVLP) SPRAY EQUIPMENT: Spray equipment used to apply coatings by means of a gun which is designed to be operated and which is operated between 0.1 and 10 pounds per square inch, gauge, (psig) air atomized pressure, measured dynamically at the center of the air cap and at the air horns.

215 INK: Any fluid or viscous composition used in printing impressing or transferring an image onto a panel.

216 LOW SOLIDS COATING: A coating or ink containing 120 grams or less of solids per liter (1.0 pounds or less of solids per gallon) of coating material.

217 NATURAL FINISH HARDWOOD PLYWOOD PANELS: Panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

218 NON-HEAT-SET INK: An ink which dries by oxidation and absorption into the substrate without the use of heat from dryers or ovens.

219 PANEL: A flat piece of wood or wood product usually rectangular and used inside homes and mobile homes for wall decorations.

220 PRINTED INTERIOR PANELS: Panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

221 ROLL COATER: A series of mechanical rollers that forms a thin coating film on the surface of roller, which is applied to a substrate by moving the substrate underneath the roller.

222 SEMI-TRANSPARENT STAIN: A stain containing dyes and/or semi-transparent pigments which are formulated to enhance wood grain and change surface color, but not to conceal surface grain, and include sap stain and non-grain raising stains. Semi-transparent stains with greater than one (1) pound of solids per gallon of coating shall be considered opaque stains.

223 SIMULATED WOOD MATERIALS: Materials, such as plastic, glass, metal, etc., that are made to give a wood-like appearance, or are processed like a wood product.

224 STAIN: A semitransparent or opaque coating labeled and formulated to change the color of a surface, but not conceal the grain pattern or texture.

225 THIN PARTICLEBOARD: A manufactured board 1/4 inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.

226 TILEBOARD: Paneling that has a colored waterproof surface coating.

227 TINT: A colorant added in small quantities to a stain to achieve a particular color for a finished product.

228 VOC CONTENT:

228.1 Regulatory VOC Content: The weight of VOC per combined volume of VOC and coating solids, measured in accordance with subsection 506.1, and calculated by the following equation:

$$G_1 = \frac{W_v - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where: G_1 = Weight of VOC in grams per liter of coating, less water and exempt compounds
W_v = Weight of volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of coating material, in liters
V_w = Volume of water, in liters
V_{ec} = Volume of exempt compounds, in liters

(To convert G_1 to pounds per gallon, multiply by 0.008345)

228.2 Actual VOC Content: The weight of VOC in grams, per liter of total material, measured in accordance with subsection 506.1, and calculated by the following equation:

$$G_L = \frac{W_v - W_w - W_{ec}}{V_m}$$

Where: G_L = Weight of VOC per liter of low solids coating material, less water and exempt compounds
W_v = Weight of volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of coating material, in liters

(To convert G_L to pounds per gallon, multiply by 0.008345)

229 VOLATILE ORGANIC COMPOUND (VOC): Any chemical compound containing at least one atom of carbon, except for the Exempt Compounds listed in Rule 102, DEFINITIONS.

230 WOOD FLAT STOCK: Interior panels containing wood including but not limited to redwood stocks, plywood panels, particle boards, composition hardboards, and any other panels containing solid wood or wood product.

300 STANDARDS

301 GENERAL REQUIREMENTS: Any person applying coatings or inks to flatwood paneling products subject to this rule shall comply with either of the following requirements listed in subsections 301.1 or 301.2:

301.1 Coating Materials and Inks: Only coatings and inks that comply with the following VOC Limits shall be used:

Coating Materials and Inks	Maximum Allowable VOC content, as applied
All coatings and inks except for low solids coatings and inks (below).	250 grams or less of VOC per liter (2.1 pounds VOC per gallon) less water and exempt compounds, as calculated in accordance with Section 228.1 (Regulatory VOC Content)
Low solids coatings and inks	120 grams or less of VOC per liter (1.0 pounds VOC per gallon) of material as calculated in accordance with Section 228.2 (Actual VOC Content)

301.2 Install and operate on the line(s), an emission control system as defined in Section 207, that operates at an overall efficiency of at least 95%, as calculated in accordance with Section 207, and that has been approved pursuant to Section 401.

302 APPLICATION EQUIPMENT REQUIREMENTS: A person or facility shall not apply coatings to wood products subject to the provisions of this rule unless the coating is applied with properly operating equipment, in accordance with proper operating procedures, and by the use of one of the following methods:

302.1 Electrostatic application;

302.2 High volume, low pressure (HVLP) spray;

302.3 Hand roller;

302.4 Flow coat;

302.5 Roll coater;

302.6 Dip coat;

302.7 Paint brush;

302.8 Detailing or touch-up guns.

303 CLEANUP AND STORAGE PROCEDURES: Any person or facility using VOC-containing solvents for cleanup or related uses shall observe the following procedures:

303.1 All solvent, including waste solvent and waste solvent residues, shall be stored in closed, non-absorbant, non-leaking, containers at all times. Each container shall have a label indicating the name of the solvent or material it contains.

303.2 If recovery of waste solvent by distillation is performed, solvent residues shall not contain more than 10 percent solvent by volume after distillation.

303.3 Solvents shall not be used for the cleanup of spray equipment including paint lines unless an enclosed system or other system that has been approved in writing for use by the Air Pollution Control Officer is used for cleanup. The system must enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures. Equipment used shall minimize the evaporation of organic

compounds to the atmosphere. Spray equipment may be cleaned without the use of an enclosed system if cleaning solutions are used that do not contain VOCs.

303.4 Spillage of VOC-containing materials shall be minimized. Spills shall be cleaned up immediately.

303.5 VOC-containing materials shall be stored and disposed of in closed containers. Storage and disposal containers must be kept closed, except when depositing or removing the materials. Disposal shall be conducted in a manner that the VOC are not emitted to the atmosphere.

303.6 VOC-containing materials shall be conveyed in closed containers or pipes.

303.7 Mixing vessels for VOC-containing materials must be closed except when in use.

303.8 VOC emissions shall be minimized during cleaning of storage, mixing, and conveying equipment.

400 ADMINISTRATIVE REQUIREMENTS

401 OPERATION AND MAINTENANCE PLAN: A person using an existing emission control system as a means of compliance with this rule, pursuant to Section 301.2, shall submit an Operation and Maintenance Plan for the emission control system to the Air Pollution Control Officer for approval. A person proposing to install a new emission control system as a means of compliance with this rule, shall submit in addition to an Operation and Maintenance Plan, an application for an Authority to Construct, pursuant to Rule 501, GENERAL PERMIT REQUIREMENTS. The Plan shall specify operating and maintenance procedures which will demonstrate continuous operation of the emission control system during periods of emissions-producing operations. The Plan shall also specify which records shall be kept to document these operating and maintenance procedures. These records shall comply with the requirements of Section 500. The Plan shall be implemented upon approval of the Air Pollution Control Officer.

500 MONITORING AND RECORDS

501 COATING LIST: Any person subject to Section 301 shall maintain at the facility, a current list of coatings and inks in use, which includes all of the data necessary to evaluate compliance with the standards of this rule.

502 RECORDKEEPING: Any person subject to this Rule shall maintain records on a monthly basis that provide the following information as applicable:

502.1 Coating types and mix ratios of components used;

502.2 Quantity of each coating applied;

502.3 Description of substrate(s) coated;

502.4 Oven or cure temperature, if applicable;

502.5 Type and amount of solvent used for cleanup and surface preparation.

503 RECORDKEEPING FOR STAINS AND TINTS: In addition to the requirements in Section 502, any person subject to this rule shall maintain records on a monthly basis that provide the following information as applicable:

503.1 Name, description, container size and actual VOC content of any tints used to color stains for factory coating of wood products.

503.2 For persons using tints to color stains, usage is limited to one pint of tint in any operating day. Records of any tint use shall be maintained on a monthly basis and submitted to the Placer Air Pollution Control District when requested.

504 EMISSION CONTROL SYSTEM RECORDS: A person using an emission control system as a means of compliance with this rule pursuant to Section 301.2, shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control system during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with the requirements of Section 301.2.

505 RETENTION OF RECORDS: All records maintained pursuant to this rule shall be retained for at least three years from date of entry, with the exception of sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM. These sources shall retain records at least five years. Records shall be made available for inspection by the Air Pollution Control Officer upon request.

506 TEST METHODS:

506.1 Determination of VOC Content: VOC content, solids content and water content of flatwood paneling coatings shall be determined in accordance with United States Environmental Protection Agency (U.S. EPA) Method 24 or U.S. EPA Method 24A and Section 228.

506.2 Determination of Capture Efficiency: Efficiency of the capture system, calculated in accordance with Section 202, shall be based upon test measurements made in accordance with U.S. EPA "Guidelines for Determining Capture Efficiency, January 9, 1995". Individual capture efficiency test runs subject to the U.S. EPA technical guidelines shall be determined by:

506.2.1 40 CFR 51, Appendix M, Methods 204-204F; or

506.2.2 The South Coast Air Quality Management District "Protocol for Determination of Volatile Organic Compound (VOC) Capture Efficiency"; or

506.2.3 Any other method approved by U.S. EPA, the California Air Resources Board, and the Air Pollution Control Officer.

506.3 Determination of Control Device Efficiency: Efficiency of the emissions control device, calculated in accordance with Section 204, shall be based upon test measurements made in accordance with (1) U.S. EPA Method 25 or 25A, for VOC concentration, and (2) U.S. EPA Method 2 or 2C for flow rates, as applicable. U.S. EPA Method 18 or CARB Method 422 "Determination of Volatile Organic Compounds in Emissions from Stationary Sources" may be used to determine emissions of exempt compounds.

506.4 Multiple Test Methods: When more than one test method or a set of test methods is specified for any testing, 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.

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RULE 239 GRAPHIC ARTS OPERATIONS

ADOPTED 11-03-94
AMENDED 06-08-95
AMENDED 02-13-97

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 CAPTURE EFFICIENCY
202 COATING
203 CONTROL DEVICE
204 CONTROL DEVICE EFFICIENCY
205 CONVERTING OPERATION
206 DOCTOR BLADE
207 DRYING OVEN
208 EXEMPT COMPOUNDS
209 FLEXIBLE PACKAGING INDUSTRY
210 FLEXOGRAPHIC PRINTING
211 FOUNTAIN SOLUTION
212 FUGITIVE EMISSIONS
213 GRAPHIC ARTS OPERATIONS
214 GRAVURE PRINTING
215 INTAGLIO PRINTING
216 LAMINATING OPERATIONS
217 LETTERPRESS PRINTING
218 LINE
219 LITHOGRAPHIC PRINTING
220 NONHEATSET INK
221 NONPOROUS SUBSTRATE
222 OFFSET PRINTING
223 PACKAGING GRAVURE PRINTING
224 POROUS SUBSTRATE
225 PRODUCTION UNIT
226 PUBLICATION GRAVURE PRINTING
227 SCREEN PRINTING
228 SPECIALTY GRAVURE PRINTING
229 STANDARD INDUSTRIAL CLASSIFICATION (SIC)
230 VOLATILE ORGANIC COMPOUNDS (VOC)
231 VOC CONTENT OF FOUNTAIN SOLUTIONS, MAKEUP SOLVENTS, SURFACE PREPARATION SOLVENTS AND CLEANUP SOLVENTS
232 VOC CONTENT OF INKS, COATINGS AND ADHESIVES
233 WEB
234 WEB-FEED

300 STANDARDS

301 GENERAL REQUIREMENTS
302 LOW-VOC INK, COATING AND ADHESIVE REQUIREMENT
303 LOW-VOC FOUNTAIN SOLUTION AND MAKEUP SOLVENT REQUIREMENT
304 APPROVED EMISSION CONTROL SYSTEM
305 SURFACE PREPARATION AND CLEANUP REQUIREMENTS

400 ADMINISTRATIVE REQUIREMENTS

401 OPERATION AND MAINTENANCE PLAN
402 COMPLIANCE STATEMENT REQUIREMENT

500 MONITORING AND RECORDS

501 USAGE RECORDS
502 TEST METHODS

100 GENERAL

101 **PURPOSE:** To limit the emissions of volatile organic compounds from graphic arts operations.

102 **APPLICABILITY:**

102.1 GEOGRAPHIC: The provisions of this rule apply only to facilities located in the Sacramento Valley Air Basin portion of Placer County, as defined by California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 1.5, Article 1, Section 60106.

102.2 OPERATIONS: Except for the operations listed in Section 103, EXEMPTIONS, the provisions of this rule apply to all GRAPHIC ARTS OPERATIONS as defined in Section 213 and to any person who manufactures, sells, offers to sell, or supplies any graphic arts materials listed in Sections 301, 302, 303 and 305, STANDARDS. (GRAPHIC ARTS OPERATIONS are typically categorized under the Standard Industrial Classification (SIC) Codes of 27xx)

103 **EXEMPTIONS:**

103.1 EXEMPTION, PARTIAL, LOW EMISSION LIMIT: Any graphic arts facility which emits less than 660 pounds of volatile organic compounds per calendar month from all graphic arts operations, including surface preparation and cleanup solvents, is exempt from all provisions of this rule with the exception of Section 501, USAGE RECORDS. Records required by Section 501, shall be maintained by these facilities to demonstrate their exemption status.

103.2 EXEMPTION, PARTIAL, RESEARCH AND TEST: Graphic arts operations used exclusively for research, laboratory analysis or determination of product quality and commercial acceptance, such as proof presses or other proofing systems, provided that total VOC emissions from all such equipment do not exceed 300 pounds per calendar month per facility, are exempt from all provisions of this rule, with the exception of Section 501, USAGE RECORDS. Records required by Section 501, shall be maintained by these facilities to demonstrate their exemption status.

103.3 EXEMPTION, SCREEN PRINTING: Screen printing operations are exempt from all provisions of this rule.

103.4 EXEMPTION FROM RULE 219: The provisions of Rule 219, Organic Solvents, shall not apply to Graphic Arts Operations as defined in Rule 239, Section 213.

200 DEFINITIONS

201 **CAPTURE EFFICIENCY:** Expressed in percent, capture efficiency is the ratio of the weight of the VOC in the effluent stream entering a control device to the weight of the VOC emitted from graphic arts operations, both measured simultaneously, and can be calculated by the following equation:

$$\text{Capture Efficiency} = \frac{W_c}{W_e} x\,100$$

Where: W_c = Weight of VOC entering the control device

W_e = Weight of VOC emitted from the operation

202 **COATING:** The application of a uniform layer of material across the entire width of a substrate. Those machines which have both coating and printing units are considered to be performing a graphic arts operation.

203 **CONTROL DEVICE:** Equipment such as an incinerator or adsorber used to prevent air pollutants from reaching the ambient air.

204 **CONTROL DEVICE EFFICIENCY:** Expressed in percent, control device efficiency is the ratio of the weight of the VOC removed by the control device from the effluent stream entering the control device to the weight of VOC in the effluent stream entering the control device, both measured simultaneously. Control device efficiency is calculated by the following equation:

$$\text{Control Device Efficiency} = \frac{(W_c - W_a)}{W_c} x\,100$$

Where: W_c = Weight of VOC entering the control device

W_a = Weight of VOC discharged from the control device

205 **CONVERTING OPERATION:** Coating, waxing, laminating, extrusion coating and printing, for fabrication of base materials. The base materials are then used to produce wraps, bags, and other preformed packages.

206 **DOCTOR BLADE:** A steel blade used to scrape excess ink from a printing plate.

207 **DRYING OVEN:** An oven used to hasten the process of drying printed or coated material.

208 **EXEMPT COMPOUNDS:** For the purposes of this rule, Exempt Compounds are as defined in Rule 102, Definitions.

209 **FLEXIBLE PACKAGING INDUSTRY:** Establishments that convert materials consisting of light gauge papers, plastic films, cellulosic films such as cellophane, thin gauge metal sheets such as aluminum foil or steel foil, and combinations thereof into a variety of product packages.

210 **FLEXOGRAPHIC PRINTING:** A printing operation in which words, designs, or pictures are applied to a substrate by means of a roll printing technique in which a raised pattern is applied to an image carrier made of rubber or other elastomeric materials mounted on a steel matting cylinder. The image is then printed directly from the raised pattern to the substrate.

211 **FOUNTAIN SOLUTION:** The solution applied to the image plate to maintain the hydrophilic properties of the nonimage areas and to keep the nonimage area free from ink.

212 **FUGITIVE EMISSIONS:** Emissions of VOC from any portion of Graphic Arts Operations as defined in Section 213, other than the drying oven.

213 **GRAPHIC ARTS OPERATIONS:** Publication gravure, packaging gravure, specialty gravure, flexographic printing operations, lithographic printing operations, letterpress printing operations, or any coating or laminating operation that manufactures flexible packaging materials. Coating operations which are performed by a machine having only coating units and no printing units are not graphic arts operations.

214 **GRAVURE PRINTING:** An intaglio printing operation in which the ink is transferred from minute etched wells which comprise the image on a plate to the substrate which is supported by an impression roller, with excess ink removed from the plate by a doctor blade.

215 **INTAGLIO PRINTING:** A printing operation done from a plate in which the image is etched or engraved into the surface.

216 **LAMINATING OPERATIONS:** A process of composing two or more layers of material to form a single multiple-layer sheet by using adhesive as the bonding agent.

217 **LETTERPRESS PRINTING:** A printing operation in which the image area is raised relative to the nonimage area and the ink is transferred to the paper directly from the image surface.

218 **LINE:** The minimum equipment which is required for the application and/or curing of inks and/or coatings on a substrate, including the ink and/or coating applicators and heating oven(s) and associated ink and coating mixing equipment.

219 **LITHOGRAPHIC PRINTING:** A printing operation in which the image and nonimage areas exist in the same plane. The nonimage area is treated chemically so that only the image areas will be printed onto the substrate.

220 **NONHEATSET INK:** An ink which dries primarily by oxidation and absorption into the substrate without the use of heat from dryers or ovens, used primarily in lithographic and letterpress printing.

221 **NONPOROUS SUBSTRATE:** Any substrate other than paper or paperboard, including but not limited to foil, polyethylene, polypropylene, cellophane, metalized polyester, nylon and polyethylene terephthalate (mylar), but not including wood, metal, or ceramic materials.

222 **OFFSET PRINTING:** A lithographic printing operation in which the image area is transferred, or offset, to another surface, and then printed onto the substrate.

223 **PACKAGING GRAVURE PRINTING:** A gravure printing operation on paper, paperboard, foil, film or other substrates which are to be used to produce containers or packages.

224 **POROUS SUBSTRATE:** Paper or paperboard.

225 **PRODUCTION UNIT:** A ream of paper, consisting of 500 sheets of paper.

226 **PUBLICATION GRAVURE PRINTING:** A gravure printing operation on paper which is subsequently formed into books, magazines, catalogs, brochures, directories, newspaper supplements or other publication material.

227 **SCREEN PRINTING:** A printing operation in which the printing ink passes through a refined form of stencil to a web or fabric. The stencil openings determine the form and dimension of the imprint.

228 **SPECIALTY GRAVURE PRINTING:** A gravure printing operation for production of wall and floor covering, decorated household paper products such as towels and tissues, cigarette filter tips, vinyl upholstery, gift wrap, and woodgrains.

229 **STANDARD INDUSTRIAL CLASSIFICATION (SIC):** Number codes created by the U. S. Government Office of Management and Budget (OMB) to classify establishments by type of economic activity.

230 **VOLATILE ORGANIC COMPOUNDS (VOC):** Any chemical compound containing at least one atom of carbon except for the Exempt Compounds listed in Rule 102, Definitions.

231 **VOC CONTENT OF FOUNTAIN SOLUTIONS, MAKEUP SOLVENTS, SURFACE PREPARATION SOLVENTS AND CLEANUP SOLVENTS:** The weight of VOC per volume of material. It shall be determined using the appropriate test method pursuant to Section 502 and calculated by the following equation:

$$\textit{Grams of VOC per Liter of Material} = \frac{W_m - W_w - W_{ec}}{V_m}$$

Where:

W_m = *Weight of all volatile compounds in grams*

W_w = *Weight of water in grams*

W_{ec} = *Weight of exempt compounds in grams*

V_m = *Volume of material in liters*

232 **VOC CONTENT OF INKS, COATINGS AND ADHESIVES:** The weight of VOC per liter of material, less water and exempt compounds. It shall be determined using the appropriate test method pursuant to Section 502, and calculated by the following equation:

$$\textit{Grams per Liter less Water and Exempt Compounds} = \frac{W_m - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where:

W_s = *Weight of volatile compounds in grams.*
W_w = *Weight of water in grams.*
W_{es} = *Weight of exempt compounds in grams.*
V_m = *Volume of material in liters.*
V_w = *Volume of water in liters.*
V_{es} = *Volume of exempt compounds (as defined in Rule 102, Definitions), in liters.*

233 **WEB:** A continuous sheet of substrate that is printed on web-fed printing presses.

234 **WEB-FEED:** An automatic system on a printing press which supplies a web substrate to the printing unit.

300 **STANDARDS**

301 **GENERAL REQUIREMENTS:** Any person operating equipment for GRAPHIC ARTS OPERATIONS as defined in Section 213, and any related coating, laminating or converting operations on porous or nonporous substrates, shall comply with one of the following requirements:

301.1 Use only low-VOC (Volatile Organic Compounds) inks, coatings, adhesives, and fountain solutions as specified in Section 302, 303 and 305 of this rule, **or**

301.2 Install and operate on the line, an approved emission control system pursuant to Section 304, with a control device efficiency of at least 95 percent on a mass basis and an emission collection efficiency of at least 70% on a mass basis.

302 **LOW-VOC INK, COATING AND ADHESIVE REQUIREMENT:** Any person choosing to comply with this rule through the use of low-VOC inks, coatings, adhesives, or fountain solutions shall comply with the following requirement:

302.1 Use only inks, coatings, or adhesives, which contain, on an as-applied basis, 300 grams or less of VOC per liter (2.5 pounds per gallon) of material, less water and exempt compounds, calculated as defined in Section 232.

303 **LOW-VOC FOUNTAIN SOLUTION AND MAKEUP SOLVENT REQUIREMENT:** Any person choosing to comply with this rule through the use of low-VOC fountain solutions shall comply with the following requirement:

303.1 Use only fountain solutions and makeup solvents which contain, on an as-applied basis, 116 grams or less of VOC per liter (0.97 pounds per gallon) of material, calculated as defined in Section 231.

304 **APPROVED EMISSION CONTROL SYSTEM:** A system for reducing emissions of volatile organic compounds, approved by the Air Pollution Control Officer, and which satisfies both of the following conditions:

303.1 It includes a collection system which collects all drying oven exhaust and fugitive emissions from the line and transports them to the control device, and

303.2 It includes a control device designed and operated to achieve the efficiencies specified in Section 301.2, at all times during normal operation of the line being controlled.

305 **SURFACE PREPARATION AND CLEANUP REQUIREMENTS:** Any person using surface preparation and cleanup solvents for graphic arts operations shall comply with the following requirements:

305.1 Use only surface preparation solvents and cleanup solvents which contain, on an as-applied basis, 116 grams or less of VOC per liter (0.97 pounds per gallon) of material, calculated as defined in Section 231

305.2 Place all VOC-contaminated cloth, paper or other materials used for surface preparation and cleanup only in closed containers for storage or disposal.

305.3 Place and store all fresh or spent VOC-containing materials only in closed containers.

400 ADMINISTRATIVE REQUIREMENTS

401 **OPERATION AND MAINTENANCE PLAN:** Any person using an emission control system pursuant to Section 304, as a means of complying with this rule, as provided in Section 301, must submit, with the application for Authority to Construct, pursuant to Rule 501, General Permit Requirements, an Operation and Maintenance Plan for the emission control system to the Air Pollution Control Officer for approval. The Plan shall specify operating and maintenance procedures which will demonstrate continuous operation of the emission control system during periods of emissions-producing operations. The Plan shall also specify which records must be kept to document these operating and maintenance procedures. These records shall comply with the requirements of Sections 501.4, and 501.5. The Plan shall be implemented upon approval of the Air Pollution Control Officer.

402 **COMPLIANCE STATEMENT REQUIREMENT:** The manufacturer or distributor of all inks, coatings, adhesives, fountain solutions, makeup solvents, and surface preparation and cleanup solvents which are sold for use in graphic arts operations within the District shall include on product data sheets a designation of both the as-supplied VOC content (prior to any recommended dilution) and the as-applied VOC content (based on any recommended dilution) of each material. The VOC content of inks, coatings, and adhesives shall be given pursuant to Section 302.1. The VOC content of fountain solutions and makeup solvents, shall be given pursuant to Section 303.1. The VOC content of surface preparation and cleanup solvents shall be given pursuant to Section 305.1.

500 MONITORING AND RECORDS

501 **USAGE RECORDS:** Any person subject to this rule, including owners or operators of facilities claiming exemption under Sections 102.1, and 102.2, shall comply with the following requirements:

501.1 The person shall maintain a current list of inks, coatings, adhesives, fountain solutions, makeup solvents (reducers, thinners), and surface preparation and cleanup solvents which states the VOC content of each, on an as-applied (press-ready) basis. The VOC content of inks, coatings, and adhesives shall be given pursuant to Section 302.1. The VOC content of fountain solutions and makeup solvents, shall be given pursuant to Section 303.1. The VOC content of surface preparation and cleanup solvents shall be given pursuant to Section 305.1.

501.2 For persons using graphic arts materials which comply with the VOC limits specified in Section 302, 303 and 305, records shall be maintained on a monthly basis, showing the type and volume of inks, coatings, adhesives, fountain solutions, and makeup solvents used, and solvents or other materials used for surface preparation, cleanup, or ink, coating, or adhesive removal.

501.3 For persons using graphic arts materials exceeding the VOC limits specified in Section 302, 303 and 305, and using a control system pursuant to Section 304, daily records shall be maintained of the type and volume of graphic arts materials used.

501.4 Operation and maintenance records as required by the Operation and Maintenance Plan in Section 401, shall be maintained by the source on a daily basis.

501.5 Records specified in Section 501 shall be retained on-site for two years and made available for review by the Air Pollution Control Officer upon request.

502 **TEST METHODS**

502.1 ANALYSIS OF SAMPLES: Measurement of the volatile content in adhesives, coatings, fountain solutions, makeup solvents, surface preparation and cleanup solvents, and all inks (except as provided for in Section 502.2) shall be made in accordance with EPA Method 24, or EPA Method 24A for publication rotogravure inks.

502.2 ANALYSIS OF SAMPLES, NONHEATSET POLYMERIZING LITHOGRAPHIC OR LETTERPRESS INKS: Measurement of the volatile content shall be made in accordance with EPA Method 24. All components of the sample must be weighed in the proper proportion into the analysis container and mixed together, with the mixture then being allowed to stand for at least one hour, but no more than 24 hours, prior to being oven-dried at 110 degrees C for 1 hour.

502.3 DETERMINATION OF EXEMPT COMPOUNDS: Exempt compounds, pursuant to Sections 208 and 230, shall be determined in accordance with ASTM Method D 4457-85 or ARB Method 432. If any of the perfluorocarbons are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds.

502.4 DETERMINATION OF CONTROL DEVICE EFFICIENCY: Control efficiency of control equipment shall be determined in accordance with EPA Method 25.

502.5 DETERMINATION OF CAPTURE SYSTEM EFFICIENCY: Collection efficiency of the emission control system shall be determined in accordance with the U.S. EPA Technical Guidelines Document, "Guidelines for Determining Capture Efficiency", January 19, 1995.

RULE 240 SURFACE PREPARATION AND CLEANUP

Adopted 06-08-95
(Amended 10-09-97, 12-11-03)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 SEVERABILITY
104 EXEMPTIONS

200 DEFINITIONS

201 ADHESIVE
202 AEROSOL CLEANER
203 APPLICATION EQUIPMENT
204 APPURTENANCE
205 ARCHITECTURAL COATING
206 ARCHITECTURAL COATINGS APPLICATION EQUIPMENT CLEANING
207 CLOSED CONTAINER
208 COATING
209 DEGREASER
210 ELECTRICAL APPARATUS COMPONENTS
211 ELECTRONIC COMPONENTS
212 ENCLOSED GUN CLEANER
213 EXEMPT COMPOUNDS
214 HIGH PRECISION OPTICS
215 HOT-LINE TOOL
216 INK
217 JANITORIAL CLEANING
218 KEY SYSTEM OPERATING PARAMETER
219 LEAK
220 MAINTENANCE CLEANING
221 MANUFACTURING PROCESS
222 MEDICAL DEVICE
223 NON-ABSORBENT CONTAINERS
224 NON-ATOMIZED SOLVENT FLOW
225 NON-COMPLIANT SOLVENT
226 NON-LEAKING CONTAINER
227 PERSON
228 POLYESTER RESIN
229 PREFABRICATED ARCHITECTURAL COMPONENTS
230 PRINTING
231 PRODUCT CLEANING
232 RADIATION-EFFECT COATING
233 REPAIR CLEANING
234 REPAIR PROCESS
235 SCIENTIFIC INSTRUMENT
236 SOLVENT
237 SOLVENT CLEANING
238 SOLVENT CONTAINER
239 SOLVENT FLUSHING
240 STATIONARY SOURCE
241 STERILIZATION INDICATING INK
242 STRIPPING

243 SUBSTRATE
244 SURFACE PREPARATION
245 UNCURED COATINGS AND UNCURED INKS
246 VOLATILE ORGANIC COMPOUND (VOC)
247 VOC COMPOSITE PARTIAL PRESSURE
248 VOLATILE ORGANIC COMPOUND (VOC) AS APPLIED
249 VOLATILE ORGANIC COMPOUND (VOC) AS SUPPLIED
250 WIPE CLEANING

300 STANDARDS

301 SOLVENT REQUIREMENTS
302 CLEANING DEVICES AND METHODS
303 EMISSIONS CONTROL SYSTEM
304 STORAGE AND DISPOSAL

400 ADMINISTRATIVE

401 CALCULATION FOR DETERMINING VOC CONTENT OF CLEANING SOLVENTS INCLUDING WATER AND EXEMPT COMPOUNDS
402 CALCULATION FOR DETERMINING PERCENT CONTROL EFFICIENCY AND VOC MASS EMISSION RATE
403 CALCULATION FOR DETERMINING VOC COMPOSITE VAPOR PRESSURE
404 OPERATION AND MAINTENANCE PLAN
405 PRODUCT INFORMATION REQUIREMENTS FOR SELLERS
406 VIOLATIONS

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 RETENTION OF RECORDS
503 TEST METHODS

100 GENERAL

101 PURPOSE: The purpose of this rule is to reduce emissions of volatile organic compounds (VOC) from solvents used for surface preparation, maintenance and cleanup operations, and from the storage and disposal of all VOC-containing materials used in these operations.

102 APPLICABILITY:

102.1 Geographic: The provisions of this rule apply to all of Placer County.

102.2 Operations: This rule applies to all persons who engage in the production, repair, maintenance, or servicing of parts, products, tools, machinery, or equipment, and storage and disposal of VOC-containing materials used in solvent cleaning operations.

103 SEVERABILITY: If a court of competent jurisdiction issues an order that any provision of this rule is invalid, it is the intent of the Board of Directors of the District that other provisions of this rule remain in full force and effect, to the extent allowed by law.

104 EXEMPTIONS:

104.1 Low Volume: Usage of solvents for cleaning which does not exceed 38 liters (10 gallons) per calendar year, is exempt from the provisions of this rule except for recordkeeping requirements in Section 501.3.3.1.

104.2 The provisions of this rule do not apply to cleaning operations specifically subject to requirements under the following rules:

104.2.1 Rule 216, Organic Solvent Cleaning and Degreasing Operations;

104.2.2 Rule 223, Metal Can Coating;

104.2.3 Rule 227, Petroleum Dry Cleaning Operations;

104.2.4 Rule 234, Automotive Refinishing Operations;

104.2.5 Rule 235, Adhesives;

104.2.6 Rule 236, Wood Products Coating Operations;

104.2.7 Rule 239, Graphic Arts Operations, and

104.2.8 Rule 243, Polyester Resin Operations.

104.3 The provisions of this rule shall not apply to the following:

104.3.1 Cleaning with solvents that contain 50 grams per liter or less VOCs as applied including water and exempt compounds;

104.3.2 Cleaning of solar cells, laser hardware, scientific instruments, and high-precision optics;

104.3.3 Cleaning of cotton swabs to remove cottonseed oil before cleaning of high-precision optics;

104.3.4 Cleaning of paper-based gaskets and clutch assemblies where rubber is bonded to metal by means of an adhesive;

104.3.5 Cleaning of application equipment used to apply coatings on satellites and radiation effect coatings;

104.3.6 Cleaning of electrostatic coating application equipment; and

104.3.7 Janitorial cleaning, including graffiti removal.

104.4 The provisions of this rule, except for the recordkeeping requirements in Sections 501.1, 501.3.1, and 502, shall not apply to the following:

104.4.1 Cleaning of sterilization ink indicating equipment provided that the solvent usage is less than 1.5 gallons per day with solvents that contain more than 50 grams/liter VOC as applied including water and exempt compounds.

104.4.2 Cleaning with aerosol, provided that 160 fluid ounces or less of aerosol product are used per day, per stationary source with solvents that contain more than 50 grams/liter VOC as applied including water and exempt compounds.

104.5 The provisions of Section 302 shall not apply to the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems.

200 DEFINITIONS

201 ADHESIVE: Any material that is used to bond one surface to another surface by attachment.

202 AEROSOL CLEANER: A material used as a surface preparation solvent, a cleanup solvent, or as a stripper and consisting of liquid and/or gaseous solvent and propellants packaged in a hand-held, pressurized, non-refillable container. The container expels pressurized aerosol materials when a valve on the container is depressed.

203 APPLICATION EQUIPMENT: A device used to apply adhesive, coating, ink, or polyester resin materials.

204 APPURTENANCE: Any accessory to a stationary structure, whether installed or detached at the proximate site of installation, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, elevators, doors, partitions, stairways, fixed ladders, catwalks, fire escapes, fences, rain-gutters and down spouts, window screens, lamp-posts, heating and air conditioning equipment, pipes and piping systems, other fixed mechanical equipment, large fixed stationary tools, and concrete forms.

205 ARCHITECTURAL COATING: Any coating applied to stationary structures and their appurtenances, to portable buildings, to pavements or to curbs.

206 ARCHITECTURAL COATINGS APPLICATION EQUIPMENT CLEANING: The cleaning of architectural coating application equipment such as paint spray guns, brushes, and hoses. For the purpose of this rule, the cleaning of architectural coating application equipment used for coating of prefabricated architectural components is not subject to the requirements of this rule.

207 CLOSED CONTAINER: A container, which has a nonabsorbent cover where the cover meets with the main body of the container without any visible gaps between the cover and the main body of the container.

208 COATING: A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

209 DEGREASER: A tank, tray, drum, or other container in which the objects to be cleaned are exposed to a solvent or solvent vapor in order to remove contaminants.

210 ELECTRICAL APPARATUS COMPONENTS: An internal component such as wires, windings, stators, rotors, magnets, contacts, relays, energizers, and connections in an apparatus that generates or transmits electrical energy including, but not limited to: alternators, generators, transformers, electric motors, cables, and circuit breakers, except for the actual cabinet in which the components are housed. Electrical components of graphic arts application equipment and hot-line tools are also included in this category.

211 ELECTRONIC COMPONENTS: The portion of an assembly, that includes circuit board assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the actual cabinets in which the components are housed.

212 ENCLOSED GUN CLEANER:

212.1 A device used for the cleaning of spray guns, pots and hoses, which has an enclosed solvent container, is not open to the ambient air when in use, and has a mechanism to force the cleanup material through the gun while the cleaner is in operation; or

212.2 A device used for the cleaning of spray guns, pots and hoses, which has an enclosed solvent container, uses non-atomized solvent flow to flush the spray equipment and collects and returns the discharged solvent to the enclosed container.

213 EXEMPT COMPOUNDS: For the purposes of this rule, exempt compounds are determined in accordance with Section 503.2, and are listed in Rule 102, Definitions.

214 HIGH PRECISION OPTICS: An optical element used in an electro-optical device and which is designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes in light energy levels.

215 HOT-LINE TOOL: A specialized tool used primarily on the transmission systems, sub-transmission systems and distribution systems for replacing and repairing circuit components or for other types of work with electrically energized circuits.

216 INK: Any fluid or viscous composition used in printing, impressing, or transferring an image onto a substrate.

217 JANITORIAL CLEANING: The cleaning of building or facility components, such as the floor, ceiling, walls, windows, doors, stairs, bathrooms, etc.

218 KEY SYSTEM OPERATING PARAMETER:

218.1 A variable that is critical to the operation of an emission control system and that ensures:

218.1.1 Operation of the system within the system manufacturer's specifications, and

218.1.2 Compliance with the overall system efficiency standard required by Section 303.

218.2 Variables described in Section 218.1 may include, but are not limited to:

218.2.1 Hours of operation,

218.2.2 Temperature,

218.2.3 Flow rate, and

218.2.4 Pressure.

219 LEAK: A leak is:

219.1 The dripping of liquid volatile organic compounds in excess of three drops per minute; or

219.2 The appearance of a visible mist.

220 MAINTENANCE CLEANING: A solvent cleaning operation or activity performed to keep parts product, tools, machinery, equipment (excluding application equipment, or general work areas), in clean and good operating condition.

221 MANUFACTURING PROCESS: The process of making goods or articles by hand or by machinery.

222 MEDICAL DEVICE: An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article, including any component or accessory, that meets one of the following conditions:

222.1 it is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease; or

222.2 it is intended to affect the structure or any function of the body; or

222.3 it is defined in the National Formulary or the United States Pharmacopoeia, or any supplement to them.

223 NON-ABSORBENT CONTAINERS: Containers made of nonporous material, which do not allow the migration of the liquid solvent through them.

224 NON-ATOMIZED SOLVENT FLOW: The use of a solvent in the form of a liquid stream without atomization to remove uncured inks, uncured adhesives, uncured coatings and contaminants from an article.

225 NON-COMPLIANT SOLVENT: A solvent that:

225.1 exceeds the VOC content limits specified in Section 301.1 and 301.2 and

225.2 is not exempt pursuant to Section 104, and

225.3 is used at a facility that does not use emission control equipment pursuant to Section 303.

226 NON-LEAKING CONTAINER: A container without a leak.

227 PERSON: Any firm, business establishment, association, partnership, corporation or individual, whether acting as principal, agent, employee, or any other capacity including any governmental entity or charitable organization.

228 **POLYESTER RESIN:** Unsaturated polyester resin such as isophthalic, orthophthalic, halogenated, bisphenol-A, vinyl-ester, or furan resin; cross-linking agent; catalyst, gel coat, inhibitor, accelerator, promoter, and any other VOC-containing material comprising a resin made from polyester. Inert filler and cleaning material are excluded from this definition.

229 **PREFABRICATED ARCHITECTURAL COMPONENTS:** Prefabricated metal parts and products, which are to be used as architectural appurtenances or structures and which are coated in a shop environment, not including window frames and door frames.

230 **PRINTING:** Any operation that imparts color, design, alphabet, or numerals on a substrate.

231 **PRODUCT CLEANING:** The cleaning of parts or components in a process of making goods or articles by hand or by machinery from those parts or components.

232 **RADIATION-EFFECT COATING:** A material that prevents radar detection.

233 **REPAIR CLEANING:** A solvent-cleaning operation or activity performed during a repair process.

234 **REPAIR PROCESS:** The process of returning a damaged object or an object not operating properly to good condition.

235 **SCIENTIFIC INSTRUMENT:** An instrument (including the components, assemblies, and subassemblies used in their manufacture and associated accessories and reagents that is used for the detection, measurement, analysis, separation, synthesis, or sequencing of various compounds.

236 **SOLVENT:** A VOC-containing liquid used to perform solvent cleaning operations.

237 **SOLVENT CLEANING:** The removal of loosely held uncured inks, uncured coatings, and contaminants which include, but are not limited to: dirt, soil, and grease from parts, products, tools, machinery, and equipment. Each distinct method of cleaning in a cleaning process, which consists of a series of cleaning methods, shall constitute a separate solvent cleaning operation.

238 **SOLVENT CONTAINER:** That part of a cleaning device that holds the solvent.

239 **SOLVENT FLUSHING:** The use of a solvent to remove uncured inks, uncured coatings, or contaminants from the internal surfaces and passages of the equipment by flushing solvent through the equipment.

240 **STATIONARY SOURCE:** Any building, structure, facility, or emissions unit, which emits or may emit any affected pollutant directly or as a fugitive emission. This includes all pollutant-emitting activities which:

240.1 Belong to the same industrial grouping, and

240.2 Are located on one property or on two or more contiguous properties, and

240.3 Are under the same or common ownership, operation, or control or which are owned or operated by entities, which are under common control.

Pollutant-emitting activities shall be considered as part of the same industrial grouping if they:

240.4 Belong to the same two-digit standard industrial classification code, or

240.5 Are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material.)

241 STERILIZATION INDICATING INK: Ink that changes color to indicate that sterilization has occurred. Such ink is used to monitor the sterilization of medical instruments, autoclave efficiency, and the thermal processing of foods for the prevention of spoilage.

242 STRIPPING: The removal of cured coatings, cured inks, and cured adhesives.

243 SUBSTRATE: The material upon which another material is coated or fabricated.

244 SURFACE PREPARATION: The removal of contaminants such as dust, soil, oil, or grease, before coating or ink applications.

245 UNCURED COATINGS AND UNCURED INKS: Coatings and inks that are not dry to the touch.

246 VOLATILE ORGANIC COMPOUND (VOC): Any chemical compound containing at least one atom of carbon, except for the Exempt Compounds listed in Rule 102, Definitions.

247 VOC COMPOSITE PARTIAL PRESSURE: The sum of the partial vapor pressures of the compounds defined as VOCs, as determined in accordance with Sections 403 and 503.3

248 VOLATILE ORGANIC COMPOUND (VOC) AS APPLIED: A VOC as applied means the VOC content of the cleaning solvent as applied, including any diluters, and calculated pursuant to Section 503.1.

249 VOLATILE ORGANIC COMPOUND (VOC) AS SUPPLIED: A VOC as supplied means the VOC content of the original material as supplied by the manufacturer and calculated pursuant to Section 503.1.

250 WIPE CLEANING: The method of cleaning a surface by physically rubbing it with a material such as a rag, paper, or a cotton swab moistened with a solvent.

300 STANDARDS

301 SOLVENT REQUIREMENTS:

301.1 Until December 11, 2004, a person shall not use a solvent to perform cleaning operations, including the use of cleaning devices or methods, unless it complies with the following applicable requirements:

301.1.1 Manufacturing Processes and Coating, Adhesive, or Ink Applications: The solvent used to clean substrates during the manufacturing process, or used for surface preparation of substrates before coating, adhesive, or ink applications shall have a VOC content equal to or less than 70 grams of VOC per liter of material, as calculated in accordance with Sections 401 and 503.1.

301.1.2 Repair and Maintenance: Solvents used for repair or maintenance cleaning shall have a VOC content of 900 grams or less of VOC per liter of material, as calculated in accordance with Sections 401 and 503.1 **and** a VOC composite partial pressure of 20 mm Hg or less at 20 C (68 ^{o}F), as calculated in accordance with Sections 401 and 503.3.

301.1.3 Coatings Application Equipment: Solvents used for cleaning coatings application equipment shall have a VOC content of 950 grams or less of VOC per liter of material, as calculated in accordance Sections 401 and 503.1 and 503.2 and a VOC composite partial pressure of 35 mm Hg or less at 20 ^{o}C (68 ^{o}F), as calculated in accordance with Sections 401 and 503.3.

301.1.4 Electronic Assemblies: Solvents used for manufacturing or maintenance cleaning of electronic assemblies shall have a VOC content of 900 grams or less of VOC per liter of material, as calculated in accordance with Sections 401 and 503.1 **and** a VOC composite partial pressure of 33 mm Hg or less at 20 ^{o}C (68 ^{o}F), as calculated in accordance with Sections 401 and 503.3.

301.1.5 Polyester Resin Application: Solvents used for cleaning polyester resin application equipment shall comply with any one of the limits specified below:

301.1.5.1 The solvent shall have a VOC content of 200 grams or less VOC per liter of material, as calculated in accordance with Sections 401 and 503.1; or

301.1.5.2 The solvent shall have a VOC content of 1100 grams or less of VOC per liter of material, as calculated in accordance with Sections 401 and 503.1, **and** a VOC composite partial pressure of 1.0 mm Hg or less at 20 ^{o}C (68 ^{o}F), as calculated in accordance Sections 401 and 503.3 or

301.1.5.3 In lieu of complying with either of the VOC limitations in Sections 301.1.5.1 and 301.1.5.2, above, a person may comply by using a solvent residue reclamation system. Reclamation may be done either on-site or off-site through a reclamation facility. The on-site reclamation system shall operate at least at 80 percent efficiency, by weight, and the solvent residues shall contain not more than 20 percent VOC, by weight.

301.2 Effective December 11, 2004 a person shall not perform solvent cleaning unless the solvent has a VOC content, as applied (as determined per Sections 401 and 503.1) equal to or less than the applicable VOC limit in the table below. The VOC content shall be calculated based on grams per liter of solvent or pounds per gallon of solvent including water and exempt compounds.

Solvent Cleaning Activity	**VOC Content g/l (lb/gal) (Effective December 11, 2004)**
General (wipe cleaning, maintenance cleaning)	50 (0.42)
Product Cleaning During Manufacturing Process or Surface Preparation for Coating, Adhesive, Sealants, or Ink Application	
General	50 (0.42)
Electrical Apparatus Components and Electronic Components	500 (4.2)
Medical Devices and Pharmaceuticals	800 (6.7)

Solvent Cleaning Activity	VOC Content g/l (lb/gal) (Effective December 11, 2004)
Repair and Maintenance Cleaning	
General	50 (0.42)
Electrical Apparatus Components and Electronic Components	900 (7.5)
Medical Devices and Pharmaceuticals	
General Work Surfaces	600 (5.0)
Tools, Equipment, and Machinery	800 (6.7)
Platelets	800 (6.7)
Architectural Coating Application Equipment	
Water based Coatings	50 (0.42)
Solvent based Coatings – Jobsite and No Enclosed Gun Cleaner	300 (2.5)

302 CLEANING DEVICES AND METHODS: A person shall not perform solvent cleaning unless one of the following cleaning devices or methods is used:

302.1 Wipe cleaning.

302.2 Cleaning within closed containers or by using hand held spray bottles from which solvents are applied without a propellant-induced force.

302.3 Using cleaning equipment which has a solvent container that is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself.

302.4 Using remote reservoir degreaser, non-vapor degreaser, or vapor degreaser used pursuant to the provisions of Rule 216, Organic Solvent Cleaning and Degreasing Operations.

302.5 Using solvent flushing methods where the cleaning solvent is discharged into a container, which is, closed except for the solvent collection openings and, if necessary, openings to avoid excessive pressure buildup inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping.

302.6 Using an enclosed gun cleaner for the cleaning of application equipment, except as listed in Section 302.7 or by using a solvent that contains 50 grams per liter or less VOCs for cleaning of spray guns if no enclosed gun cleaner is used.

302.7 Using solvents that comply with the VOC limits in Section 301 and cleaning methods in Section 302.5 for cleaning of application equipment used to apply architectural coatings at the jobsite.

302.8 Cleaning of spray gun nozzles by soaking in solvent provided the container (not to exceed five (5) gallons in size) is kept tightly covered at all times except when accessing the container.

302.9 Regardless of cleaning method, any spray discharge of solvent into the open air is prohibited at all times.

303 EMISSION CONTROL SYSTEM: As an alternative to complying with Sections 301 and 302, a person may use air pollution control equipment provided it satisfies the following conditions:

303.1 The air pollution control equipment is approved by the Air Pollution Control Officer pursuant to Rule 501, General Permit Requirements, and

303.2 The air pollution control equipment is designed and operated with:

303.2.1 A control device efficiency of at least 95 percent on a mass basis, as determined pursuant to Sections 402 and 503.5, and

303.2.2 An emission collection efficiency of at least 90 percent on a mass basis of the emissions generated by the solvent cleaning operations, as determined pursuant to Section 503.6, or

303.2.3 An output of less than 50 parts per million calculated as carbon with no dilution.

304 STORAGE AND DISPOSAL:

304.1 All VOC-containing materials used in solvent cleaning operations, such as solvents, and cloth and paper moistened with solvents, shall be stored in non-absorbent containers with no liquid leaks. Such containers shall be kept closed at all times except when filling or emptying.

304.2 All spent solvents shall be disposed of properly. Spent cleanup solvents may be classified as hazardous waste. The owner or operator shall obtain approval from applicable local, state, or federal water pollution control agency prior to disposing of spent solvents into the sewer or storm drain systems.

400 ADMINISTRATIVE

401 CALCULATION FOR DETERMINING VOC CONTENT OF CLEANING SOLVENTS INCLUDING WATER AND EXEMPT COMPOUNDS: For the VOC content as applied, the volume of solvent is defined as the volume of the original solvent, plus any material added to the original solvent (e.g., thinners or reducers). For the VOC content as supplied, the volume of solvent is defined as the volume of the original solvent. The weight of VOC per total volume of solvent shall be calculated by the following equation:

$$G_2 = \frac{W_v - W_w - W_{ec}}{V_m}$$

Where: G_2 = Weight of VOC per total volume of solvent, in grams per liter
W_v = Weight of all volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of solvent, in liters

402 CALCULATION FOR DETERMINING PERCENT CONTROL EFFICIENCY AND VOC MASS EMISSION RATE: The VOC mass emission rate shall be calculated both upstream and downstream of the emissions control device based on the VOC mass concentration, collection efficiency, and volumetric flowrate, pursuant to Section 503.5, and 503.6 and the following equations:

402.1 VOC mass emission rate:

$$M = (Q) * (C) * (60 \frac{m}{hr}) \ (calculated\ upstream\ and\ downstream)$$

Where: M = VOC mass emission rate (upstream/downstream), in lb/hr.
Q = the volumetric flowrate at the inlet (upstream) or exhaust stack outlet (downstream), in standard cubic feet per minute as determined by Section 503.9.
C = the VOC mass concentration at the inlet (upstream) or outlet (downstream), in pounds per standard cubic feet, as determined pursuant to Section 503.9.

402.2 The percent control efficiency is calculated as follows:

$$\%CE = \left(\frac{M_u - M_d}{M_u} \right) * 100$$

Where: CE = control efficiency.
M_u = the upstream VOC mass emission rate, in lb/hr.
M_d = the downstream VOC mass emission rate, in lb/hr.

403 CALCULATION FOR DETERMINING VOC COMPOSITE PARTIAL PRESSURE: VOC composite partial pressure shall be calculated by the following equation:

$$PP_c = \frac{\sum_{i=1}^{n} \frac{(W_{i)}(VP_i)}{MW_i}}{\frac{W_w}{MW_w} + \sum_{e=1}^{n} \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where: PP_C = VOC composite partial pressure at 20 ^oC, in mm Hg.
W_i = Weight of the "i"th VOC compound, in grams as determined by ASTM E 260-96.
W_w = Weight of water, in grams as determined by ASTM D 3792-99.
W_e = Weight of the "e"th exempt compound, in grams, as determined by ASTM E 260-96.
MW_i = Molecular weight of the "i"th VOC compound, in grams per g-mole, as given in chemical reference literature.
MW_w = Molecular weight of water, 18 grams per g-mole.
MW_e = Molecular weight of the "e"th exempt compound, in grams per g-mole, as given in chemical reference literature.
VP_i = Vapor pressure of the "i"th VOC compound at 20^oC, in mm Hg, as determined by Section 503.4 of this rule.

404 OPERATION AND MAINTENANCE PLAN: Any person using approved emission control equipment pursuant to Section 303 must submit an Operation and Maintenance Plan for the emissions control equipment to the Air Pollution Control Officer for approval. This Plan shall specify operation and maintenance procedures that demonstrate continuous operation and compliance of the emissions control equipment during periods of emissions-producing operations. This Plan shall specify key system operating parameters, such as temperatures, pressures, and/or flow rates, necessary to determine compliance with this rule and shall describe in detail procedures to maintain the approved control device. The plan shall specify which records must be kept to document these operations and maintenance procedures. The records shall comply with the

requirements of Section 501. This Plan shall be implemented upon approval by the Air Pollution Control Officer.

405 PRODUCT INFORMATION REQUIREMENTS FOR SELLERS: Any person who sells any solvent subject to this rule shall make available to the purchaser at the time of sale the following information:

405.1 The solvent type by name/code/manufacturer;

405.2 The maximum VOC content of the cleanup solvent as applied. The VOC content shall be displayed as grams of VOC per liter of solvent (or pounds of VOC per gallon), including water and exempt compounds as determined pursuant to Section 503.1.

405.3 Recommendations regarding thinning, reducing, or mixing with any solvent, if applicable.

406 VIOLATIONS: Failure to comply with any provision of this rule shall constitute a violation of the rule.

500 MONITORING AND RECORDS

501 RECORDKEEPING: Any person subject to this rule shall comply with all of the following applicable requirements:

501.1 List of Solvents: A list shall be maintained of all solvents currently used and/or stored at the site. The list shall include the following information:

501.1.1 Cleaning solvent type by name/code/manufacturer.

501.1.2 The actual VOC content of cleaning solvents listed in Section 301, as applied including water and exempt compounds.

501.1.3 The actual mixing ratio for the cleaning solvent as applied.

501.2 Product Information: The information listed under Section 405 shall be maintained on-site and made available to the Air Pollution Control Officer upon request.

501.3 Usage Records: Any person within the District using cleaning solvents regulated by this rule shall update and maintain the records as required by this rule as follows:

501.3.1 Daily: Any person claiming an exemption from this rule pursuant to Section 104.4 shall maintain the following records.

501.3.1.1 Records of total applied volume in gallons per day of solvents used for cleaning of sterilization ink indicating equipment.

501.3.1.2 Records of total volume of aerosol products in ounces used.

501.3.2 Monthly:

501.3.2.1 Record of total applied volume in gallons for each cleaning solvent used, and

501.3.2.2 Record of solvent cleaning activity associated with each solvent used.

501.3.3 Annually:

501.3.3.1 Low Volume Usage: Any person claiming partial exemption from this rule for low volume of solvent usage, pursuant to Section 104.1, shall maintain records of the type and volume of solvent used, as required by Section 502, on an annual basis.

501.4 Emission Control Equipment: Any person using emission control equipment pursuant to this rule shall maintain records, on a daily basis, of key system operating parameters for emission control equipment, including, but not limited to:

501.4.1 Hours of operation;

501.4.2 Routine and non-routine maintenance; and

501.4.3 The records required by Section 404 as part of the Operation and Maintenance Plan.

501.4.4 Records of test reports conducted pursuant to Section 503.

502 RETENTION OF RECORDS: All records required by this rule shall be retained on-site for at least two years, except for sources subject to Rule 507, Federal Operating Permit Program, which shall be retained for at least five years. Such records shall be made available to the Air Pollution Control Officer upon request.

503 TEST METHODS

503.1 Determination of VOC Content: VOC content of solvents shall be determined in accordance with United States Environmental Protection Agency (U.S. EPA) Method 24 and Sections 401 and 503.2 of this rule.

503.2 Determination Of Compounds Exempt From VOC Definition: Compounds exempt from the VOC definition, as listed in Rule 102, Definitions, shall be determined in accordance with ASTM D4457-91 or ARB Method 432. If any of the perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds.

503.3 Determination Of VOC Composite Partial Pressure: VOC composite partial pressure shall be determined in accordance with ASTM E260-96 for organic compounds, and ASTM D3792-91 for water content as applicable, and Sections 403 and 503.4 of this rule.

503.4 Determination of Vapor Pressure: Vapor pressure of a VOC shall be determined in accordance with ASTM Method D2879-96, or may be obtained from a published source such as:

503.4.1 "The Vapor Pressure of Pure Substances", Boublik, Fried, and Hala; Elsevier Scientific Publishing Company, New York, 1973.

503.4.2 "Perry's Chemical Engineer's Handbook", McGraw-Hill Book Company, 1984.

503.4.3 "CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company, 1986-87.

503.4.4 "Lange's Handbook of Chemistry", John Dean, ed., McGraw-Hill Book Company, 1985. DETERMINATION OF SOLVENT COMPONENTS: The identity of components in solvents shall be determined by U.S. EPA Method 18.

503.5 Determination of Control Device Efficiency: Control efficiency of the emissions control equipment shall be determined in accordance with United States Environmental Protection Agency Method 18, 25, or 25A (whichever is applicable).

503.6 Determination of Collection Efficiency: Collection efficiency shall be determined in accordance with U.S. EPA “Guidelines for Determining Capture Efficiency, January 9, 1995". Individual capture efficiency test runs subject to United States Environmental Protection Agency technical guidelines shall be determined by:

503.6.1 Applicable U.S. EPA methods 204, 204A, 204B, 204C, 204E, and/or 204F; or

503.6.2 Any other method approved by the U.S. EPA, the California Air Resources Board, and the Air Pollution Control Officer.

503.7 Multiple Test Methods: When more than one test method or set of test methods is specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods shall constitute a violation of this rule.

503.8 Test Method Updates: Future U.S. EPA-approved revisions of any test methods referenced in Section 503 shall then become the applicable versions with respect to this rule.

502.9 Determination of Volumetric Flowrate: Volumetric flowrate shall be determined in accordance with United States Environmental Protection Agency Methods 2, 2A, 2C, or 2D (whichever is applicable).

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RULE 242 STATIONARY INTERNAL COMBUSTION ENGINES

Adopted 4-10-03

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 ANNUAL FUEL USAGE
202 APCO
203 CALENDAR YEAR
204 DIESEL ENGINE
205 EMERGENCY STAND-BY ENGINE
206 ENGINE RATING
207 EXISTING ENGINE
208 LEAN-BURN ENGINE
209 MAINTENANCE OPERATION
210 NITROGEN OXIDES (NOx)
211 OUTPUT
212 PERMITTED CAPACITY FACTOR
213 RICH-BURN ENGINES
214 PEAK LOAD
215 START OF CONSTRUCTION
216 STATIONARY INTERNAL COMBUSTION ENGINE
217 STOICHIOMETRIC AIR/FUEL RATIO

300 STANDARDS

301 LIMITS
302 ENGINE OPERATOR INSPECTION PLAN

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULES
402 REPORTING REQUIREMENTS
403 EMISSION SOURCE TESTING
404 VIOLATIONS

500 MONITORING AND RECORDKEEPING

501 RECORDKEEPING-GENERAL
502 RECORDKEEPING-EXEMPTIONS
503 RECORDKEEPING-RETENTION
504 TEST METHODS

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100 GENERAL

101 PURPOSE: To limit the emission of nitrogen oxides (NOx) and carbon monoxide (CO) from stationary internal combustion engines.

102 APPLICABILITY

102.1 Geographic: The provisions of this rule apply to facilities located anywhere in Placer County.

102.2 Application: This rule applies to any stationary internal combustion engine rated at more than 50 brake horsepower and using any gaseous fuel or liquid fuel, including liquid petroleum gas (LPG), gasoline or diesel fuel. This rule shall not apply to engines used directly and exclusively for agricultural operations necessary for the growing of crops or the raising of fowl and animals.

102.3 Severability: If any section, subsection, sentence, clause, phrase or portion of this rule is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct and independent provision, and the holding shall not affect the validity of the remaining portions of the rule.

103 EXEMPTIONS:

103.1 Exemption, Operating Hours: The provisions of this rule shall not apply to any engine operated less than 200 hours per calendar year.

103.2 Exemption, Emergency Stand-By Engines: The provisions of this rule shall not apply to permitted emergency stand-by engines operated either during an emergency or maintenance operation. Maintenance operation is limited to 100 hours per calendar year.

103.3 Exemption, Research, Testing and Evaluation: The provisions of this rule shall not apply to:

103.3.1 Engines used in research or teaching programs;

103.3.2 Test-stands used for evaluating engine performance.

103.4 Exemption, Low Capacity: The provisions of this rule shall not apply to diesel engines with a permitted capacity factor of 15 percent or less.

103.5 Exemption, Cranes and Welding: The provisions of this rule shall not apply to engines used to power cranes and welding equipment.

200 DEFINITIONS

201 ANNUAL FUEL USAGE: The amount of fuel an internal combustion engine consumes in a calendar year.

202 APCO: District Air Pollution Control Officer.

203 CALENDAR YEAR: Twelve (12) consecutive months beginning January 1 and ending December 31.

204 DIESEL ENGINE: A compression-ignited two or four-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

205 EMERGENCY STAND-BY ENGINE: An internal combustion engine used only as follows:

205.1 When normal power line or natural gas service fails;

205.2 For the emergency pumping of water for either fire protection or flood relief.

An emergency stand-by engine may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has either been reached or exceeded.

206 ENGINE RATING: The output of an engine as determined by the engine manufacturer and listed on the nameplate of the engine, regardless of any de-rating.

207 EXISTING ENGINE: A stationary internal combustion engine whose installation commenced prior to the date of adoption of this rule.

208 LEAN-BURN ENGINE: A spark-ignited engine that is designed to operate with an air-to-fuel ratio that is greater than 1.1 times the stoichiometric air-to-fuel ratio.

209 MAINTENANCE OPERATION: The use of an emergency stand-by engine and fuel system during testing, repair and routine maintenance to verify its readiness for emergency stand-by use.

210 NITROGEN OXIDES (NOx): The sum of nitric oxide and nitrogen dioxide compounds in the exhaust gas stream of an internal combustion engine.

211 OUTPUT: The shaft work output from an engine, plus the energy reclaimed by any useful heat recovery system.

212 PERMITTED CAPACITY FACTOR: Calculated in percent by (1) taking the annual permitted fuel use and dividing it by the product of the manufacturer's specified maximum hourly fuel consumption times 8760 hours per year, and (2) multiplying that result by 100.

213 RICH-BURN ENGINE: A spark-ignited engine that is designed to operate with an air-to-fuel ratio that is less than or equal to 1.1 times the stoichiometric air-to-fuel ratio.

214 PEAK LOAD: Maximum instantaneous operating load.

215 START OF CONSTRUCTION: The time when the owner has:

215.1 Begun a continuous program of on-site construction of the source, to be completed within a reasonable time.

or

215.2 Entered into binding agreements or contractual arrangements to undertake construction, which cannot be cancelled or modified without substantial loss to the owner or operator.

216 STATIONARY INTERNAL COMBUSTION ENGINE: Any internal combustion engine of the reciprocating type that is operated at a site for more than one year or is attached to a foundation, not including engines used for self-propulsion.

217 STOICHIOMETRIC AIR/FUEL RATIO: The chemically correct air-to-fuel ratio where all fuel and all oxygen in the air-to-fuel mixture will be consumed.

300 STANDARDS

301 LIMITS

301.1 After the applicable compliance date specified in Section 401 of this rule, the owner or operator of an existing stationary internal combustion engine to which this rule is applicable, shall limit the emissions from that engine to no more than the following:

301.1.1 Rich-burn stationary internal combustion engine NOx emissions shall not exceed 90 ppmv and CO emissions shall not exceed 2,000 ppmv.

301.1.2 Lean-burn stationary internal combustion engine NOx emissions shall not exceed 150 ppmv and CO emissions shall not exceed 2,000 ppmv, if the engine rating is greater than 100 horsepower.

301.1.3 Lean-burn stationary internal combustion engine NOx emissions shall not exceed 300 ppmv and CO emissions shall not exceed 2,000 ppmv, if the engine rating is equal to or less than 100 horsepower.

301.1.4 Diesel-fired stationary internal combustion engine NOx emissions shall not exceed 600 ppmv and CO emissions shall not exceed 2,000 ppmv.

Where: ppmv = parts per million by volume at 15% oxygen on a dry basis

NOx = nitrogen oxides
CO = carbon monoxide

301.2 The owner or operator of any new or replacement stationary internal combustion engine shall limit the emissions from that engine to those levels established in Section 301.1.

301.3 In lieu of meeting the emission limits specified in Sections 301.1 of this rule, an owner or operator of an internal combustion engine may elect to replace the unit with an electric motor or permanently remove the engine from service in accordance with the applicable compliance schedule specified in Section 401.4 of this rule.

301.4 All engines subject to this rule shall be equipped with a non-resettable fuel consumption meter or a non-resettable elapsed time meter.

302 ENGINE OPERATOR INSPECTION PLAN: The operator of an engine subject to the provisions of Section 301 of this rule shall submit to the APCO an Engine Operator Inspection Plan. The plan shall be approved in writing by the APCO and updated after any change in operation. For new engines and modifications to existing engines, the plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The operator may request a change to the plan at any time. The plan shall include the following:

302.1 The manufacturer, model number, rated horsepower and combustion method (i.e., rich-burn, lean-burn, or diesel) of the engine.

302.2 A description of the NOx control system installed on the engine, if any, including type (e.g., nonselective catalyst, “clean-burn” combustion, etc.), manufacturer, and a description of any ancillary equipment related to the control of emissions (e.g., automatic air/fuel ratio controller, fuel valves, etc.).

302.3 The company identification and location of the engine by a schematic diagram of the affected facilities.

302.4 A specific emission inspection procedure to assure that the engine is operated in continual compliance with the provisions of this rule. The procedure shall include an

inspection schedule. Inspections shall be conducted every quarter or after every 2,000 hours of engine operation. In no event shall the frequency of inspections be less than once per year. Testing results from individual engines in terms of rated brake horsepower, operational conditions, fuel used and control method, may satisfy these inspection requirements. Prior to implementation of testing, test plans shall be submitted to and approved in writing by the APCO.

302.5 A description of each preventive or corrective maintenance procedure or practice that will be used to maintain the engine and NOx control system in continual compliance with the provisions of this rule.

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULES

401.1 Compliance Schedule-Existing: Owners or operators of existing engines shall comply, with the applicable provisions of Section 301 of this rule in accordance with the following schedule:

No later than ***90 days after the date of adoption of this rule***, submit to the APCO:

401.1.1 An Engine Operator Inspection Plan pursuant to Section 302 of this rule and a complete application for an Authority to Construct, if applicable;

or

401.1.2 Support documentation for each exempt engine, pursuant to Section 502.1 of this rule.

No later than ***120 days after the date of adoption of this rule***, demonstrate full compliance with all provisions of this rule.

401.2 Compliance Schedule – Retrofit: Owners or operators of existing engines that require retrofit or additions to meet requirements of this rule, shall comply with the applicable provisions of Section 301.1 of the rule in accordance with the following schedule:

No later than ***90 days after adoption of this rule*****,** submit to the APCO:

401.2.1 An Engine Operator Inspection Plan pursuant to Section 302 of this rule; or

401.2.2 Support documentation for each exempt engine, pursuant to Section 502.1 of this rule.

401.2.3 A complete application for an Authority to Construct for all modifications.

No later than ***July 1, 2004***, start construction of all retrofits and/or additions of new control equipment, as approved by the APCO.

No later than ***December 1, 2004***, demonstrate full compliance with the applicable provisions of this rule. Engines equipped with non-selective catalytic control reduction have until the next catalyst recharge or three (3) years, whichever occurs first, to comply with the requirements of Section 301.1.

401.3 Compliance Schedule – New Construction: Any owner or operator of a new or replacement unit that is constructed on or after ***date of adoption of this rule*****,** shall complete an application for an Authority to Construct prior to beginning construction of the unit. The owner or operator shall demonstrate that the unit will be operated in

compliance with all applicable provisions of this rule within 60 days after the date of initial startup of the unit.

401.4 Compliance Schedule – Permanent Removal/Replacement: An owner or operator who elects to replace a stationary internal combustion engine with an electric motor as specified in Section 301.3 of this rule, or who permanently removes the engine from service shall demonstrate compliance with all the applicable requirements of this rule no later than ***December 1, 2004***. The owner or operator shall submit written notification to the District for either conversion to electric power or permanent removal no later than ***December 1, 2003***. The owner or operator shall start electric motor conversion of the unit no later than **May 1, 2004,** or permanently remove the engine from service by **December 1, 2004.**

402 REPORTING REQUIREMENTS: Prior to the renewal of any Permit to Operate, each owner or operator subject to the provisions of this rule shall provide the APCO the following data:

402.1 Actual annual usage (e.g., fuel consumption and operating hours) for each affected engine;

402.2 Engine manufacturer, model number and permit number;

402.3 Location of each engine;

402.4 A summary of maintenance and testing reports per Section 302.4 of this rule, and an annual emission report.

403 EMISSION SOURCE TESTING: Engines subject to the requirements of Sections 301.1, 301.2 and 301.3 of this rule shall be source tested for NOx and CO emissions as follows:

403.1 The owner or operator shall arrange for and assure that an emissions source test is performed on each stationary internal combustion engine at least once every 24 months.

403.2 All emission readings shall be taken at an engine's actual peak load and under the engine's typical duty cycle. Determination of emissions shall be made in accordance with the test methods listed in Sections 504.1, 504.2 and 504.3.

403.3 Prior to any source test required by this rule, a source test protocol shall be prepared and submitted to the APCO. The source test protocol shall be approved by the APCO prior to any testing. In addition to other information, the source test protocol shall describe which critical parameters will be established and incorporated into the Engine Operator Inspection Plan described in Section 302. Source test protocol shall conform to the requirements in Section 504.5. Emissions under normal operating conditions before any controls are considered to be Baseline emissions. Source test reports shall be submitted to the APCO or designee.

404 VIOLATIONS

404.1 Failure to comply with any provision of this rule shall constitute a violation of this rule.

404.2 It is the responsibility of the engine owner or operator to demonstrate to the satisfaction of the APCO, that an engine subject to this rule is being operated in continuous compliance with all applicable provisions of this rule.

404.3 An engine shall be in violation if is operated out of compliance with the operating parameters of an approved Engine Operator Inspection Plan. If, however, data from a source test of the engine operating under identical conditions indicates that the engine is in compliance with the requirements of this rule, then a violation will not have occurred. The source test shall be conducted at the engine operator's

expense. The Engine Operator Inspection Plan shall be then amended to reflect the information from this source test.

500 MONITORING AND RECORDKEEPING

501 RECORDKEEPING-GENERAL: The owner or operator of any engine subject to Section 301 of this rule shall maintain an inspection log containing, at a minimum, the following data:

501.1 Identification and location of each engine subject to the provisions of this rule.

501.2 Date and results of each emission inspection.

501.3 A summary of any corrective maintenance measures taken to ensure compliance with the emission limits or reductions, specified in Section 301 of this rule.

501.4 The readings of the non-resettable fuel consumption and the non-resettable elapsed operating time indicators.

501.5 Any additional information required in the Engine Operator Inspection Plan.

502 RECORDKEEPING – EXEMPTIONS: Any owner or operator claiming an exemption under Section 103 of this rule shall keep support documentation identifying reasons for the exemption. Such documentation shall contain a list that provides the following for each engine:

502.1 Permit to Operate number, if applicable

502.2 Engine manufacturer

502.3 Engine model designation

502.4 Rated brake horsepower

502.5 Type of fuel and type of ignition

502.6 A log of operating hours for each engine.

503 RECORDKEEPING - RETENTION: The owner or operator shall maintain the records required in Sections 501 and 502 for a period of two (2) years after the date of each entry. The log shall be made available for inspection by the APCO, upon request.

504 TEST METHODS

504.1 Nitrogen Oxides: NOx emissions for compliance source tests shall be determined in accordance with EPA Method 7E or CARB Method 100.

504.2 Carbon Monoxide: CO emissions for compliance source tests shall be determined in accordance with EPA Method 10 or CARB Method 100.

504.3 Oxygen: Oxygen content for compliance source tests shall be determined in accordance with EPA Method 3A or CARB Method 100.

504.4 Testing Protocol: NOx emission limitations specified in Sections 301.1 and 301.2 of this rule shall be expressed as nitrogen dioxide. All ppmv emission limitations are referenced at 15 percent volume stack gas oxygen, measured on a dry basis. Source test data point intervals shall be no greater than five (5) minutes and data points shall be averaged over 15 consecutive minutes.

RULE 243 POLYESTER RESIN OPERATIONS

Adopted 4-10-03

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 APCO
202 CAPTURE EFFICIENCY
203 CATALYST
204 CLEANING MATERIAL
205 CLOSED CONTAINER
206 CLOSED MOLD SYSTEM
207 CONTROL DEVICE EFFICIENCY
208 CROSS-LINKING
209 CURE
210 ELECTROSTATIC SPRAY
211 EMISSION CONTROL SYSTEM
212 ENCLOSED GUN CLEANER
213 EXEMPT COMPOUND
214 FIBERGLASS
215 GEL COAT
216 GRAMS OF VOC PER LITER OF MATERIAL
217 HIGH VOLUME-LOW PRESSURE (HVLP) EQUIPMENT
218 INHIBITOR
219 LAY-UP
220 LOW-VOC EMISSIONS RESIN SYSTEMS
221 LOW VOLUME-LOW PRESSURE (LVLP) EQUIPMENT
222 MATERIAL
223 MONOMER
224 MONOMER CONTENT
225 NON-ATOMIZING APPLICATOR
226 PLEASURE CRAFT
227 PLEASURE CRAFT COATING
228 POLYESTER RESIN MATERIALS
229 POLYESTER RESIN OPERATIONS
230 POLYMER
231 POLYMERIZATION
232 REPAIR
233 RESIN
234 SPECIALTY RESIN
235 TOUCH-UP
236 VAPOR SUPPRESSANT
237 VOLATILE ORGANIC COMPOUND (VOC)
238 WASTE MATERIALS

300 STANDARDS

301 SPRAY APPLICATION REQUIREMENTS
302 PROCESS AND CONTROL REQUIREMENTS
303 EMISSION CONTROL SYSTEM
304 CLEANING MATERIAL REQUIREMENTS
305 STORAGE AND DISPOSAL REQUIREMENTS
306 COMPLIANCE DATES

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION
402 PROHIBITION OF SALE
403 SALE OF SOLVENTS
404 OPERATION AND MAINTENANCE PLAN

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 RECORD RETENTION
503 TEST METHODS

100 GENERAL

101 PURPOSE: To reduce the emissions of Volatile Organic Compounds (VOC) from polyester resin operations at each stage of the polyester resin process.

102 APPLICABILITY

102.1 Geographic: The provisions of this rule apply to all commercial and industrial stationary facilities performing polyester resin operations, including pleasure craft refinishing, anywhere in Placer County.

102.2 Application: This rule applies to any person who:

102.2.1 Manufactures, sells, offers for sale or supplies polyester resins for use in the District; or

102.2.2 Uses polyester resins; or

102.2.3 Uses a surface preparation solvent, a cleanup solvent or a stripper; or

102.2.4 Solicits, requires the use of, or specifies the application of any polyester resins, surface preparation solvent, cleanup solvent, or stripper that does not comply with this rule.

102.3 Severability: If a court of competent jurisdiction issues an order that any provision of this rule is invalid, it is the intent of the Board of Directors of the District that the other provisions of this rule remain in full force and effect, to the extent allowed by law.

103 EXEMPTIONS

103.1 Partial Exemption, Touch-Up and Repair: The provisions of Section 300 of this rule, Standards, shall not apply to touch-up and repair operations.

103.2 Partial Exemption, Low Usage of Resin Materials: The provisions of this rule, except for Sections 501 and 502, shall not apply to any person operating a polyester operation where the volume of polyester resin materials used in any month is less than 20 gallons.

103.3 Partial Exemption, Low Usage of Cleaning Materials: The provisions of Section 304 of this rule shall not apply to the cleaning of molds, spray equipment or other dispensing equipment tools used in gel coat or specialty resin operations that come in direct contact with polyester resin products, provided that the total volume of the cleaning materials used in any month does not exceed 16 gallons.

103.4 Pleasure Craft Exemption: The provisions of this rule shall not apply to pleasure craft repair and maintenance operations that do not involve polyester resin materials.

103.5 Exemption From Rule 219: The provisions of Rule 219, Organic Solvents, shall not apply to polyester resin operations as defined in Rule 243.

200 DEFINITIONS

201 APCO: Air Pollution Control Officer.

202 CAPTURE EFFICIENCY: Expressed in percent, capture efficiency is the ratio of the weight of the VOC in the effluent stream entering a control device to the weight of the VOC emitted from polyester resin operations, both measured simultaneously in accordance with Subsection 503.3, and calculated by the following equation:

$$\text{Capture Efficiency} = \frac{W_c}{W_e} \times 100$$

Where: W_c = Weight of VOC entering the control device

W_e = Weight of VOC discharged from the coating operations

203 CATALYST: A substance added to resin to initiate or promote polymerization.

204 CLEANING MATERIAL: Any material containing a volatile organic compound (VOC) and used to clean hands, work areas, tools, molds, application equipment, and any other equipment related to a polyester resin operation.

205 CLOSED CONTAINER: A container, which has a cover where the cover meets with the main body of the container without any visible gaps between the cover and the main body of the container.

206 CLOSED MOLD SYSTEM: A method of forming objects from polyester resin material by placing the polyester resin material in a confining mold cavity and applying pressure and/or heat.

207 CONTROL DEVICE EFFICIENCY: Expressed in percent, control device efficiency is the ratio of the weight of the VOC removed by the control device from the effluent stream entering the control device to the weight of VOC in the effluent stream entering the control device, both measured simultaneously in accordance with Subsection 503.4, and calculated by the following equation:

$$\text{Control Device Efficiency} = \frac{(W_c - W_a)}{W_c} \times 100$$

Where: W_c = Weight of VOC entering the control device

W_a = Weight of VOC discharged from the control device

208 CROSS-LINKING: The process of chemically bonding two or more polymer chains together.

209 CURE: To polymerize, e.g., to transform from a liquid to a solid or semi-solid state to achieve desired product physical characteristics, including hardness.

210 ELECTROSTATIC SPRAY: Equipment used to apply materials by charging atomized particles, which are deposited by electrostatic attraction.

211 EMISSION CONTROL SYSTEM: A system for reducing emissions of VOC from polyester resin operations. It consists of (1) equipment, which captures the emissions from the polyester resin process and transports them to the control device, and (2) a VOC control device, which destroys the VOC or otherwise limits the emission of VOC to the atmosphere. The capture efficiency and the control device efficiency are calculated in accordance with Subsections 503.3 and 503.4, respectively.

The Emission Control System Efficiency is calculated by the following equation:

$$\text{Efficiency,\%} = \frac{\text{Capture Efficiency,\%} \times \text{Control Device Efficiency,\%}}{100}$$

212 ENCLOSED GUN CLEANER:

212.1 A device that is used for the cleaning of spray guns, pots, cups and hoses, that has an enclosed solvent container, is not open to the ambient air when in use and has a mechanism to force the cleanup material through the gun while the cleaner is in operation:

or

212.2 A device that is used for the cleaning of spray guns, pots, cups and hoses, that has a remote reservoir, uses non-atomized solvent flow to flush the spray equipment and collects and returns the discharged solvent to the remote reservoir.

213 EXEMPT COMPOUND: Any organic compound, which is exempt from the category of Volatile Organic Compounds (VOC), and is listed in District Rule 102, Definitions.

214 FIBERGLASS: A glass fiber, similar in appearance to wool or cotton fiber.

215 GEL COAT: A polyester resin topcoat that provides a cosmetic enhancement and improves resistance to degradation from exposure to the environment. A gel coat may be either pigmented or clear.

216 GRAMS OF VOC PER LITER OF MATERIAL: The weight (in grams) of VOC per liter of material shall be calculated using the following:

$$\text{Weight of VOC per volume of material} = \frac{(W_V - W_W - W_{EC})}{W_M}$$

Where: W_V = Weight of all volatile compounds, in grams
W_W = Weight of water, in grams
W_{EC} = Weight of compounds listed as exempt from the definition of VOC, per Section 237, in grams
W_M = Volume of material, in liters

217 HIGH VOLUME-LOW PRESSURE (HVLP) EQUIPMENT: Spray equipment used to apply coatings by means of a gun which operates between 0.1 and 10.0 psig air pressure, measured dynamically at the center of the air cap and at the air horns.

218 INHIBITOR: A substance used to slow down or prevent a chemical reaction.

219 LAY-UP: A hand application technique of composite materials using a bucket and a paint brush, a paint roller or other hand-held method of application.

220 LOW VOC EMISSIONS RESIN SYSTEMS: Polyester resin materials, which contain vapor suppressants to reduce monomer evaporation loss.

221 LOW VOLUME-LOW PRESSURE (LVLP) EQUIPMENT: Spray equipment used to apply coatings by means of a gun which operates between 0.1 and 10.0 psig air pressure**,** and air volume less than 15.5 cfm per spray gun and which operates at a maximum fluid delivery pressure of 50 psig.

222 MATERIAL: Any material containing VOC, including but not limited to, resin, pigmented gel coat, catalyst, stripper or cleaning solvent.

223 MONOMER: A relatively low-molecular-weight organic compound that combines with itself, or other similar compounds, to become a cured thermosetting resin.

224 MONOMER CONTENT: The amount of monomer in a batch of polyester resin material, expressed as a percentage of the total weight of the batch. It shall be calculated by using the following three equations:

224.1 Batch weight $W_B = W_R + W_F + W_P + W_O$

Where: W_R = Resin weight
W_F = Filler weight
W_P = Pigment weight
W_O = Other additives weight

224.2 Monomer weight, $W_M = W_R \times \frac{W_{SP}}{100}$

Where: W_R = Resin weight in batch
W_{SP} = % Monomer in resin, per mfgr's. specification.

224.3 Monomer content, % $= \frac{W_M}{W_B} \times 100$

225 NON-ATOMIZING APPLICATOR: Equipment used to apply materials by use of fluid pressure without forming an atomized spray.

226 PLEASURE CRAFT: Boats or other water vessels, which are manufactured or operated primarily for recreational purposes, or leased, rented or chartered to a person or business for recreational purposes.

227 PLEASURE CRAFT COATING: Any unsaturated polyester resin material applied by brush, spray, roller or other means to a pleasure craft.

228 POLYESTER RESIN MATERIALS: Include but are not limited to, unsaturated polyester resins such as isophthalic, orthophthalic, halogenated, bisphenol-A, vinyl ester, or furan resins; cross-linking agents, catalysts, gel coats, inhibitors, accelerators, promoters, and any other VOC-containing materials in polyester operations.

229 POLYESTER RESIN OPERATIONS: The production or rework of products by mixing, pouring, hand lay-up, impregnating, injecting, forming, winding, spraying, and/or curing unsaturated polyester resin materials with fiberglass, fillers, or any other reinforcement materials, and associated cleanup.

230 POLYMER: A chemical compound comprised of a large number of chemical units, which is formed by the chemical linking of monomers.

231 POLYMERIZATION: A chemical process where liquid materials are transformed into a solid or semi-solid state to achieve desired product physical properties, including hardness.

232 REPAIR: The part of the fabrication process that requires the addition of polyester resin material to one or more portions of a previously fabricated product in order to mend structural damage.

233 RESIN: Any of a class of organic polymers of natural or synthetic origin used in reinforced products to surround and hold fibers or filler particles, and is solid or semi-solid in the cured state.

234 SPECIALTY RESIN: Any halogenated, furan, bisphenol-A, vinyl-ester, or isophthalic resin used to make products for exposure to one or more of the following extreme environmental conditions: acute or chronic exposure to corrosive agents, caustic agents, acidic agents or flame.

235 TOUCH-UP: The part of the fabrication process that is necessary to cover minor imperfections.

236 VAPOR SUPPRESSANT: A substance added to resin to minimize the outward diffusion of monomer vapor into the atmosphere.

237 VOLATILE ORGANIC COMPOUND (VOC): Any chemical compound, which meets the definition of VOC described in District Rule 102, Definitions.

238 WASTE MATERIAL: Material including, but not limited to, scraps resulting from cutting or grinding operations, any paper or cloth used for cleaning operations, waste resins and any other spent cleaning materials.

300 STANDARDS

301 SPRAY APPLICATION REQUIREMENTS: Spray application of polyester resin materials shall be performed using one or more of the following application methods:

301.1 Non-Atomizing Applicator;

301.2 High volume-low pressure (HVLP) spray gun;

301.3 Low volume-low pressure (LVLP) spray gun;

301.5 Electrostatic spray;

301.6 Any other equivalent method, which has been approved in writing by the APCO and the U. S. Environmental Protection Agency.

302 PROCESS AND CONTROL REQUIREMENTS: Each polyester resin operation shall comply with one of the following process or control requirements:

302.1 Low VOC Polyester Resin Materials: Use only materials with the following not-to-exceed monomer content: (Monomer content is as applied, based upon the manufacturer's specifications and is calculated per Section 224).

302.1.1 Resins (except for specialty resins and gel coats): Not to exceed monomer content of 35% by weight, as applied.

302.1.2 Pigmented Gel Coats: Not to exceed monomer content of 45% by weight, as applied.

302.1.3 Specialty Resins and Clear Gel Coats: Not to exceed monomer content of 50% by weight, as applied.

302.2 Vapor Suppressant: Use polyester resin material containing a vapor suppressant which limits weight loss from VOC emissions to no more than 60 grams per square meter.

302.3 Closed Mold: Use a closed mold system.

303 EMISSION CONTROL SYSTEM: As an alternative to Section 302, the owner/operator of a polyester resin operations facility may install and operate an emission control system. The emission control system shall be an acceptable alternative if it meets all of the following requirements:

303.1 Permit: Owner or Operator shall apply for and receive a Permit-to-Operate from the APCO, pursuant to Rule 501, General Permitting Requirements.

303.2 Efficiency: Owner or operator shall provide an overall system efficiency of not less than 85% by weight, as determined per Subsections 503.3 and 503.4, and calculated per Section 211.

303.3 Operation and Maintenance Plan: Plan shall comply with the provisions of Section 404.

304 CLEANING MATERIAL REQUIREMENT: Unless used in an enclosed gun cleaner, the maximum allowable usage of cleaning materials that either exceed 1.7 pounds VOC per gallon, or have an initial boiling point less than 190°C, is four gallons per day. If the usage of these materials exceeds four gallons per day, a cleaning material reclamation system shall be used. Such a system shall operate at a minimum of 80% recovery efficiency. Solvent residues from on-site reclamation systems shall not contain more than 20 % VOC by weight, as determined per Subsection 503.7.

305 STORAGE AND DISPOSAL REQUIREMENTS

305.1 Closed Containers: Closed containers shall be used for the storage of all polyester resin materials, cleaning materials, freshly-cured resin scraps and any other unused VOC-containing materials except when being accessed for use.

305.2 Self-Closing Containers: Self-closing containers shall be used in such a manner to effectively control VOC emissions to the atmosphere for the disposal of all polyester resin materials, cleaning materials, waste materials and any unused VOC-containing materials.

306 COMPLIANCE DATES

306.1 Any person subject to the requirements of this rule shall be in compliance by October 13, 2003.

306.2 Facilities operating prior to the date of adoption of this rule, and electing to install and operate an emission control system pursuant to the requirements of Section 303, shall have the control system installed and operating by October 13, 2004.

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION: No person shall require for use or specify the application of any gel coat or polyester resin subject to the provisions of this rule that does not meet the limits and requirements of this rule, where such applications result in a violation of this rule. The requirements of this Section shall apply to all written or oral contracts.

402 PROHIBITION OF SALE: No person shall sell or offer for sale, any gel coat or polyester resin material subject to the provisions of this rule, that does not meet the limits and requirements of this rule where such applications result in a violation of this rule.

403 SALE OF SOLVENTS: Any person who sells any solvent subject to this rule shall make available to the purchaser at the time of sale, the following information:

403.1 The solvent type by name, code and manufacturer.

403.2 The maximum VOC content of the cleanup solvent, as applied, expressed as grams VOC per liter of material as determined pursuant to Section 216.

403.3 Recommendations regarding thinning, reducing or mixing with any solvent, as applicable.

404 OPERATION AND MAINTENANCE PLAN: A person using an emission control system pursuant to Section 303, as a means of alternate compliance with this rule, shall submit an Operation and Maintenance Plan for the emission control system to the APCO for approval. A person proposing to install a new emission control system as a means of alternate compliance with this rule shall submit in addition to an Operation and Maintenance Plan, an application for Authority to Construct, pursuant to Rule 501, General Permit Requirements. The Plan shall specify operating and maintenance procedures, which will demonstrate continuous operation of the emission control system during periods of emission-producing operations. The Plan shall also specify which records must be kept to document these operating and maintenance procedures. These records shall comply with the requirements of Sections 501 and 502. The Plan shall be implemented upon approval of the APCO. Non-approval by the APCO, with the deficiency noted, shall be sent to the applicant, in writing within thirty (30) days of receipt of the Plan. The applicant shall have thirty (30) additional days to correct and resubmit the Plan.

500 MONITORING AND RECORDS

501 RECORDKEEPING: Any person subject to this rule shall comply with the following requirements.

501.1 Maintain current records, which provide all of the data necessary to demonstrate compliance with this rule, including the following information:

501.1.1 List of all polyester resins, catalysts, solvents and cleaning materials in use.

501.1.2 Daily usage quantities of the above materials.

501.1.3 Weight percent of monomer (VOC) in each of the polyester resin materials.

501.1.4 VOC content (grams/liter) for solvents and cleaning materials used.

501.1.5 For approved vapor-suppressed resins, the weight loss (grams per square meter) during resin polymerization, the monomer weight percent and the gel time for each resin.

501.1.6 The amount of each of the polyester resin materials and cleaning materials used during each day of operation.

501.1.7 The volume of polyester resin materials and cleaning materials used for touch-up and repair each day of operation.

501.1.8 Records of hours of operation and key operating parameters as per Section 404 for any emission control system.

502 RECORD RETENTION: All records required by this rule shall be retained and made available for inspection by the APCO for the previous 24 month period.

503 TEST METHODS

503.1 VOC Content: Volatile Organic Compound content shall be determined in accordance with EPA Method 24 and calculated per Section 216 of this rule, as applicable.

503.2 Resin VOC (Monomer) Weight Loss: The “Static Method for Determination of Volatile Emissions from Polyester and Vinyl Ester Resins” (Air Resources Board RACT/BARCT Guidance, 1991, which is based upon South Coast AQMD Rule 1162 as amended and published 7/17/90) shall be used for determining VOC emissions for resins as received from the manufacturer. Other applicable test methods may be used if they are approved by the APCO, California Air Resources Board and the U.S. Environmental Protection Agency.

503.3 Emission Capture System Efficiency

503.3.1 EPA Methods 204, 204A, 204B, 204C, 204D, 204E, and/or 204F, as appropriate.

503.3.2 40 CFR 52.741, “VOC Measurement Techniques for Capture Efficiency”.

503.4 Emission Control System Efficiency

503.4.1 EPA Method 25A, “Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer”.

503.4.2 EPA Method 18, “Measurement of Gaseous Organic Compound Emissions by Gas Chromatography”.

503.4.3 EPA Method 2 or 2C, as appropriate.

503.5 VOC Content, Other

503.5.1 ASTM D 3960-81 - “VOC in Paints and Coatings”.

503.5.2 ASTM D 1078-86 - “Liquid VOC Boiling Range”.

503.6 Exempt Solvents

503.6.1 ASTM D 4457-85 (GC) or ARB 432

503.7 VOC Content of Waste Materials

503.7.1 EPA Method 8240, “GC/MS Method for Volatile Organics” for liquid wastes.

503.7.2 Air Resources Board Method 401, “Gravimetric Purge and Trap”

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 244
SEMICONDUCTOR MANUFACTURING OPERATIONS

Adopted 02-09-95

100 GENERAL

101 DESCRIPTION: The purpose of this Rule is to limit the emissions of precursor organic compounds from semiconductor manufacturing operations. For the purpose of this Rule, semiconductor manufacturing operations are limited to the manufacture of semiconductor and other related integrated circuits.

102 EXEMPTION, SMALL SEMICONDUCTOR OPERATION: The provisions of Sections 302, and 501 shall not apply to any facility whose total combined negative photoresist maskant and negative photo resist developer consumption is less than 24 gallons per month on a facility wide basis and provided the requirements of Section 402 and Section 502 are met.

103 EXEMPTION, SOLVENT CLEANERS: The provisions of Sections 301 and 302 shall not apply to any vapor degreaser or cold cleaner utilizing solvent flow or with a capacity greater than 10 gallons. Such vapor degreasers or cold cleaners are subject to REGULATION 2, RULE 216, ORGANIC SOLVENT CLEANING AND DEGREASING OPERATIONS.

104 EXEMPTION, COMPOUNDS WITH LOW VOLATILITY: All compounds with an initial boiling point greater than 150C (302F) and where the initial boiling point exceeds the actual operating temperature by at least 100C (180F) are exempt from the requirements of Section 302.3

200 DEFINITIONS

201 FREEBOARD HEIGHT: The distance from the top of the solvent or solvent drain to the top of the sink.

202 FREEBOARD RATIO: The freeboard height divided by the smaller of the length or width of the sink or reservoir.

203 MASKING: Application of a maskant material to a wafer to increase or decrease the masked area's resistance to chemical milling.

204 ORGANIC COMPOUND: Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide carbonic acid, metallic carbides or carbonates and ammonium carbonate.

205 EXEMPT ORGANIC COMPOUNDS: For the purposes of this rule, exempt compounds are the following:

205.1 Methane
205.2 Carbon dioxide
205.3 Carbon monoxide
205.4 Carbonic acid
205.5 Metallic carbides or carbonates
205.6 Ammonium carbonate
205.7 1,1,1-trichloroethane
205.8 Methylene chloride
205.9 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
205.10 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)

205.11 Trichlorofluoromethane (CFC-11)
205.12 Dichlorodifluoromethane (CFC-12)
205.13 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
205.14 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114)
205.15 Chloropentafluoroethane (CFC-115)
205.16 Pentafluoroethane (HFC-125)
205.17 1,1,2,2-tetrafluoroethane (HFC-134)
205.18 Tetrafluoroethane (HFC-134a)
205.19 1,1-dichloro-1-fluoroethane (HCFC-141b)
205.20 1-chloro-1,1-difluoroethane (HCFC-142b)
205.21 1,1,1-trifluoroethane (HFC-143a)
205.22 Chlorodifluoromethane (HCFC-22)
205.23 Trifluoromethane (HFC-23)
205.24 Difluoroethane (HFC-152a)
205.25 The following four classes of perfluorocarbon 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.
d. Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine. Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

206 PHOTORESIST LINE: Equipment used to apply and develop photoresist masking solution on a wafer. Process includes preparation (except primary cleaning), soft bake, develop and hard bake.

207 PHOTORESIST, NEGATIVE: Maskant hardens when exposed to light. Unhardened maskant is stripped, exposing wafer surface to etching. Typically uses xylene formulated resin and developer solutions.

208 PHOTORESIST, POSITIVE: Maskant softens when exposed to light. Softened maskant is stripped, exposing wafer surface for etching. Typically uses cellosolves for primer and resin carrier with caustic type developer.

209 SEMICONDUCTOR MANUFACTURE: Any operation performed in order to manufacture semiconductor or related solid state devices, such as semiconductor diodes and stacks, and including rectifiers, integrated microcircuits, transistors, solar cells, and light sensing and emitting devices. Semiconductor manufacture includes all processing from crystal growth through circuit separation and encapsulation. Examples of semiconductor operations are: crystal growth, diffusion operations, photoresist operations, wafer processing, etching, etc.

210 SOLVENT CLEANING STATION: Any operation whose primary purpose is to remove surface contaminants or to remove photoresist using a liquid or vapor containing organic compounds.

211 LIQUID SOLVENT LEAKS: A liquid leak of four drops or more per minute from secondary containment.

212 CONTAINERS: For the purposes of Section 301 and Section 302, a container is defined as having a total volume of 1 liter (0.264 gal) or less. Any container with a volume greater than 1 liter is considered a reservoir.

300 STANDARDS

301 NEGATIVE PHOTORESIST OPERATIONS: All exhaust gases containing precursor organic vapors from negative photoresist operations shall be vented to control devices which reduce the total emission of precursor organic compounds to the atmosphere by at least 90 percent by weight.

302 SOLVENT CLEANING STATION LIMITS: A person shall not operate a solvent cleaning station at a

semiconductor manufacturing facility unless exhaust organic vapors are vented to control devices that reduce the total emissions of precursor organic compounds to the atmosphere by at least 90% by weight or the following requirements are met:

302.1 All unheated containers, reservoirs and sinks containing precursor organic compounds shall be provided with a cover. These covers must remain closed unless production, sampling, maintenance, loading or unloading procedures require operator access.
302.2 All unheated reservoirs and sinks containing acetone, isopropyl alcohol, methyl alcohol, methyl ethyl ketone, or trichloroethylene shall have a freeboard ratio greater than or equal to 0.75.
302.3 All heated reservoirs, sinks, or containers containing precursor organic compounds shall be provided with a cover as described in Section 302.1. In addition, heated reservoirs and sinks must also have a freeboard ratio greater than or equal to 0.75.
302.4 The capacity of all vapor degreasers and cold cleaners shall be clearly marked by suitable physical or mechanical means.
302.5 Precursor organic compounds including waste solvents, shall not be stored or disposed of in a manner that will allow evaporation into the atmosphere. Storage of organic compounds in tanks which comply with Rule 212, STORAGE OF PETROLEUM PRODUCTS, constitutes compliance with Section 302.5.
302.6 All equipment at a solvent cleaning station shall be operated and maintained in proper working order.
302.7 Liquid solvent leaks shall be repaired immediately or the equipment shall be shut down until repaired.

400 ADMINISTRATIVE REQUIREMENTS

401 RESERVOIRS AND SINKS COMPLIANCE SCHEDULE: Any existing facility subject to Section 302 of this Rule shall comply with the following increments of progress:

401.1 Submit plan for compliance by March 1, 1996.
401.2 Submit to the APCO a complete application for an Authority to Construct for necessary equipment modifications on or before March 1, 1997.
401.3 Complete on-site construction of equipment modifications on or before March 1, 1998.
401.4 Demonstrate final compliance on or before March 1, 1999.

402 SMALL SEMICONDUCTOR OPERATION PETITION: Any person seeking to satisfy the conditions of Section 102 shall comply with the following requirements:

402.1 A written petition for exemption shall be submitted to the APCO, showing the total combined net usage of negative photoresist maskant and negative photoresist developer, is less than 24 gallons per month for the facility. The written petition must be submitted to the APCO by March 1, 1996.
402.2 If the APCO grants written approval, such petition will be repeated every July 1, on an annual basis.

500 MONITORING AND RECORDS

501 ANNUAL REPORTING: Any person subject to Sections 301 or 302 of this Rule shall report the following on an annual basis, prior to renewal of Permits to Operate:

501.1 Quantity of each of the following liquid organic compounds purchased during the previous 12 months for use in semiconductor manufacturing.
Xylene
n-Butyl Acetate
Acetone
Isopropyl Alcohol
Methyl Ethyl Ketone

Trichloroethylene
All other precursor organic compounds (total)
Methylene Chloride
1,1,1 Trichloroethane
All other non-precursor organic compounds (total)

501.2 Separate totals of precursor and non-precursor organic compounds disposed of or reclaimed in liquid form from semiconductor manufacturing operations during the previous 12 months.

502 RECORDS: Any person seeking to satisfy the conditions of Section 102 shall comply with the following requirements:

502.1 A weekly record shall be kept showing the facility wide combined net usage of negative photoresist maskant and negative photoresist developer.
502.2 Such records shall be maintained and be available for inspection by the APCO for the previous 24 month period.

503 NEGATIVE PHOTORESIST SOURCE TESTS: Any person subject to Section 301 shall conduct a source test of the abatement device to demonstrate compliance. Results of the tests shall be submitted within 90 days of (Date of adoption by the Board of Directors), or 90 days after start up of affected equipment, whichever is later. The APCO shall be contacted in writing no less than 15 days prior to testing. Equipment that has previously undergone a District approved source test and successfully demonstrated compliance under Rule 244 requirements need not be retested.

504 TEST METHODS

504.1 DETERMINATION OF ABATEMENT EFFICIENCY: Abatement Efficiency of precursor organic compounds as specified in Section 302 shall be measured as prescribed by EPA Method 25 or 25A. A source shall be considered in violation if the VOC emissions measured by any of the test methods exceed the standards of this rule.

RULE 245 SURFACE COATING OF METAL PARTS AND PRODUCTS

Adopted 12/11/08
(Amended 8/20/09)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 SEVERABILITY
104 EXEMPTIONS - LOW MATERIAL USAGE
105 EXEMPTIONS - SPECIFIC OPERATIONS AND COATINGS

200 DEFINITIONS

201 ADHESIVE
202 AEROSOL CONTAINER
203 AEROSPACE VEHICLE
204 AIR-DRIED COATING
205 ALUMINUM COATING FOR WINDOW FRAMES AND DOOR FRAMES
206 APPLICATION EQUIPMENT
207 APPURTENANCES
208 BAKED COATING
209 CAMOUFLAGE COATING
210 CLEANUP MATERIAL
211 CLOSED CONTAINER
212 CAN COATING
213 COATING
214 COATING REMOVER
215 COILS
216 CONFORMAL COATING
217 CURED MATERIAL
218 DIP COAT
219 ELECTRICAL INSULATING COATING
220 ELECTRICAL INSULATING VARNISH
221 ELECTROCOATING
222 ELECTROSTATIC APPLICATION
223 ENCLOSED GUN WASHER
224 ETCHING FILLER
225 EXEMPT COMPOUNDS
226 EXTREME HIGH GLOSS COATING
227 EXTREME PERFORMANCE COATING
228 FLOW COAT
229 HAND COATING
230 HAND LETTERING
231 HEAT-RESISTANT COATINGS
232 HIGH PERFORMANCE ARCHITECTURAL COATING
233 HIGH TEMPERATURE COATING
234 HIGH VOLUME, LOW-PRESSURE SYSTEM (HVLP) APPLICATION EQUIPMENT
235 IRIDESCENT COATING
236 KEY SYSTEM OPERATING PARAMETER
237 LOW VOLUME, LOW-PRESSURE SYSTEM (LVLP) APPLICATION EQUIPMENT
238 MAGNETIC DATA STORAGE DISK
239 MAINTENANCE CLEANING
240 METAL PARTS AND PRODUCTS

241 METALLIC COATING
242 MILITARY SPECIFICATION
243 MOLD-SEAL COATING
244 MOTOR VEHICLE
245 MULTI-COMPONENT COATING
246 NON-ABSORBENT CONTAINER
247 NON-SKID COATING
248 ONE-COMPONENT COATING
249 OPTICAL ANTI-REFLECTIVE COATING
250 PAN BACKING COATING
251 PERFORMANCE TEST
252 POLYESTER RESIN MATERIALS
253 POLYESTER RESIN OPERATIONS
254 POWDER COATING
255 PREFABRICATED ARCHITECTURAL COATING
256 PRETREATMENT WASH PRIMER
257 REPAIR COATING
258 ROLL COATER
259 SAFETY- INDICATING COATING
260 SILICONE RELEASE COATING
261 SOLAR-ABSORBENT COATING
262 SOLID FILM LUBRICANT
263 STATIONARY SOURCE
264 STENCIL COATING
265 STRIPPER (OR COATING REMOVER)
266 SURFACE PREPARATION
267 TEXTURED FINISH
268 TOUCH-UP COATING
269 TRANSFER EFFICIENCY
270 VACUUM-METALIZING COMPOUND
271 VOLATILE ORGANIC COMPOUND (VOC)
272 VOLATILE ORGANIC COMPOUND (VOC) AS APPLIED

300 STANDARDS

301 VOC CONTENT LIMITS OF COATINGS FOR METAL PARTS AND PRODUCTS
302 APPLICATION METHODS
303 SURFACE PREPARATION AND CLEAN-UP REQUIREMENTS
304 WORK PRACTICE REQUIREMENTS
305 EMISSION CONTROL EQUIPMENT

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION
402 PRODUCT INFORMATION REQUIREMENTS FOR SELLERS
403 DETERMINATION OF VOC CONTENT OF COATINGS, LESS WATER AND EXEMPT COMPOUNDS
404 DETERMINATION OF VOC CONTENT PER LITER OF COATING REMOVERS (STRIPPERS), SURFACE PREPARATION MATERIALS AND CLEANUP MATERIALS
405 OPERATION AND MAINTENANCE PLAN

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 VOC EMISSION THRESHOLD
503 TEST METHODS

100 GENERAL

101 PURPOSE: To limit the emission of volatile organic compounds from the application of coatings, coating removers (strippers), surface preparation materials, and cleanup materials in metal parts and products coating operations.

102 APPLICABILITY: The provisions of this rule apply only to facilities located in Placer County.

103 SEVERABILITY: If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity of the remaining portions of the rule.

104 EXEMPTIONS, LOW USAGE OF MATERIALS EXCEEDING VOC CONTENT LIMITS:

104.1 Low Usage of Non-Compliant Coating Materials: The provisions of this rule shall not apply to the VOC requirements of Sections 301 if (1) the total volume of such non-compliant coatings is less than 55 gallons per year, and (2) the requirements of Sections 401 and 501 are met.

105 EXEMPTIONS, SPECIFIC OPERATIONS AND COATINGS: Except for recordkeeping requirements as specified in Section 501, the requirements of this rule shall not apply to:

105.1 Coating of prefabricated architectural components or structures not coated in a shop environment and which are regulated by Rule 218, Architectural Coatings.

105.2 Motor vehicles including automotive, truck and heavy equipment which are regulated by Rule 234, Automotive Refinishing Operations.

105.3 Coating of metal cans, which is regulated by Rule 223, Metal Container Coating.

105.4 Adhesives and other materials which are regulated by Rule 235, Adhesives.

105.5 Polyester resin operations which is regulated by Rule 243, Polyester Resin Operations.

105.6 Coatings sold in non-refillable aerosol containers having a capacity of 1 liter (1.1 quarts), or less.

105.7 Powder coatings.

105.8 Partial exemptions:

105.8.1 Coating operations used for repair and touchup are only exempt from the application method requirements of Section 302.

105.8.2 Coating operations used for stencil, safety indicating, solid film lubricating, electric insulating, thermal conduction, and magnetic data storage, are only required to meet the recordkeeping requirements of Section 501 and work practice requirements of Section 304.

200 DEFINITIONS

201 ADHESIVE: Any substance that is used to bond one surface to another by attachment.

202 AEROSOL CONTAINER: A hand-held, nonrefillable container which expels pressurized product ingredients by means of a propellant-induced force.

203 **AEROSPACE VEHICLE:** The completed unit of any aircraft, helicopter, missile or space vehicle.

204 **AIR-DRIED COATING:** Any coating which is not heated above 194^{o}F (90^{o}C) for the purpose of curing or drying.

205 **ALUMINUM COATING FOR WINDOW FRAMES AND DOOR FRAMES:** A coating which is applied in a shop environment and is used to protect prefabricated aluminum window frames, window walls and door frames, and which is required to meet the specifications of Architectural Aluminum Manufacturers Association AAMA 605.2-1980.

206 **APPLICATION EQUIPMENT:** A device used to apply coatings or used in preparing a coating material, such as stir sticks or funnels.

207 **APPURTENANCES:** Accessories to a stationary structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools and concrete forms.

208 **BAKED COATING:** Any coating which is heated above 194^{o}F (90^{o}C) for the purpose of curing or drying.

209 **CAMOUFLAGE COATING:** A coating applied as a topcoat on equipment to conceal such equipment from detection.

210 **CLEANUP MATERIAL:** A VOC-containing material used to clean parts and application equipment used in miscellaneous metal parts and products coating operations.

211 **CLOSED CONTAINER:** A container whose cover meets with the main body of the container without any visible gaps between the cover and the main body of the container.

212 **CAN COATING:** Any coating containing organic materials and applied or intended for application by spray, roller, or other means onto the interior and/or exterior of metal cans, drums, pails or lids.

213 **COATING:** A material applied to a surface to identify, beautify, protect, convey a message, or minimize detection of such surface. Such materials include, but are not limited to paints, varnishes, sealers and stains.

214 **COATING REMOVER:** (See STRIPPER, Section 265)

215 **COILS:** Material sheets or strips which are rolled into coils for further industrial or commercial use.

216 **CONFORMAL COATING:** A coating applied to electronic circuit boards or the assembled components for the purpose of moisture resistance, corrosion resistance, bacteria resistance, or fungi resistance.

217 **CURED MATERIAL:** An adhesive, coating or ink that is dry to the touch.

218 **DIP COAT:** A coating method which is applied by dipping an object into a vat of coating material, and allowing any excess coating material to drain off.

219 **ELECTRICAL INSULATING COATING:** A coating which is applied to electrical components expressly for the purpose of electrical insulation.

220 **ELECTRICAL INSULATING VARNISH:** A varnish coating which is applied to electrical components.

221 ELECTROCOATING: A process that uses coating concentrates or pastes added to a water bath. The coating is applied by using an electrical current in either an anodic or cathodic process.

222 ELECTROSTATIC APPLICATION: A process that applies coating particles or coating droplets to a grounded substrate by electrically charging them.

223 ENCLOSED GUN WASHER: A spray gun washing system that has an enclosed solvent container, and which uses non-atomized solvent flow to flush the spray equipment and then collects and returns the discharged solvent to the enclosed container.

224 ETCHING FILLER: A coating that contains less than 23 percent solids, by weight, and at least 0.5 percent acid by weight, and which is used instead of applying a pretreatment coating followed by a primer.

225 EXEMPT COMPOUNDS: For a current listing of exempt compounds, see Rule 102, Definitions.

226 EXTREME HIGH GLOSS COATING: A coating which, when tested in accordance with ASTM Test Method D-523-1989, has a reflectance of 85 percent or more on a 60^0 meter.

227 EXTREME PERFORMANCE COATING: A coating applied to a metal surface where the coated surface, in its intended use, is frequently or chronically exposed to any of the following:

227.1 Corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solution.

227.2 Repeated exposure to temperatures in excess of 250^oF (121^oC).

227.3 Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents.

228 FLOW COAT: A coating method which is applied by flowing a stream of coating over an object and allowing any excess material to drain.

229 HAND COATING: The application of coatings by manually-held, non-mechanically operated equipment. Such equipment includes paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers and sponges.

230 HAND LETTERING: A method utilizing hand application equipment to add letters and/or numbers on a substrate:

231 HEAT-RESISTANT COATINGS: A coating which is applied to a substrate that must withstand a temperature of at least 400^oF (204^oC) during normal use.

232 HIGH PERFORMANCE ARCHITECTURAL COATING: A coating used to protect architectural subsections and which is required to meet the specifications of the Architectural Aluminum Manufacturer Association's publication number AAMA 605.2-1980.

233 HIGH TEMPERATURE COATING: A coating applied to a substrate that must withstand a temperature of 1000^oF (538^oC) during normal use.

234 HIGH VOLUME, LOW PRESSURE (HVLP) APPLICATION EQUIPMENT: Equipment used to apply coatings by means of a gun which is designed to be operated, and which is operated between 0.1 and 10 psig air pressure, measured dynamically at the center of the air cap and at the air horns.

235 IRIDESCENT COATING: Any coating which contains more than 0.042 lb/gal (5.0 g/l) of iridescent particles, as applied, where such particles are visible in the dried film.

236 KEY SYSTEM OPERATING PARAMETER: A variable that is critical to the operation of an emission control system and that ensures both operation of the system within the system manufacturer's specifications, and compliance with the overall system efficiency standard required by Section 304. Such variables may include, but are not limited to, hours of operation, temperature, flow rate and pressure.

237 LOW VOLUME, LOW PRESSURE (LVLP) APPLICATION EQUIPMENT: Equipment used to apply coatings by means of a gun which is designed to be operated, and which is operated between 0.1 and 10 psig air pressure, with air volume less than 15.5 cfm per spray gun, and which operates at a maximum fluid delivery pressure of 50 psig.

238 MAGNETIC DATA STORAGE DISC: A flat film or plate with a magnetic coating on which digital information can be stored by selective magnetization of portions of the flat surface.

239 MAINTENANCE CLEANING: The cleaning of tools, forms, molds, jigs, machinery and equipment, and the cleaning of work areas where maintenance or manufacturing occurs.

240 METAL PARTS AND PRODUCTS: Any components or complete units fabricated from metal, except those subject to the provisions of other District source-specific rules.

241 METALLIC COATING: A coating which contains more than 0.042 lb/gal (5.0 g/l) of metal particles, as applied, where such particles are visible in the dried film.

242 MILITARY SPECIFICATION: A coating which has a formulation approved by a United States Military Agency for use on military equipment.

243 MOLD-SEAL COATING: The initial coating applied to a new mold or repaired mold and associated tooling to provide a smooth surface which, when coated with a mold release material, prevents products from sticking to the mold or to the tooling.

244 MOTOR VEHICLE: A passenger car, light duty truck, medium-duty vehicle, or heavy-duty vehicle as defined in Section 1902, Title 13, of the California Administrative Code.

245 MULTI-COMPONENT COATING: A coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.

246 NON-ABSORBENT CONTAINER: A container made of non-porous material that does not allow the migration of solvents through the container.

247 NON-SKID COATING: Any coating which has, as its primary purpose, the creation of traction to prevent slippage.

248 ONE-COMPONENT COATING: A coating that is ready for application as it comes out of its container to form an acceptable dry film.

249 OPTICAL ANTI-REFLECTIVE COATING: A coating with a low reflectance in the infrared and visible wavelength range, and is used for anti-reflection on or near optical and laser hardware.

250 PAN BACKING COATING: A coating applied to the surfaces of pots or other cooking implements that are exposed directly to a flame or other heating elements.

251 PERFORMANCE TEST: The application of coatings and the use of cleaning solvents at paint manufacturing facilities, while conducting tests on the materials to verify performance with the requirements of this rule.

252 POLYESTER RESIN MATERIALS: Materials including, but not limited to, unsaturated polyester resins such as isophthalic, orthophthalic, halogenated, biphenol A, vinyl ester, furan resins, cross-linking agents, catalysts, gel coats, inhibitors, accelerators, promoters, and any other VOC-containing materials in polyester resin coating operations.

253 POLYESTER RESIN OPERATIONS: All mixing, pouring, forming, spraying and other production operations, including rework and cleanup activities.

254 POWDER COATING: Any coating applied as a dry (without solvent or other carrier) finely divided solid, which when melted and fused, adheres to the substrate as a paint film.

255 PREFABRICATED ARCHITECTURAL COMPONENT: Prefabricated metal parts and products which are to be used as architectural appurtenances or structures and which are coated in a shop environment, not including window frames and door frames.

256 PRETREATMENT WASH PRIMER: A coating which contains no more than 12 percent solids (by weight) and at least 0.5 percent acid (by weight), and which is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion and ease of stripping.

257 REPAIR COATING: A coating used to recoat portions of a product which has sustained mechanical damage to the coating following normal painting operations.

258 ROLL COATER: A coating device that contains a series of mechanical rollers that apply a thin coating film onto the surface of a roller, which is then applied to a substrate by moving the substrate beneath the roller.

259 SAFETY- INDICATING COATING: A coating which is formulated to produce a color change when it is exposed to an unsafe condition, such as a high temperature or an unsafe concentration of gas.

260 SILICONE RELEASE COATING: A coating which contains silicone resin, and which is intended to prevent food from sticking to metal surfaces such as baking pans.

261 SOLAR-ABSORBENT COATING: A coating which has as its prime purpose the absorption of solar radiation.

262 SOLID FILM LUBRICANT: A very thin coating consisting of a binder system containing as its chief pigment material one or more of the following materials: molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE), or other solid that acts as a dry lubricant between closely-fitting surfaces.

263 STATIONARY SOURCE: Any building, structure, facility, or emissions unit which emits or may emit any affected pollutant directly or as a fugitive emission.

263.1 "Building, structure, facility, or emission unit" includes all pollutant emitting activities which:

263.1.1 Belong to the same industrial grouping, and

263.1.2 Are located on one property or two or more contiguous properties, and

263.1.3 Are under the same common ownership, operation, or control, or which are owned or operated by entities which are under common control.

263.2 Pollutant emitting activities shall be considered as part of the same industrial grouping if:

263.2.1 They belong to the same two-digit Standard Industrial Classification (SIC) code, or

263.2.2 They are part of a common production process, which includes industrial processes, manufacturing processes and any connected processes involving a common material.

264 STENCIL COATING: A coating which is applied by a template or stamp in order to add designs, letters and/or numbers to the product.

265 STRIPPER (OR COATING REMOVER): A material applied to the surface of any metal part or product to completely remove maskants, coatings or coating residues. A stripper is not a surface preparation material or cleanup material. Material used for the removal of overspray is not considered a coating remover.

266 SURFACE PREPARATION: A process where a VOC-containing material is applied to the surface of any miscellaneous metal part or product to clean the substrate or to promote adhesion of subsequent coatings, prior to the application of those coatings.

267 TEXTURED FINISH: A rough surface produced by spraying and splattering large drops of coating onto a previously applied coating. The coatings used to form the appearance of the textured finish are referred to as “textured coatings”.

268 TOUCH-UP COATING: A coating used to cover minor coating imperfections appearing after the main coating operation.

269 TRANSFER EFFICIENCY: The ratio of the weight or volume of coating solids adhering to an object, to the total weight or volume, respectively, of coating solids used in the application process, expressed as a percentage.

270 VACUUM-METALIZING COMPOUND: The undercoat applied to the substrate on which the metal is deposited, or the overcoat applied directly to the metal film.

271 VOLATILE ORGANIC COMPOUND (VOC): For the purposes of this rule, “volatile organic compound” has the same meaning as in Rule 102, Definitions.

272 VOLATILE ORGANIC COMPOUND (VOC) AS APPLIED: For the purposes of this rule, “volatile organic compound as applied” means the VOC content including thinners, reducers, hardeners, retarders, catalysts and additives, calculated pursuant to Sections 403 or 404, as applicable.

300 STANDARDS

301 LIMITS: VOC CONTENT OF COATINGS FOR METAL PARTS AND PRODUCTS: Except for materials and processes listed in Sections 104 or 105, no person shall apply any coatings to a metal part or product, or use VOC-containing solvents, if such materials have a VOC content exceeding the applicable limits specified in the following Table 1. The VOC content of coating materials shall be determined in accordance with Sections 403. The VOC content of solvents, strippers and cleanup materials, shall be determined in accordance with Sections 404.

Table 1 - VOC Content Limits for Coatings and Materials Used to Coat Metal Parts and Products

Coating or Material Type	VOC Limit, grams/liter (lb/gal), (Less water and exempt compounds)	
	Baked	Air-Dried
General (One Component)	275 (2.3)	275 (2.3)
General (Multi-Component)	275 (2.3)	340 (2.8)
Specialty Coatings		
Camouflage	360 (3.0)	420 (3.5)
Electric Insulating Varnish	420 (3.5)	420 (3.5)
Etching Filler	420 (3.5)	420 (3.5)
Extreme Performance	360 (3.0)	420 (3.5)
Extreme High Gloss	360 (3.0)	340 (2.8)
Heat Resistant	360 (3.0)	420 (3.5)
High Performance Architectural	420 (3.5)	420 (3.5)
High Temperature	420 (3.5)	420 (3.5)
Metallic and Iridescent Coating	360 (3.0)	420 (3.5)
Military Specification	275 (2.3)	340 (2.8)
Mold Seal Coating	420 (3.5)	420 (3.5)
Pan Backing Coating	420 (3.5)	420 (3.5)
Pretreatment Wash Primer	275 (2.3)	340 (2.8)
Prefabricated Architectural	275 (2.3)	420 (3.5)
Repair Coating	360 (3.0)	420 (3.5)
Silicone Release Coating	420 (3.5)	420 (3.5)
Solar Absorbent Coating	360 (3.0)	420 (3.5)
Touch-Up Coating	360 (3.0)	420 (3.5)
Vacuum Metalizing	420 (3.5)	420 (3.5)

302 APPLICATION METHODS: A person shall not apply coatings to metal parts and products subject to the provisions of this rule unless the coatings are applied using properly operated equipment, and by using either: one of the following application methods or any other high transfer efficiency application method which has been approved in advance, in writing, by the Air Pollution Control Officer and United States Environmental Protection Agency:

302.1 Electrostatic attraction, operated in accordance with manufacturer's recommendations.

302.2 High-Volume, Low-Pressure (HVLP) spray system operated in accordance with manufacturer's recommendations.

302.3 Low-Volume, Low-Pressure (LVLP) spray system operated in accordance with manufacturer's recommendations.

302.4 Flow Coat

302.5 Dip Coat

302.6 Hand Coat

302.7 Roll Coat

303 SURFACE PREPARATION AND CLEAN-UP REQUIREMENTS:

303.1 A person shall not use materials which have a VOC content in excess of 200 grams per liter (1.67 pounds/gallon) of material for stripping any coating governed by this rule.

303.2 Before August 20, 2010, a person shall not perform product cleaning with any material containing VOC in excess of 72 grams per liter (0.6 pounds per gallon).

303.3 Before August 20, 2010, except for electrostatic spray guns, a person shall not use VOC-containing materials for the clean-up of equipment used in coating operations unless (1) the equipment is disassembled and cleaned in an enclosed gun washer, or (2) the VOC content of the cleaning material used does not exceed 72 grams per liter (0.6 pounds per gallon).

303.4 After August 20, 2010, a person shall not perform cleanup of application equipment (including spray gun nozzles), product cleaning, or surface preparation, with a material containing VOC in excess of 25 grams per liter (0.21 pounds per gallon).

304 WORK PRACTICE REQUIREMENTS:

304.1 Spillage of VOC-containing materials shall be minimized.

304.2 VOC-containing materials and used shop towels or sponges shall be stored and disposed of in closed containers. Storage and disposal containers must be kept closed, except when depositing or removing the materials. Disposal shall be conducted in a manner that the VOC are not emitted to the atmosphere.

304.3 VOC-containing materials shall be conveyed in closed containers or pipes.

305 EMISSION CONTROL EQUIPMENT: As an alternative to using materials that meet the VOC limits in Sections 301, a person may comply with the VOC provisions of this rule by using a District-approved emission control equipment system. Such compliance may be demonstrated by a system to capture and control emissions, which will reduce VOC emissions by at least 95% by weight.

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION: No person shall require for use or specify the application of any coating subject to the provisions of this rule that does not meet the limits and requirements of this rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating is to be applied to any metal parts or product at any physical location within the District.

402 PRODUCT INFORMATION REQUIREMENTS FOR SELLERS: Any person who sells any coating, coating remover (stripper), surface preparation or cleanup material subject to this rule, shall provide the following information on material data sheets made available to the purchaser at the time of sale:

402.1 The material type by name/code/manufacturer.

402.2 For coating materials, the maximum VOC content of the material, as applied, after any mixing or thinning as recommended by the manufacturer: VOC content shall be displayed as grams per liter (pounds per gallon) of coating, excluding water and exempt compounds, pursuant to Section 403.

402.3 For coating removers (strippers), surface preparation and cleanup materials, the maximum VOC content of the material, as applied, after any mixing or thinning as recommended by the manufacturer: VOC content shall be displayed as grams per liter (pounds per gallon) of material, including water and exempt compounds, pursuant to Section 404.

402.4 For all materials, recommendations regarding thinning, reducing, or mixing with any VOC-containing material, as defined in Section 270.

402.5 For all materials, VOC content may be calculated using product formulation data, or may be determined using the test method in Section 503.1.

403 DETERMINATION OF VOC CONTENT OF COATINGS, LESS WATER AND EXEMPT COMPOUNDS: The weight of VOC per combined volume of VOC and coating solids shall be calculated by the following equation:

$$G = \frac{W_v - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where: G = Weight of VOC per liter of coating, less water and exempt compounds
W_v = Weight of volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of coating material, in liters
V_w = Volume of water in liters
V_{ec} = Volume of exempt compounds, in liters.

404 DETERMINATION OF VOC CONTENT PER LITER OF COATING REMOVERS (STRIPPERS), SURFACE PREPARATION MATERIALS, AND CLEANUP MATERIALS: The weight (in grams) of VOC per liter of coating materials shall be calculated by the following equation:

$$G = \frac{W_v - W_w - W_{ec}}{V_m}$$

Where: G = Weight of VOC per total volume of material, in grams per liter.
W_v = Weight of all volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of coating material, including any added VOC-containing solvents or reducers, but excluding any colorants added to tint the base, in liters.

405 OPERATION AND MAINTENANCE PLAN: A person using an emission control system pursuant to Section 304, as a means of alternate compliance with this rule, must submit an Operation and Maintenance Plan for the emission control system to the Air Pollution Control Officer for approval. A person proposing to install a new emission control as a means of alternate compliance with this rule shall submit in addition to an Operation and Maintenance Plan, an application for Authority to Construct, pursuant to Rule 501, General Permit Requirements. The plan shall specify operating and maintenance procedures which will demonstrate continuous operation of the emission control system during periods of emission-producing operations. The Plan shall also specify which records must be kept to document these operating and maintenance procedures. These records shall comply with the requirements of Sections 501. The plan shall be implemented upon approval of the Air Pollution Control Officer.

500 MONITORING AND RECORDS

501 RECORDKEEPING: In addition to any applicable record-keeping requirements of either Rule 502, New Source Review, Rule 507, Federal Operating Permit Program, Rule 511, Potential

To Emit, or any other District Rule which might be applicable, any person applying coating products, surface preparation solvents, cleanup solvents, or strippers subject to any provision of this rule shall maintain the following records for non-exempt materials in order to evaluate compliance:

501.1 Product Data: A list of currently used coating products, surface preparation solvents, cleanup solvents or strippers subject to this rule. This list shall include all of the following data for each material used:

501.1.1 The material's manufacturer, product name and product number or code.

501.1.2 Classification according to the terminology used in Sections 301, 302 and 303. (e.g." Extreme-Performance Coating", "Mold-Seal Coating", "Stripper", etc.).

501.1.3 The material's VOC content as applied, determined according to Sections 403 and 404, when used in the mixing ratios recommended by the manufacturer.

501.1.4 The actual mixing ratio, if different from the manufacturer's recommendation, used in applying the material.

501.2 Product Usage and Frequency: Any person using materials regulated by this rule shall record and maintain records of the volume used per month of each individual material as listed pursuant to Section 501.1.

501.3 Emission Control Equipment Records:

501.3.1 A person using emission control equipment as a means of alternate compliance pursuant to Section 304, shall maintain records on a daily basis, showing the type and volume of coatings and solvents used.

501.3.2 A person using emission control equipment as a means of alternate compliance with this rule pursuant to Section 304, shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control system during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with the requirements of Section 304, and as defined in Section 235.

501.4 Retention of Records: All records required by this rule shall be retained for at least three years, except for sources subject to Rule 507, Federal Operating Permit Program, which shall be retained for at least five years. Such records shall be made available to the Air Pollution Control Officer, upon request.

502 VOC EMISSION THRESHOLD: If VOC emissions for any calendar year exceed 10,000 pounds, additional recordkeeping documentation will be required per Rule 511, Potential To Emit.

503 TEST METHODS:

503.1 Determintation of VOC Content: VOC content of coatings, solvents, strippers and surface preparation materials shall be determined in accordance with United States Environmental Protection Agency (USEPA) Method 24 or Method 24A.

503.2 Determination of Compounds Exempt From VOC Definition: Exempt compounds referenced in Section 224 and listed in Rule 102, Definitions, shall be determined in accordance with ASTM D 4457-85 "Standard Test Method for Determination of

Dichloromethane and 1,1,1-Tricholorethane in Paints and Coatings by Direct Injection into a Gas Chromatograph" or California Air Resources Board Method 432 "Determination of Dichloromethane and 1,1,1-Tricholorethane in Paints and Coatings". If any perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present and the USEPA-approved test method used to make the determination of these compounds.

503.3 Determination of Control Efficiency: Control efficiency of emissions control equipment referenced in Section 304, shall be determined in accordance with USEPA Method 25 or 25A: and USEPA Method 2 or 2C (whichever is applicable). USEPA Method 18 or CARB Method 422 "Determination of Volatile Organic Compounds in Emissions from Stationary Sources" may be used to determine emissions of exempt compounds.

503.4 Determination of Collection Efficiency: Collection efficiency of the control equipment referenced in Section 304 shall be determined in accordance with U.S.EPA's "Guidelines for Determining Capture Efficiency, January 9, 1995". Individual collection efficiency test runs subject to the U.S.EPA's technical guidelines shall be determined by:

503.4.1 40 CFR 51, Appendix M, Methods 204-204F; or

503.4.2 The South Coast AQMD "Protocol for Determination of Volatile Organic Compound (VOC) Capture Efficiency"; or

503.4.3 Any other method approved by the USEPA, the California Air Resources Board, and the Air Pollution Control Officer.

503.5 Metallic/Iridescent Topcoat: The determination of a coating as metallic/iridescent shall be made using the South Coast Air Quality Management District "Spectrographic Method for the Analysis of Carbon Dust and Carbon Laminates, December 1985".

503.6 Acid Content: The acid content of pretreatment wash primers shall be measured and reported in accordance with South Coast Air Quality Management District "Laboratory Methods for Analysis for Enforcement Samples", and ASTM D1613-06 "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products".

503.7 Emissions From Spray Gun Cleaning Systems: Determination of emissions of VOC from spray gun cleaning systems shall be made using South Coast Air Quality Management District "General Method for Determining Solvent Losses From Spray Gun Cleaning Systems", October 1989.

503.8 Transfer Efficiency: Determination of transfer efficiency shall be made using South Coast Air Quality Management District Test Method "Spray Equipment Transfer Efficiency Test Procedure for Equipment Users", May 24, 1989.

503.9 Multiple Test Methods: When more than one test method or a set of test methods is specified for any testing, 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.

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RULE 246 NATURAL GAS-FIRED WATER HEATERS

Adopted 6-19-97

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 BRITISH THERMAL UNIT
202 HEAT INPUT
203 HEAT OUTPUT
204 JOULE
205 MOBILE HOME
206 MOBILE HOME WATER HEATER
207 NATURAL GAS
208 NATURAL GAS-FIRED WATER HEATER
209 NANOGRAM
210 RATED HEAT INPUT CAPACITY
211 RECREATIONAL VEHICLE
212 STORAGE TANK CAPACITY
213 SWIMMING POOLS AND HOT TUBS

300 STANDARDS

301 NITROGEN OXIDES EMISSION LIMIT

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE
402 CERTIFICATION REQUIREMENT
403 MANUFACTURERS= LABELING REQUIREMENT

500 MONITORING AND RECORDS

502 RETENTION OF RECORDS
501 TEST METHOD

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100 GENERAL

101 PURPOSE: To limit the emission of nitrogen oxides (NO_x) from natural gas-fired water heaters.

102 APPLICABILITY:

102.1 Geographic: The provisions of this rule apply to all of Placer County.

102.2 General: This rule shall apply to any person who manufactures, distributes, offers for sale, sells, or installs any natural gas-fired water heater with a rated heat input capacity less than 75,000 British Thermal Units per hour (BTU/hr), for use in this District.

103 EXEMPTIONS:

103.1 Exemption, Large Natural Gas-Fired Water Heaters: Water heaters with a rated heat input of 75,000 BTU/hr or greater are exempt from all provisions of this rule.

103.2 Exemption, Recreational Vehicles: Natural gas-fired water heaters used in recreational vehicles are exempt from all provisions of this rule.

103.3 Exemption, Swimming Pools and Hot Tubs: Natural gas-fired water heaters used exclusively to heat swimming pools and hot tubs are exempt from all provisions of this rule.

103.4 Exemption, Other Fuels: Water heaters using any fuel other than natural gas are exempt from all provisions of this rule.

200 DEFINITIONS

201 BRITISH THERMAL UNIT: The amount of heat energy required to raise the temperature of one pound of water from 59^0 F to 60^0 F at one atmosphere pressure

202 HEAT INPUT: The amount of heat energy released by natural gas burned in a natural gas-fired water heater. It is calculated during certification testing in accordance with the test method referenced in Section 502.

203 HEAT OUTPUT: The amount of heat energy, H_o, in British Thermal Units (BTU), absorbed by the water being heated during the process of natural gas-fired water heater testing in accordance with the protocol referenced in Section 502. It is calculated using the following equation:

$$H_o = MC_{pi} (T_{del} - T_{in}) + V_{st} D_n C_{p2} (T_{max} - T_o)$$

Where:
- H_o = Heat output, in BTU
- M = Mass of the water withdrawn, in pounds
- C_{pi} = Specific heat of water at the average temperature $[(T_{del} + T_{in}) / 2]$, BTU per pound per ^oF
- T_{del} = Average delivery temperature, ^oF.
- T_{in} = Average inlet temperature, ^oF.
- V_{st} = Storage tank capacity, in gallons, as determined in Section 212
- D_n = Density of water at the average temperature $[(T_{max} + T_o)/2]$, pounds per gallon

C_{p2} = Specific heat of water at the average temperature, $[(T_{max} + T_o)/ 2]$, BTU per pound per ^oF.

T_{max} = Maximum mean tank temperature recorded after cutout following the test draw, ^oF.

T_o = The maximum mean tank temperature recorded prior to the test draw, ^oF.

204 JOULE: A unit of heat energy output equal to 9.4799×10^{-4} BTU.

205 MOBILE HOME: A residential dwelling, designed and manufactured to be movable from site to site as desired by the owner/occupant, and that is not a Recreational Vehicle as defined in Section 211.

206 MOBILE HOME WATER HEATER: A natural gas-fired water heater manufactured exclusively for mobile home use.

207 NANOGRAM: A unit of mass equal to one billionth of a gram, or 10^{-9} gram.

208 NATURAL GAS: A mixture of gaseous hydrocarbons containing at least 80 percent methane by volume as determined according to American Standard Test Method (ASTM) D1945-64.

209 NATURAL GAS-FIRED WATER HEATER: A closed vessel in which water is heated by the combustion of natural gas and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210^0 F (99^0 C).

210 RATED HEAT INPUT CAPACITY: The heat input capacity specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different from the heat input capacity specified on the nameplate, the actual heat input capacity, as certified by the Manufacturer or Certified technician, shall be considered as the rated heat input capacity.

211 RECREATIONAL VEHICLE: A motor home, travel trailer, truck camper, or camping trailer, with or without motive power, designed for human habitation for recreational, emergency, or other occupancy, and which meets all of the following criteria: (1) contains less than 320 square feet of internal living room area, excluding built-in equipment, including, but not limited to wardrobe, closets, cabinets, kitchen units or fixtures, and bath or toilet rooms; (2) contains 400 square feet or less of gross area measured at maximum horizontal projections; (3) is built on a single chassis and (4) is either self propelled, truck mounted, or permanently towable on the highways without a permit.

212 STORAGE TANK CAPACITY: The capacity of the natural gas-fired water heater in gallons. It is calculated using the following equation:

$$V_{st} = (W_f - W_t) / D_s$$

Where: Vst = Storage capacity of the water heater, in gallons

W_f = Weight of the water heater completely filled with water, in pounds

W_t = Weight of the empty water heater, in pounds

D_s = Density of water at the test temperature, in pounds per gallon

213 SWIMMING POOLS AND HOT TUBS: (For the purposes of Section 103.4 of this rule) Residential only, single-dwelling, recreational and personal therapeutic equipment, including in-ground swimming pools, above-ground swimming pools, spas and hot tubs.

300 STANDARDS

301 NITROGEN OXIDES EMISSION LIMIT: A person shall not distribute, offer for sale, sell or install, any natural gas-fired water heater within the District, unless it meets either of the following standards:

301.1 A natural gas-fired water heater that emits less than or equal to 40 nanograms of nitrogen oxides [calculated as NO_2] per joule (93 pounds per billion BTU) of heat output; and is certified in accordance with Section 402.

301.2 A mobile home natural gas-fired water heater that emits less than or equal to 50 nanograms of nitrogen oxides [calculated as NO_2] per joule (116 pounds per billion BTU) of heat output; and is certified in accordance with Section 402.

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE: Effective January 1, 1998, no person shall distribute, offer for sale, sell or install any natural gas-fired water heater which does not comply with the requirements of Section 300.

402 CERTIFICATION REQUIREMENT:

402.1 A manufacturer of any natural gas-fired water heater subject to Section 300 shall submit to the Air Pollution Control Officer (APCO) at least 30 days prior to sale, a statement obtained from an independent testing laboratory, certifying that the laboratory tested the unit in accordance with the method in Section 502 of this rule, and that it is in compliance with the provisions of Section 300. The statement shall be signed and dated, and shall attest to the accuracy of all information. The statement shall include the brand name, model number, the heat input capacity rating as it appears on the water heater rating plate, and test results in accordance with Section 502;

OR

402.2 A manufacturer shall submit to this District an approved South Coast Air Quality Management District (SCAQMD) certification obtained from an independent testing laboratory. Any model of natural gas-fired water heater certified as complying with the SCAQMD Rule 1121 prior to July 1, 1995, need not be recertified to the test protocol specified in Section 502 until such time as required by the SCAQMD.

402.3 A manufacture shall submit a new certification or certification statement meeting the requirements of Section 402.1 or Section 402.2 for any natural gas-fired water heater, the design of which is changed in any manner which may alter the emissions from the water heater. New certifications or certification statements, for either altered or new models, shall be submitted to the APCO at least 30 days before the water heater is offered for sale in the District.

403 MANUFACTURERS' LABELING REQUIREMENT: A manufacturer shall display the model number of the water heater complying with Section 300 on the shipping carton and on the rating plate of each water heater unit. The manufacturer shall also display the certification status on the shipping carton and on the water heater. A label stating "Certified per South Coast Air Quality Management District, Rule 1121" or equivalent language, will meet the shipping carton label requirement of this section.

500 MONITORING AND RECORDS

501 RETENTION OF RECORDS: A manufacturer shall keep test data, calculations, reports and other certification records for as long as the water heater model is offered for sale or sold in the District, or for three calendar years after manufacture, whichever is longer. These records shall be made available to the Air Pollution Control Officer upon request.

502 TEST METHOD: Any natural gas-fired water heater distributed, offered for sale, sold, or installed within the District Shall be tested in accordance with the South Coast Air Quality Management District Protocol: "Nitrogen Oxides Emission Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers, January 1995".

RULE 247 NATURAL GAS-FIRED WATER HEATERS, SMALL BOILERS AND PROCESS HEATERS

Adopted 10-10-13
(Amended 2/13/14)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 BOILER, STEAM GENERATOR OR WATER HEATER
202 BRITISH THERMAL UNIT (BTU)
203 NATURAL GAS
204 POOL/SPA HEATER
205 PROCESS HEATER
206 RATED HEAT INPUT CAPACITY
207 RECREATIONAL VEHICLE

300 STANDARDS

301 NITROGEN OXIDES EMISSION LIMIT

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE
402 CERTIFICATION REQUIREMENT
403 MANUFACTURER'S LABELING

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 TEST METHOD

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100 GENERAL

101 PURPOSE: To limit the emissions of oxides of nitrogen (NOx) from the use of natural gas-fired water heaters, small boilers and process heaters.

102 APPLICABILITY: The provisions of this rule shall apply to any person that offers for sale, sells, or installs any natural gas-fired water heater, boiler or process heater with a rated heat input capacity of greater than or equal to 75,000 British Thermal Units per hour (Btu/hr) and less than 5 million Btu/hr in Placer County.

103 EXEMPTIONS: The provisions of the Rule shall not apply to:

103.1. Water heaters used in recreational vehicles.

103.2. Water heaters used to heat pools/spas with a rated heat input capacity less than or equal to 400,000 Btu/hr.

103.3. Any propane-fired heating equipment.

200 DEFINITIONS: Unless otherwise defined below, the terms used in this rule are defined in Rule 102, DEFINITIONS.

201 BOILER, STEAM GENERATOR OR WATER HEATER: Any equipment fired with natural gas to produce hot water or steam.

202 BRITISH THERMAL UNIT (BTU): The amount of heat required to raise the temperature of one pound of water from 59° F to 60° F at one atmosphere.

203 NATURAL GAS: A mixture of gaseous hydrocarbons containing at least 80 percent methane by volume as determined according to ASTM Test Method D1945-03.

204 POOL/SPA HEATER: A device through which water is heated when pool or spa water circulates through a heat exchanger.

205 PROCESS HEATER: Combustion equipment which transfers heat from combustion gases to a liquid process stream other than water.

206 RATED HEAT INPUT CAPACITY: The heat input capacity specified on the nameplate of the combustion unit. If the combustion unit has been physically altered or modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the new maximum heat input shall be considered as the rated heat input capacity.

207 RECREATIONAL VEHICLE: Any vehicle used for recreational purposes and designed to include a natural gas-fired water heater and is required to be licensed to be driven or moved on the highways of California.

300 STANDARDS

301 NITROGEN OXIDES EMISSION LIMIT: No person shall offer for sale, sell, or install any natural gas-fired water heater, boiler or process heater subject to this rule with oxides of nitrogen (NOx) emissions in excess of 20 ppmv @ 3 percent oxygen.

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE: Effective January 1, 2015, no person shall offer for sale, sell or install any natural gas-fired water heater, boiler or process heater which does not comply with the requirements of Section 300.

402 CERTIFICATION REQUIREMENT:

402.1 A manufacturer of any water heater, boiler or process heater subject to Section 300 shall submit to the Air Pollution Control Officer (APCO) at least 30 days prior to sale, a statement that the unit is in compliance with the provisions of Section 300. The statement shall be signed and dated, and shall attest to the accuracy of all information. The statement shall include the brand name, model number, the heat input capacity rating as it appears on the rating plate, or

402.2 A manufacturer shall submit to this District an approved South Coast Air Quality Management District (SCAQMD) certification obtained from an independent testing laboratory. Any model of natural gas-fired water heater, boiler or process heater certified as complying with the SCAQMD Rule 1146.1 or Rule 1146.2 need not be recertified to the test protocol specified in Section 502. A certification of a model to San Joaquin Qir Quality Management District Rule 4307 will also be accepted.

403 MANUFACTURER'S LABELING: A manufacturer shall display the model number of the water heater, boiler or process heater on the permanent rating plate of each unit. The manufacturer shall also display the certification status on the unit. If a shipping carton is used which obscures the labeling on the unit, the manufacturer shall display the model number and certification status on the carton.

500 MONITORING AND RECORDS

501 RECORDKEEPING: A manufacturer shall keep certification reports, test reports, and certification statements for as long as the water heater, boiler or process heater model is offered for sale, sold, or installed within the District, or for five years, whichever is longer.

502 TEST METHOD: The manufacturer shall have each water heater, boiler, or process heater subject to this rule tested in accordance with one of the following:

502.1 South Coast Air Quality Management District Protocol: "Nitrogen Oxides Emission Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers".

502.2 South Coast Air Quality Management District Test Method 100.1

502.3 EPA Reference Test Method 7E (40 CFR 60, Appendix A)

502.4 A manufacturer that has certified a unit model to demonstrate compliance with a State or local agency rule that meets the requirements of this Rule may submit the test results to the District in lieu of conducting duplicative testing.

RULE 249 SURFACE COATING OF PLASTIC PARTS AND PRODUCTS

Adopted 8-8-13

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 SEVERABILITY
104 EXEMPTIONS - LOW USAGE OF MATERIALS EXCEEDING VOC CONTENT LIMITS
105 EXEMPTIONS - SPECIFIC OPERATIONS AND COATINGS
106 PARTIAL EXEMPTIONS

200 DEFINITIONS

201 ADHESIVE
202 AEROSOL CONTAINER
203 APPLICATION EQUIPMENT
204 CLEANUP MATERIAL
205 CLOSED CONTAINER
206 ELECTRIC DISSIPATING COATING AND SHOCK-FREE COATING
207 EXEMPT COMPOUNDS
208 EXTREME PERFORMANCE COATING
209 FLOW COAT
210 HAND COATING
211 HIGH VOLUME, LOW-PRESSURE (HVLP) APPLICATION EQUIPMENT
212 KEY SYSTEM OPERATING PARAMETER
213 LOW VOLUME, LOW-PRESSURE (LVLP) APPLICATION EQUIPMENT
214 MAINTENANCE CLEANING
215 METALLIC COATING
216 MILITARY SPECIFICATION
217 MOLD-SEAL COATING
218 MULTI-COLORED COATING
219 MULT-COMPONENT COATING
220 ONE-COMPONENT COATING
221 OPTICAL COATING
222 PLASTIC PARTS AND PRODUCTS
223 TRANSFER EFFICIENCY
224 VACUUM-METALIZING COMPOUND
225 VOLATILE ORGANIC COMPOUND (VOC)
226 VOLATILE ORGANIC COMPOUND (VOC) AS APPLIED

300 STANDARDS

301 LIMITS: VOC CONTENT OF COATINGS FOR PLASTIC PARTS AND PRODUCTS
302 APPLICATION METHODS
303 SURFACE PREPARATION AND CLEAN-UP REQUIREMENTS
304 WORK PRACTICE REQUIREMENTS
305 EMISSION CONTROL EQUIPMENT

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION
402 PRODUCT INFORMATION REQUIREMENTS FOR SELLERS

403 DETERMINATION OF VOC CONTENT OF COATINGS, LESS WATER AND EXEMPT COMPOUNDS
404 DETERMINATION OF VOC CONTENT PER LITER OF COATING REMOVERS (STRIPPERS), SURFACE PREPARATION MATERIALS AND CLEANUP MATERIALS
405 OPERATION AND MAINTENANCE PLAN

500 MONITORING AND RECORDS

501 RECORDKEEPING
502 VOC EMISSION THRESHOLD
503 TEST METHODS

100 GENERAL

101 PURPOSE: To limit the emission of volatile organic compounds from the application of coatings, coating removers (strippers), surface preparation materials, and cleanup materials in plastic parts and products coating operations.

102 APPLICABILITY: The provisions of this rule apply to all of Placer County.

103 SEVERABILITY: If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity of the remaining portions of the rule.

104 EXEMPTIONS, LOW USAGE OF MATERIALS EXCEEDING VOC CONTENT LIMITS:

104.1 Low Usage of Non-Compliant Coating Materials: The VOC requirements of Section 301 of this rule shall not apply to coating operations where (1) the total volume of such non-compliant coatings is less than 55 gallons per calendar year, if substitute compliant coatings are not available, and (2) the requirements of Sections 401 and 501 are met.

105 EXEMPTIONS, SPECIFIC OPERATIONS AND COATINGS: This rule shall not apply to:

105.1 Coating of prefabricated architectural components or structures not coated in a shop environment and which are regulated by Rule 218, Architectural Coatings.

105.2 Motor vehicles including automotive, truck and heavy equipment which are regulated by Rule 234, Automotive Refinishing Operations.

105.3 Coating of metal cans, which is regulated by Rule 223, Metal Container Coating.

105.4 Coating of metal parts and products which are regulated by Rule 245, Surface Coating of Metal Parts and Products.

105.5 Adhesives and other materials which are regulated by Rule 235, Adhesives.

105.6 Polyester resin operations which is regulated by Rule 243, Polyester Resin Operations.

105.7 Coatings sold in non-refillable aerosol containers having a capacity of 1 liter (1.1 quarts, or 34 fluid ounces), or less.

105.8 Powder coatings.

106 PARTIAL EXEMPTIONS:

106.1 Coating operations used for repair and touchup are exempt from all sections of the rule except the application method requirements of Section 302, surface preparation and cleanup of Section 303, the work practices requirements of Section 304, and the recordkeeping requirements of Section 501 shall apply.

106.2 Coating operations used for stencil, safety indicating, solid film lubricating, electric insulating, thermal conduction, and magnetic data storage, are exempt from all sections of the rule except the application method requirements of Section 302, surface preparation and cleanup of Section 303, the work practices requirements of Section 304, and the recordkeeping requirements of Section 501 shall apply.

200 DEFINITIONS

201 ADHESIVE: Any substance that is used to bond one surface to another by attachment.

202 AEROSOL CONTAINER: A hand-held, non-refillable container which expels pressurized product ingredients by means of a propellant-induced force.

203 APPLICATION EQUIPMENT: A device used to apply coatings or used in preparing a coating material, such as stir sticks or funnels.

204 CLEANUP MATERIAL: A VOC-containing material used to clean parts and application equipment used in miscellaneous plastic parts and products coating operations.

205 CLOSED CONTAINER: A container whose cover meets with the main body of the container without any visible gaps between the cover and the main body of the container.

206 ELECTRIC DISSIPATING COATING AND SHOCK-FREE COATING: A coating that rapidly dissipates a high voltage electric charge.

207 EXEMPT COMPOUNDS: For a current listing of exempt compounds, see Rule 102, Definitions.

208 EXTREME PERFORMANCE COATING (2 PACK): A coating applied to a plastic surface where the coated surface, in its intended use, is frequently or chronically exposed to any of the following:

208.1 Corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solution.

208.2 Repeated exposure to temperatures in excess of 250^{o}F (121^{o}C).

208.3 Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents.

209 FLOW COAT: A coating method which is applied by flowing a stream of coating over an object and allowing any excess material to drain.

210 HAND COATING: The application of coatings by manually-held, non-mechanically operated equipment. Such equipment includes paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers and sponges.

211 HIGH VOLUME, LOW PRESSURE (HVLP) APPLICATION EQUIPMENT: Equipment used to apply coatings by means of a gun which is designed to be operated, and which is operated between 0.1 and 10 psig air pressure, measured dynamically at the center of the air cap and at the air horns.

212 KEY SYSTEM OPERATING PARAMETER: A variable that is critical to the operation of an emission control system and that ensures both operation of the system within the system manufacturer's specifications, and compliance with the overall system efficiency standard required by Section 305. Such variables may include, but are not limited to, hours of operation, temperature, flow rate and pressure.

213 LOW VOLUME, LOW PRESSURE (LVLP) APPLICATION EQUIPMENT: Equipment used to apply coatings by means of a gun which is designed to be operated, and which is operated between 0.1 and 10 psig air pressure, with air volume less than 15.5 cfm per spray gun, and which operates at a maximum fluid delivery pressure of 50 psig.

214 MAINTENANCE CLEANING: The cleaning of tools, forms, molds, jigs, machinery and equipment, and the cleaning of work areas where maintenance or manufacturing occurs.

215 METALLIC COATING: A coating which contains more than 0.042 lb/gal (5.0 g/l) of metal particles, as applied, where such particles are visible in the dried film.

216 MILITARY SPECIFICATION: A coating which has a formulation approved by a United States Military Agency for use on military equipment.

217 MOLD-SEAL COATING: The initial coating applied to a new mold or repaired mold and associated tooling to provide a smooth surface which, when coated with a mold release material, prevents products from sticking to the mold or to the tooling.

218 MULTI-COLORED COATING: A coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.

219 MULTI-COMPONENT COATING: A coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.

220 ONE-COMPONENT COATING: A coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

221 OPTICAL COATING: A coating applied to an optical lens.

222 PLASTIC PARTS AND PRODUCTS: Any components or complete units fabricated from plastic, except those subject to the provisions of other District source-specific rules

223 TRANSFER EFFICIENCY: The ratio of the weight or volume of coating solids adhering to an object, to the total weight or volume, respectively, of coating solids used in the application process, expressed as a percentage.

224 VACUUM-METALIZING COMPOUND: The undercoat applied to the substrate on which the metal is deposited, or the overcoat applied directly to the metal film. Vacuum metalizing/physical vapor deposition (PVD) is the process whereby metal is vaporized and deposited on a substrate in a vacuum chamber.

225 VOLATILE ORGANIC COMPOUND (VOC): For the purposes of this rule, "volatile organic compound" has the same meaning as in Rule 102, Definitions.

226 VOLATILE ORGANIC COMPOUND (VOC) AS APPLIED: For the purposes of this rule, "volatile organic compound as applied" means the VOC content including thinners, reducers, hardeners, retarders, catalysts and additives, calculated pursuant to Sections 403 or 404, as applicable.

300 STANDARDS

301 LIMITS: VOC CONTENT OF COATINGS FOR PLASTIC PARTS AND PRODUCTS: Except for materials and processes listed in Sections 104 or 105, no person shall apply any coatings to a plastic part or product, or use VOC-containing solvents, if such materials have a VOC content exceeding the applicable limits specified in the following Table 1. The VOC content of coating materials shall be determined in accordance with Section 403. The VOC content of solvents, strippers and cleanup materials, shall be determined in accordance with Sections 404.

Table 1 – VOC Content Limits for Coatings and Materials Used to Coat Plastic Parts and Products

	VOC As Applied Limit, grams/liter (lb/gal), (Less water and exempt compounds)
General One Component	275 (2.3)
General Multi-Component	420 (3.5)
Specialty Coatings	
Electric Dissipating and Shock-free	800 (6.7)
Extreme Performance (2 pack)	420 (3.5)
Metallic	420 (3.5)
Military Specification (1 pack)	335 (2.8)
Military Specification (2 pack)	420 (3.5)
Mold Seal	755 (6.3)
Multi-colored	680 (5.7)
Optical	800 (6.7)
Vacuum Metalizing	800 (6.7)

302 APPLICATION METHODS: A person shall not apply coatings to plastic parts and products subject to the provisions of this rule unless the coatings are applied using properly operated equipment, and by using either: one of the following application methods or any other high transfer efficiency application method which has been approved in advance, in writing, by the Air Pollution Control Officer and United States Environmental Protection Agency:

302.1 Electrostatic attraction, operated in accordance with manufacturer's recommendations.

302.2 High-Volume, Low-Pressure (HVLP) spray system operated in accordance with manufacturer's recommendations.

302.3 Low-Volume, Low-Pressure (LVLP) spray system operated in accordance with manufacturer's recommendations.

302.4 Flow Coat

302.5 Dip Coat

302.6 Hand Coat

302.7 Roll Coat

303 SURFACE PREPARATION AND CLEAN-UP REQUIREMENTS:

303.1 A person shall not use materials which have a VOC content in excess of 200 grams per liter (1.67 pounds/gallon) of material, as defined in Section 404, for stripping any coating governed by this rule.

303.2 A person shall not perform cleanup of application equipment (including spray gun nozzles), product cleaning, or surface preparation, with a material containing VOC in excess of 50 grams per liter (0.42 pounds per gallon), as defined in Section 404.

304 WORK PRACTICE REQUIREMENTS:

304.1 Spillage of VOC-containing materials shall be minimized.

304.2 VOC-containing materials and used shop towels or sponges shall be stored and disposed of in closed containers. Storage and disposal containers must be kept closed, except when depositing or removing the materials. Disposal shall be conducted in a manner that the VOCs are not emitted to the atmosphere.

304.3 VOC-containing materials shall be conveyed in closed containers or pipes.

305 EMISSION CONTROL EQUIPMENT: As an alternative to using materials that meet the VOC limits in Sections 301, a person may comply with the VOC provisions of this rule by using an emission control equipment system approved by the District, the California Air Resources Board and the U.S. Environmental Protection Agency. Such compliance may be demonstrated by a system to capture and control emissions, which will reduce VOC emissions by at least 90% by weight.

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION: No person shall require for use or specify the application of any coating subject to the provisions of this rule that does not meet the limits and requirements of this rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating is to be applied to any Plastic parts or product at any physical location within the District.

402 PRODUCT INFORMATION REQUIREMENTS FOR SELLERS: Any person who sells any coating, coating remover (stripper), surface preparation or cleanup material subject to this rule, shall provide the following information on material data sheets made available to the purchaser at the time of sale:

402.1 The material type by name/code/manufacturer.

402.2 For coating materials, the maximum VOC content of the material, as applied, after any mixing or thinning as recommended by the manufacturer: VOC content shall be displayed as grams per liter (pounds per gallon) of coating, excluding water and exempt compounds, pursuant to Section 403.

402.3 For coating removers (strippers), surface preparation and cleanup materials, the maximum VOC content of the material, as applied, after any mixing or thinning as recommended by the manufacturer: VOC content shall be displayed as grams per liter (pounds per gallon) of material, including water and exempt compounds, pursuant to Section 404.

402.4 For all materials, recommendations regarding thinning, reducing, or mixing with any VOC-containing material.

402.5 For all materials, VOC content may be calculated using product formulation data, or may be determined using the test method in Section 503.1.

403 DETERMINATION OF VOC CONTENT OF COATINGS, LESS WATER AND EXEMPT COMPOUNDS: The weight of VOC per combined volume of VOC and coating solids shall be calculated by the following equation:

$$G = \frac{W_v - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where: G = Weight of VOC per liter of coating, less water and exempt compounds
W_v = Weight of volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of coating material, in liters
V_w = Volume of water in liters
V_{ec} = Volume of exempt compounds, in liters.

404 DETERMINATION OF VOC CONTENT PER LITER OF COATING REMOVERS (STRIPPERS), SURFACE PREPARATION MATERIALS, AND CLEANUP MATERIALS: The weight (in grams) of VOC per liter of coating materials shall be calculated by the following equation:

$$G = \frac{W_v - W_w - W_{ec}}{V_m}$$

Where: G = Weight of VOC per total volume of material, in grams per liter.
W_v = Weight of all volatile compounds, in grams
W_w = Weight of water, in grams
W_{ec} = Weight of exempt compounds, in grams
V_m = Volume of coating material, including any added VOC-containing solvents or reducers, but excluding any colorants added to tint the base, in liters.

405 OPERATION AND MAINTENANCE PLAN: A person using an emission control system pursuant to Section 305, as a means of alternate compliance with this rule, must submit an Operation and Maintenance Plan for the emission control system to the Air Pollution Control Officer for approval. A person proposing to install a new emission control system as a means of alternate compliance with this rule shall submit in addition to an Operation and Maintenance Plan, an application for Authority to Construct, pursuant to Rule 501, General Permit Requirements. The plan shall specify operating and maintenance procedures which will demonstrate continuous operation of the emission control system during periods of emission-producing operations. The Plan shall also specify which records must be kept to document these operating and maintenance procedures. These records shall comply with the requirements of Section 501. The plan shall be implemented upon approval of the Air Pollution Control Officer.

500 MONITORING AND RECORDS

501 RECORDKEEPING: In addition to any applicable record-keeping requirements of either Rule 502, New Source Review, Rule 507, Federal Operating Permit Program, Rule 511, Potential To Emit, or any other District Rule which might be applicable, any person applying coating products, surface preparation solvents, cleanup solvents, or strippers subject to any provision of this rule shall maintain the following records for non-exempt materials in order to evaluate compliance:

501.1 Product Data: A list of currently used coating products, surface preparation solvents, cleanup solvents or strippers subject to this rule. This list shall include all of the following data for each material used:

501.1.1 The material's manufacturer, product name and product number or code.

501.1.2 Classification according to the terminology used in Sections 301, 302 and 303.

501.1.3 The material's VOC content as applied, determined according to Sections 403 and 404, when used in the mixing ratios recommended by the manufacturer.

501.1.4 The actual mixing ratio, if different from the manufacturer's recommendation, used in applying the material.

501.2 Product Usage and Frequency: Any person using materials regulated by this rule shall record and maintain records of the volume used per month of each individual material as listed pursuant to Section 501.1. The quantity of each non-compliant coating usage which qualifies for an exemption under Section 104.1 shall be recorded on a daily basis.

501.3 Emission Control Equipment Records:

501.3.1 A person using emission control equipment as a means of alternate compliance pursuant to Section 305, shall maintain records on a daily basis, showing the type and volume of coatings and solvents used.

501.3.2 A person using emission control equipment as a means of alternate compliance with this rule pursuant to Section 305, shall maintain daily records of key system operating parameters and maintenance procedures which will demonstrate continuous operation and compliance of the emission control system during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with the requirements of Section 305.

501.4 Retention of Records: All records required by this rule shall be retained for at least three years, except for sources subject to Rule 507, Federal Operating Permit Program, which shall be retained for at least five years. Such records shall be made available to the Air Pollution Control Officer, upon request.

502 VOC EMISSION THRESHOLD: If VOC emissions from all emission units at the facility for any calendar year exceed 10,000 pounds, additional recordkeeping documentation will be required per Rule 511, Potential To Emit.

503 TEST METHODS:

503.1 Determination of VOC Content: VOC content of coatings, solvents, strippers and surface preparation materials shall be determined in accordance with United States Environmental Protection Agency (USEPA) Method 24 or Method 24A.

503.2 Determination of Compounds Exempt From VOC Definition: Exempt compounds referenced in Section 207 and listed in Rule 102, Definitions, shall be determined in accordance with ASTM D 4457-85 "Standard Test Method for Determination of Dichloromethane and 1,1,1-Tricholorethane in Paints and Coatings by Direct Injection into a Gas Chromatograph" or California Air Resources Board Method 432 "Determination of Dichloromethane and 1,1,1-Tricholorethane in Paints and

Coatings". If any perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present and the USEPA-approved test method used to make the determination of these compounds.

503.3 Determination of Control Efficiency: Control efficiency of emissions control equipment referenced in Section 305, shall be determined in accordance with USEPA Method 25 or 25A: and USEPA Method 2 or 2C (whichever is applicable). USEPA Method 18 or CARB Method 422 "Determination of Volatile Organic Compounds in Emissions from Stationary Sources" may be used to determine emissions of exempt compounds.

503.4 Determination of Collection Efficiency: Collection efficiency of the control equipment referenced in Section 305 shall be determined in accordance with U.S. EPA's "Guidelines for Determining Capture Efficiency, January 9, 1995". Individual collection efficiency test runs subject to the U.S. EPA's technical guidelines shall be determined by:

503.4.1 40 CFR 51, Appendix M, Methods 204-204F; or

503.4.2 The South Coast AQMD "Protocol for Determination of Volatile Organic Compound (VOC) Capture Efficiency"; or

503.4.3 Any other method approved by the USEPA, the California Air Resources Board, and the Air Pollution Control Officer.

503.5 Emissions From Spray Gun Cleaning Systems: Determination of emissions of VOC from spray gun cleaning systems shall be made using South Coast Air Quality Management District "General Method for Determining Solvent Losses From Spray Gun Cleaning Systems", October 1989.

503.6 Transfer Efficiency: Determination of transfer efficiency shall be made using South Coast Air Quality Management District Test Method "Spray Equipment Transfer Efficiency Test Procedure for Equipment Users", May 24, 1989.

503.7 Multiple Test Methods: When more than one test method or a set of test methods is specified for any testing, 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.

RULE 250 STATIONARY GAS TURBINES

Adopted 10-17-94
(Amended 10-08-15)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTION - LABORATORY, FIREFIGHTING/FLOOD CONTROL, AND PIPELINE UNITS
104 EXEMPTION - EMERGENCY STANDBY AND SMALL UNITS

200 DEFINITIONS

201 COMPLIANCE LIMIT
202 CONTROL SYSTEM OPERATING PARAMETERS
203 EMERGENCY STANDBY UNIT
204 MAJOR SOURCE
205 NOx EMISSIONS
206 PERFORMANCE TESTING
207 POWER AUGMENTATION
208 PUBLIC SERVICE UNIT
209 RATING
210 SELECTIVE CATALYTIC REDUCTION (SCR)
211 STATIONARY GAS TURBINE
212 SHUTDOWN
213 STARTUP

300 STANDARDS

301 LIMITATIONS
302 STARTUP/SHUTDOWN COMBINED CYCLE UNITS
303 STARTUP/SHUTDOWN COMBINED SIMPLE CYCLE UNITS

400 ADMINISTRATIVE REQUIREMENTS

401 EXEMPT UNITS AND EMERGENCY STANDBY UNITS

500 MONITORING AND RECORDKEEPING

501 MONITORING
502 RECORDKEEPING
503 TEST METHODS

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100 GENERAL

101 PURPOSE: The purpose of this rule is to limit NOx emissions from stationary gas turbines.

102 APPLICABILITY: This rule shall apply to all stationary gas turbines, 0.3 megawatt (MW) and larger.

103 EXEMPTION – LABORATORY OR FIREFIGHTING/FLOOD CONTROL UNITS: The provisions of this rule with the exception of Section 402.3 shall not apply to the operation of stationary gas turbines used under the following conditions:

103.1 Laboratory units used in research and testing for the advancement of gas turbine technology.

103.2 Units operated exclusively for firefighting and/or flood control.

104 EXEMPTION - EMERGENCY STANDBY AND SMALL UNITS: The provisions of this rule with the exception of Section 502.5 shall not apply to the operation of stationary gas turbines used under the following conditions:

104.1 Emergency standby units demonstrated to operate less than 200 hours per calendar year.

104.2 Units of less than 4 MW operating less than 877 hours per calendar year.

105 EXEMPTION – LOW USE UNITS: The monitoring provisions of Section 501.1.3 shall not apply to low use units operating less than 877 hours per year and installed prior to October 8, 2015.

200 DEFINITIONS

201 COMPLIANCE LIMIT: Allowable NOx emissions expressed in parts per million by volume (ppmv).

202 CONTROL SYSTEM OPERATING PARAMETERS: Operating parameters that the Air Pollution Control Officer deems necessary to analyze when determining compliance, such as ammonia and exhaust flow rates and exhaust gas temperature for SCR; of humidity, water injection rate, exhaust gas flow rate, and temperature for water injection.

203 EMERGENCY STANDBY UNIT: A stationary gas turbine that operates only as a mechanical or electrical power source for a facility when the primary power source has been rendered inoperable due to a failure beyond the reasonable control of the operator, except due to power interruption pursuant to a voluntary interruptible power supply agreement. Electricity generated by such a unit cannot be sold.

204 MAJOR SOURCE: For the purpose of this rule a major source is defined as a stationary source with a potential to emit exceeding: 25 tons per year of nitrogen oxides, 25 tons per year of volatile organic compounds, 100 tons per year of sulfur dioxide, 100 tons per year of carbon monoxide, 100 tons per year of PM10, or 100 tons per year of a regulated air pollutant.

205 NOx EMISSIONS (NOx): The sum of nitric oxides and nitrogen dioxide in the exhaust gas stream.

206 PERFORMANCE TESTING: Performance testing for stationary source air emissions is also known as stack testing or source testing. Performance testing is the measurement of air emissions.

207 POWER AUGMENTATION: An increase in the gas turbine shaft output and/or the decrease in gas turbine fuel consumption by the addition of energy recovered from exhaust heat.

208 PUBLIC SERVICE UNIT: A gas turbine used to generate electricity for sale or for use in serving the public.

209 RATING: The continuous megawatt (MW) rating or mechanical equivalent by a manufacturer for gas turbine(s) without power augmentation.

210 SELECTIVE CATALYTIC REDUCTION (SCR): A post combustion control technology that utilizes ammonia injected into the exhaust gas stream where it reduces NOx to molecular nitrogen in the presence of a catalyst.

211 STATIONARY GAS TURBINE: Any gas turbine system that is gas and/or liquid fueled with or without power augmentation. This unit is either attached to a foundation at a facility or is portable equipment operated at a specific facility for more than 90 days in any 12-month period. Two or more gas turbines powering one shaft shall be treated as one unit.

212 SHUTDOWN: The time necessary to cease operation of a gas turbine under load conditions. The period begins when the shutdown command is given to the gas turbine. This time shall not exceed one (1) hour.

213 STARTUP: The time necessary to bring the gas turbine to the design rating not to exceed two (2) hours for simple cycle and six (6) hours for combined cycle gas turbine power plants.

300 STANDARDS

301 LIMITATIONS: The owner or operator of any stationary gas turbine unit shall not operate such unit under load conditions, excluding the startup or shutdown period which results in the measured NOx emissions concentration exceeding the compliance limit listed below, averaged over one (1) hour based on four consecutive 15-minute averages:

Unit Size	**Compliance limit NO_x, ppm @ 15% O_2**	
Megawatt Rating (MW)	**Gas[A]**	**Oil[B]**
Units rated 0.3 to Less Than 2.9 MW OR Units Greater Than or Equal to 4 MW That Operate Less Than 877 Hour/Year	42	65
2.9 to Less Than 10 MW	25	65
10.0 MW and Over	9	25

A. GAS INCLUDES NATURAL, DIGESTER, AND LANDFILL GASES.
B. OIL INCLUDES KEROSINE, JET, AND DISTILLATE. THE SULFUR CONTENT OF THE OIL SHALL BE LESS THAN 0.05%.

302 STARTUP/SHUTDOWN COMBINED CYCLE UNITS: The NOx emissions shall meet at least one of the following averaged over the duration of the startup or shutdown period:

302.1 70 ppm @ 15% O_2 for turbines fired on gas or,

302.2 0.16 pounds per MMBtu input for turbines fired on gas or oil or,

302.3 226 ppm @ 15% O_2 for turbines fired on oil.

303 STARTUP/SHUTDOWN SIMPLE CYCLE UNITS: The NOx emissions shall be kept to a minimum by use of the following:

303.1 Manufacturer's recommendation for operation during startup and shutdown.

303.2 Injection of water as soon as reasonably possible

303.3 Maintaining proper air to fuel ratios

400 ADMINISTRATIVE REQUIREMENTS

401 EXEMPT UNITS AND EMERGENCY STANDBY UNITS: Exempt units and emergency standby units shall comply with the following:

401.1 The owner or operator of any unit listed below shall notify the Air Pollution Control Officer in writing within seven days if the 877 hour-per-year limit is exceeded. A public service unit operating during a state of emergency, when such emergency is declared by proclamation of the Governor of the State of California and when the unit is located in the specific geographical location identified in the proclamation, shall be excluded from the hour-per-year limit. If the hour-per-year limit is exceeded, the exemption shall be permanently withdrawn. Within 30 days after the exceedance, the owner or operator shall submit an application for Authority to Construct that details a plan to meet the applicable limits specified in Section 301 of this rule within two years. Included in this application, the owner or operator shall submit an emission control plan that includes a schedule of increments of progress for the installation of the required control equipment. This schedule shall be subject to the review and approval of the Air Pollution Control Officer.

401.1.1 Any unit smaller than 4 MW or emergency standby unit exempt under Sections 110 and 111.

401.1.2 Any unit equal to or greater than 4 MW.

500 MONITORING AND RECORDKEEPING

501 MONITORING: The owner or operator of any stationary gas turbine subject to the provisions of this rule shall perform the following actions:

501.1 Install, operate and maintain in calibration equipment, as approved by the Air Pollution Control Officer that continuously measures and records the following:

501.1.1 Control system operating parameters;

501.1.2. Elapsed time of operation; and

501.1.3 For units of 10 MW or greater, the exhaust gas NOx concentrations on a continuous basis corrected to ISO conditions at 15 percent oxygen on a dry basis. The NOx monitoring system shall meet U.S. Environmental

Protection Agency (EPA) requirements as specified in 40 CFR Part 60, App. B, Specification 2 or other systems that are acceptable to the EPA.

501.2 Performance Testing: Performance testing shall be conducted annually for major sources of NOx and at least every three years for non-major sources of NOx.

502 RECORDKEEPING:

502.1 All records shall be available for inspection at any time for a period of five (5) years for major source and two (2) years for non-major sources.

502.2 Submit to the Air Pollution Control Officer information demonstrating that the system has data gathering and retrieval capability.

502.3 Submit to the Air Pollution Control Officer, prior to issuance of a Permit to Operate, information correlating the control system operating parameters to the associated NOx output. This information may be used by the Air Pollution Control Officer to determine compliance when there is no continuous emission monitoring system for NOx available or when the continuous emission monitoring system is not operating properly.

502.4 Provide performance test information regarding the exhaust gas NOx concentration at ISO conditions corrected to 15 percent oxygen on a dry basis.

502.5 Maintain a gas turbine operating log that includes, on a daily basis, the actual start-up and stop time, total hours of operation, type and quantity of fuel used (liquid/gas). This information shall be available for inspection at any time from the date of entry.

503 TEST METHODS:

503.1 **Oxides of Nitrogen (NO_x):** Oxides of Nitrogen (NO_x) emissions shall be determined in accordance with EPA Method 20.

503.2 **Oxygen (O_2):** Oxygen (O_2) concentrations shall be determined in accordance with EPA Method 3A.

RULE 301
NONAGRICULTURAL BURNING SMOKE MANAGEMENT

Adopted 02-10-11
(Amended 02-09-12)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 ALLOWABLE COMBUSTIBLES
202 BURN BARREL
203 COMBUSTIBLE
204 CONSTRUCTION–DEMOLITION DEBRIS
205 DISALLOWED COMBUSTIBLES
206 FIRE HAZARD REDUCTION BURNING
207 FIRE PROTECTION AGENCY
208 FLAMMABLE
209 INCINERATOR
210 NO-BURN DAY
211 OPEN BURNING OR OPEN OUTDOOR FIRE
212 PERMISSIVE BURN DAY OR BURN DAY
213 PROCESSED OR TREATED WOOD AND WOOD PRODUCTS
214 RECREATIONAL OR COOKING FIRE
215 RIGHT-OF-WAY CLEARING, LEVEE, DITCH, AND RESERVOIR MAINTENANCE BURNING

300 STANDARDS

301 PROHIBITIONS ON OPEN BURNING
302 ALLOWABLE COMBUSTIBLES
303 BURN PERMITS
304 BURN PERMIT VALIDITY
305 BURN DAYS
306 VEGETATION PREPARATION AND DRYING TIMES
307 APPROVED IGNITION DEVICES
308 WIND DIRECTION
309 DETERMINATION OF AMOUNT BURNED DAILY
310 FIRE HAZARD REDUCTION BURNING IN COMPLIANCE WITH LOCAL ORDINANCE
311 MECHANIZED BURNER
312 OPEN BURNING CONDUCTED BY PUBLIC OFFICERS
313 RIGHT OF WAY CLEARING, LEVEE, DITCH, AND RESERVOIR MAINTENANCE BURNING

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT APPLICATION INFORMATION
402 REVOCATION OF A BURN PERMIT
403 BURN PERMIT FEES

500 MONITORING AND RECORDS

501 BURN REPORTS

100 GENERAL

101 PURPOSE: To establish criteria for the disposal of vegetation from fire hazard reduction burning, mechanized burners, fires set or permitted by public officers, and right of way clearing, levee, ditch, and reservoir maintenance, to better manage smoke in order to reduce its effects.

102 APPLICABILITY

102.1 Geographic: The provisions of this Rule shall apply to all burning located within Placer County except where otherwise prohibited by a local jurisdiction.

102.2 Except as provided in the rules of Regulation 3, no person shall use open outdoor fires (including the use of a burn barrel) for the purpose of disposal or to burn any combustible.

103 EXEMPTIONS

103.1 Rule Exemptions

103.1.1 Burning conducted pursuant to Rule 302, AGRICULTURAL WASTE BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.2 Burning conducted pursuant to Rule 303, PRESCRIBED BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.3 Burning conducted pursuant to Rule 304, LAND DEVELOPMENT BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.4 Burning conducted pursuant to Rule 305, RESIDENTIAL ALLOWABLE BURNING is exempt from this Rule.

103.1.5 Burning conducted pursuant to Rule 306, OPEN BURNING OF NON-INDUSTRIAL WOOD WASTE AT DESIGNATED DISPOSAL SITES is exempt from this Rule.

103.2 General Exemptions

103.2.1 Fire Hazard Reduction Burning Public Officer Waiver: If a Public Officer with jurisdiction determines that a condition exists in which a fire hazard or health hazard will have an imminent effect on life or property, he/she may waive the requirements of this Rule, providing that a written report of such burning is forwarded to the APCO stating why life and property were being threatened to the extent necessary to require such burning. The report shall provide other information as the APCO may reasonably require.

103.2.2 Recreational or Cooking Fire: A recreational or cooking fire, as defined, is exempt from the provisions of this rule provided that the fire is not used for waste disposal purposes. Only allowable combustibles and clean, unpainted, untreated lumber can be burned.

103.2.3 American Flag: The burning, in a respectful and dignified manner, of an unserviceable American flag that is no longer fit for display.

103.2.4 Open Burning Conducted By Public Officers: : Burning conducted under Section 312, subsections 312.3, 312.4, 312.7 are exempt from

Rule 301. Subsection 312.1, 312.2, 312.5, and 312.6 is exempt from Section 300 except for Section 303.

103.3 Exemptions, Minimum Drying Times

103.3.1 The burning of standing green vegetation which is part of right-of-way clearing, levee, ditch, and reservoir maintenance burning is exempt from Section 306 when such vegetation may need to be burned green.

103.3.2 The APCO may grant an exemption to the drying times specified in Section 306 if the denial of such burning would threaten imminent and substantial economic loss.

200 DEFINITIONS (Unless otherwise defined below, the terms used in this Rule are defined in Rule 102, DEFINITIONS.)

201 ALLOWABLE COMBUSTIBLES: Vegetation originating on the premises and reasonably free of dirt, soil, and visible surface moisture.

202 BURN BARREL: A metal container used outdoors for the purpose of disposal.

203 COMBUSTIBLE: Any substance capable of burning or any substance that will readily burn.

204 CONSTRUCTION-DEMOLITION DEBRIS: Any material associated with the construction or demolition of any building, dwelling, or other man-made structure including but not limited to; lumber, tar paper, roofing material, wiring, flooring material, insulation, and plywood.

205 DISALLOWED COMBUSTIBLES: Any waste or manufactured material, including but not limited to petroleum products and petroleum wastes; construction and demolition debris; coated wire; putrescible (rotten wastes) and non-putrescible solid, semisolid and liquid materials or wastes; tires; tar; tarpaper; non-natural wood waste; processed or treated wood and wood products; metals; motor vehicle bodies and parts; rubber; synthetics; plastics, including plastic film, twine and pipe; fiberglass; styrofoam; garbage; trash; refuse; rubbish; disposable diapers; ashes; glass; industrial wastes; manufactured products; equipment; instruments; utensils; appliances; furniture; cloth; rags; paper or paper products; cardboard; boxes; crates; excelsior; offal; swill; carcass of a dead animal; manure; human or animal parts or wastes, including blood; and fecal- and food-contaminated material.

206 FIRE HAZARD REDUCTION BURNING: The burning of flammable vegetation that has been removed and cleared away from buildings or structures in compliance with local ordinances to reduce fire hazard pursuant to California Public Resources Code Section 4291.

207 FIRE PROTECTION AGENCY: Any agency with the responsibility and authority to protect people, property, and the environment from fire, and having jurisdiction within the District.

208 FLAMMABLE: Capable of catching fire easily, or combustible.

209 INCINERATOR: Any device constructed of non-flammable materials, including containers commonly known as burn barrels, for the purpose of burning therein, trash, debris, and other flammable materials for volume reduction or destruction.

210 NO-BURN DAY: Any day on which agricultural burning, including prescribed burning, is prohibited by the ARB or the APCO.

211 OPEN BURNING OR OPEN OUTDOOR FIRE: Burning of any combustibles of any type, outdoors in the open air, where the products of combustion are not directed through a flue.

212 PERMISSIVE BURN DAY OR BURN DAY: Any day in which agricultural burning including prescribed burning, is not prohibited by the ARB and/or the APCO.

213 PROCESSED OR TREATED WOOD AND WOOD PRODUCTS: Wood that has been chemically treated to retard rot or decay, or wood that has been modified with glues, laminates, stains, finishes, paints or glosses for use in furniture or for construction purposes, including but not limited to; plywood, particle board, fencing, or railroad ties.

214 RECREATIONAL OR COOKING FIRE

214.1 A fire that is used for recreational purposes including campfires and bon fires as well as fires in fire pits and fire bowls and similar free-standing devices.

214.2 An open outdoor fire used for the cooking of food for human consumption.

215 RIGHT-OF-WAY CLEARING, LEVEE, DITCH, AND RESERVOIR MAINTENANCE BURNING: The use of fire for the disposal of vegetation, which may include standing green vegetation (e.g. grasses, weeds, brush and small trees), for right-of-way clearing by a public entity or utility or for levee, ditch, or reservoir maintenance.

300 STANDARDS

301 PROHIBITIONS ON OPEN BURNING: Except as provided in Regulation 3, no person shall use an open outdoor fire (including the use of a burn barrel) for the purpose of disposal or burning of any disallowed combustibles.

302 ALLOWABLE COMBUSTIBLES: The only allowable combustibles that can be burned is vegetation originating on the premises which is reasonably free of dirt, soil, and visible surface moisture. The burning of poison oak (*toxicodendron diversilobum*) or oleander (*nerium oleander*) for disposal purposes may be prohibited or may be subject to additional permit conditions under Section 303.

303 BURN PERMITS

303.1 A person shall not ignite or allow open outdoor burning without first obtaining a valid burn permit from the District for the following:

303.1.1 Fire Hazard Reduction
303.1.2 Mechanized Burner
303.1.3 Open Burning Conducted by Public Officers
303.1.4 Right of Way Clearing, Levee, Ditch and Reservoir Maintenance

303.2 A separate burn permit may also be required by the fire protection agency that has jurisdiction in the area of the proposed burn project.

303.3 The APCO may prohibit or may add additional specific burn permit conditions for the burning of poison oak (*toxicodendron diversilobum*) or oleander (*nerium oleander*) for disposal purposes.

304 BURN PERMIT VALIDITY: No burn permit shall be construed to authorize open outdoor fires for any day during which:

304.1 It is a no-burn day.

304.2 Open burning is prohibited by a fire protection agency for fire control or prevention.

305 BURN DAYS: No person shall knowingly ignite or allow ignition of allowable combustibles on no burn days or when burning is prohibited by a fire protection agency.

306 VEGETATION PREPARATION AND DRYING TIMES: To assure rapid and complete combustion with a minimum of smoke, and to lower the moisture content of the vegetation being burned, (from when the vegetation was cut and is to be burned), the following are drying times.

306.1 No vegetation shall be burned unless it is reasonably free of disallowed combustibles, dirt, soil, and surface moisture and shall be burned in a manner to prevent excessive smoke. Excessive smoke is that which causes a nuisance.

306.2 Vegetation stacked for burning shall not be burned unless it is stacked in such a manner to promote drying and ensure combustion with a minimum amount of smoke.

306.3 A minimum of 15 days of drying time for fine prunings or cuttings less than 3” in diameter, at the cut end.

306.4 A minimum of three to six weeks of drying time for prunings or brush or small branches 3 to 6 inches in diameter, at the cut end.

306.5 A minimum of six weeks of drying time for trees, stumps, and large branches, greater than 6 inches in diameter, at the cut end.

306.6 Vegetation or stumps, greater than 12 inches in diameter, shall not be burned unless they are split smaller than 12 inches in diameter and are free of dirt.

307 APPROVED IGNITION DEVICES: All open outdoor fires as authorized by this Rule shall be ignited only with approved ignition devices. The vegetation to be burned should be ignited as rapidly as practicable within applicable fire control restrictions.

308 WIND DIRECTION: Burning shall be curtailed when smoke is drifting into a nearby populated area or which is or may become a nuisance or hazard.

309 DETERMINATION OF AMOUNT BURNED DAILY: Only that amount of vegetation that can be reasonably expected to burn completely within 24 hours of ignition.

310 FIRE HAZARD REDUCTION BURNING IN COMPLIANCE WITH LOCAL ORDINANCE: The burning of allowable combustibles in open outdoor fires for disposal purposes on the property where grown is allowed when done for the purposes of compliance with local ordinances to reduce fire hazard.

311 MECHANIZED BURNER: The APCO may authorize by burn permit open outdoor fires for the purpose of disposing of agricultural wastes or wood waste from trees, vines, bushes or other wood debris free of non-wood materials, in a mechanized burner such that no air contaminant is discharged into the atmosphere for a period or periods aggregating more than 30 minutes in any eight (8) hour period which is:

311.1 As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or

311.2 Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection 311.1 of this Rule.

311.3 In authorizing the operation of a mechanized burner the APCO may make the burn permit subject to whatever conditions are reasonably necessary to assure conformance with the standards prescribed in this Section, provided the requirements of Sections 303 are met. Section 306, Vegetation Preparation and Drying Times, does not apply.

312 OPEN BURNING CONDUCTED BY PUBLIC OFFICERS: Except as provided for under subsection 103.2.4, nothing in this rule shall be construed as limiting the authority granted under other provisions of law to any public officer, such as fire, agricultural or health officer, to set or permit a fire when such a fire is, in the opinion of said officer, necessary for any of the following purposes:

312.1 The prevention of a fire hazard which cannot be abated by any other means.

312.2 The instruction of public employees and/or volunteer firemen in the methods of fighting fires.

312.3 To set or cause to be set backfires necessary to save life or valuable property pursuant to Section 4426 of the Public Resources Code.

312.4 The instruction of employees in methods of fighting fires on property used for industrial purposes.

312.5 Disease or pest prevention, where there is an immediate need and no reasonable alternative exists.

312.6 The abatement of fire hazards pursuant to H & S Code, Section 13055. Any public agency authorized to engage in fire protection activities, including but not limited to a fire protection district, city, city and county, or county fire department, the Department of Forestry, and the United States Forest Service may use fire to abate a fire hazard.

312.7 The remediation of an oil spill pursuant to Section 8670.7 of the Government Code.

313 **RIGHT-OF-WAY CLEARING, LEVEE, DITCH, AND RESERVOIR MAINTENANCE BURNING:** The following conditions apply:

313.1 Disallowed combustibles must be removed prior to burning.

313.2 Vegetation has been prepared by stacking, drying or other methods that promote combustion as specified by the District.

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT APPLICATION INFORMATION

401.1 Type of burning;

401.2 Name and/or Business Name and address of the permittee;

401.3 Location of the proposed burn;

401.4 Distance from the proposed burn to the nearest neighboring home or structure;

401.5 The type of vegetation to be burned;

401.6 Acreage or estimated tonnage or size of pile of the vegetation to be burned;

401.7 Reason for burning;

401.8 Applicant's signature with date signed. The applicant signing the burn permit shall read and attest to the accuracy of the information provided.

401.9 Each burn permit issued shall bear a statement of warning containing the following words or words of like or similar import: "THIS BURN PERMIT IS VALID ONLY FOR THOSE DAYS ON WHICH THE STATE AIR RESOURCES BOARD DOES NOT PROHIBIT AGRICULTURAL BURNING PURSUANT TO SECTION 41855 OF THE HEALTH AND SAFETY CODE."

401.10 The applicant or representative shall have the burn permit available for inspection at the burn site during the burn.

402 REVOCATION OF A BURN PERMIT: The APCO, or his/her designee, may revoke a burn permit if it is found that the burn permit conditions, any state or federal laws, or the provisions of this Rule have been violated. The designated agency or the APCO shall notify the burn permit holder in writing of the revocation and the reasons therefore, service of the notification of revocation may be made by personal delivery or certified mail. In the case of service by mail, service shall be deemed complete at the time of deposit of the notification in the United States Post Office, or a mail box, sub-Post Office, substation, or mail chute, or other like facility.

402.1 Within ten days after service of notice of revocation specified in Section 402 above, the burn permit holder may petition the Hearing Board in writing for a public hearing. The Hearing Board, after notice and a public hearing held within 30 days after filing the petition, may sustain or reverse the decision of the APCO or the designated agency.

403 BURN PERMIT FEES: Burn permits are valid only following receipt of fees specified in Rule 607, BURN PERMIT FEES.

500 MONITORING AND RECORDS

501 BURN REPORTS

501.1 Public Officer Fire Hazard Reduction Burning Report: A fire hazard reduction burning report as required in subsection 103.2.1 shall be submitted if the fire hazard reduction exemption is employed. The report shall contain the location, type, and amount of vegetation burned and information on the determination made that there is a fire or health hazard condition having an imminent effect on life or property, what the threat to life and property is and the reason that alleviation of the threat requires such burning. The report shall provide other information as the APCO may reasonably require.

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RULE 302 AGRICULTURAL WASTE BURNING SMOKE MANAGEMENT

Adopted 02-10-11
(Amended 02-09-12)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 AGRICULTURAL BURNING
202 AGRICULTURAL OPERATION
203 AGRICULTURAL WASTES
204 DISALLOWED COMBUSTIBLES
205 NO-BURN DAY
206 OPEN BURNING OR OPEN OUTDOOR FIRE
207 PERMISSIVE BURN DAY OR BURN DAY
208 RIGHT-OF-WAY CLEARING, LEVEE, DITCH, AND RESERVOIR MAINTENANCE BURNING
209 SACRAMENTO VALLEY SMOKE MANAGEMENT PROGRAM
210 SMOKE MANAGEMENT PLAN
211 SMOKE MANAGEMENT PROGRAM

300 STANDARDS

301 PROHIBITIONS ON OPEN BURNING
302 BURN PERMITS
303 BURN PERMIT VALIDITY
304 BURN DAYS
305 VEGETATION PREPARATION AND DRYING TIMES
306 STRAW MOISTURE DETERMINATION (CRACKLE TEST)
307 LIGHTING PRACTICES
308 APPROVED IGNITION DEVICES
309 WIND DIRECTION
310 DETERMINATION OF AMOUNT BURNED DAILY
311 RIGHT-OF-WAY CLEARING, LEVEE, DITCH, AND RESERVOIR MAINTENANCE BURNING

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT APPLICATION INFORMATION
402 REVOCATION OF A BURN PERMIT
403 SMOKE MANAGEMENT PROGRAM
404 APCO APPROVAL
405 BURN PERMIT FEES

500 MONITORING AND RECORDS

501 BURN REPORTS

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100 GENERAL

101 PURPOSE: To establish standards and administrative requirements under which agricultural burning, including the burning of agricultural wastes, limited to the growing of crops or raising of fowl or animals, may occur in a reasonably regulated manner that manages the generation of smoke and reduces the emission of particulates and other air contaminates from such burning.

To establish the requirements pursuant to Title 17 CCR Subchapter 2 - Smoke Management Guidelines for Agricultural and Prescribed Burning, Article 2 - District Smoke Management Program.

102 APPLICABILITY: The provisions of this rule shall apply to all agricultural burning located in Placer County except where otherwise prohibited by a local jurisdiction.

103 EXEMPTIONS

103.1 Rule Exemptions

103.1.1 Burning conducted pursuant to Rule 301; NONAGRICULTURAL BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.2 Burning conducted pursuant to Rule 303, PRESCRIBED BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.3 Burning conducted pursuant to Rule 304, LAND DEVELOPMENT BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.4 Burning conducted pursuant to Rule 305, RESIDENTIAL ALLOWABLE BURNING is exempt from this Rule.

103.1.5 Burning conducted pursuant to Rule 306, OPEN BURNING OF NON-INDUSTRIAL WOOD WASTE AT DESIGNATED DISPOSAL SITES is exempt from this Rule.

103.1.6 The use of orchard or citrus heaters for the prevention of frost damage is provided for under Rule 208, ORCHARD OR CITRUS HEATERS.

103.2 Exemptions from Section 304, Burn Days

103.2.1 Empty Sacks or Containers: The APCO may, by special burn permit, authorize the burning of empty sacks or containers which contained pesticides or other toxic substances on the premises where used, provided the sacks or containers are within the definition of agricultural wastes.

103.2.2 Burn Day Exemption for Threat of Imminent and Substantial Economic Loss: The APCO may, by burn permit, allow agricultural burning on days designated by the ARB or APCO as "no burn days" if the denial of the burn permit would threaten imminent and substantial economic loss. The granting of an exception does not exempt the applicant from any other District or fire control regulations. Such authorization shall be limited to the amount of acreage which can be burned in any one day and only authorizes burning which is not likely to cause or contribute to exceedances of air quality standards or result in smoke impacts to smoke sensitive areas.

103.3 Exemptions, Minimum Drying Times

103.3.1 The burning of standing green vegetation associated with right-of-way clearing, levee, ditch, and reservoir maintenance burning, is exempt from Section 305 when such vegetation may need to be burned green.

103.3.2 The APCO may grant an exemption to the drying times specified in Section 305 if the denial of such burning would threaten imminent and substantial economic loss.

200 DEFINITIONS (Unless otherwise defined below, the terms used in this Rule are defined in Rule 102, DEFINITIONS or Rule 301, NONAGRICULTURAL BURNING SMOKE MANAGEMENT.)

201 AGRICULTURAL BURNING: Open outdoor fires used in agricultural operations in the growing of crops or raising of fowl or animals; open outdoor fires used in forest management, range improvement; or the improvement of land for wildlife and game habitat or disease or pest prevention or the use of open outdoor fires used in the operation or the maintenance of a system for the delivery of water and wildland vegetation management burning.

202 AGRICULTURAL OPERATION: The growing and harvesting of crops or raising of fowl or animals for the primary purpose of making a profit or providing a livelihood or the conducting of agricultural research or instruction by an educational institution. Agricultural operations do not include activities involving the processing or distribution of crops or fowl.

203 AGRICULTURAL WASTES

203.1 The unwanted or unsalable materials produced wholly from agricultural operations and materials not produced from agricultural operations but which are intimately related to the growing or harvesting of crops.

203.2 Materials not produced wholly from agricultural operations, but which are intimately related to the growing or harvesting of crops and which are used in the field. This includes materials such as fertilizer and pesticide paper sacks or paper containers, where the sacks or containers are emptied in the field. This does not include such items as shop wastes, demolition materials, garbage, oil filters, tires, plastic pesticide containers (except for paper pesticide containers), broken boxes, pallets, or other similar material, or orchard or vineyard waste removed for land use conversion to nonagricultural purposes.

204 DISALLOWED COMBUSTIBLES: Any waste or manufactured material, including but not limited to: petroleum products and petroleum wastes; construction and demolition debris; coated wire; putrescible (rotten wastes) and non-putrescible solid, semisolid and liquid materials or wastes; tires; tar; tarpaper; non-natural wood waste; processed or treated wood and wood products; metals; motor vehicle bodies and parts; rubber; synthetics; plastics, including plastic film, twine and pipe; fiberglass; styrofoam; garbage; trash; refuse; rubbish; disposable diapers; ashes; glass; industrial wastes; manufactured products; equipment; instruments; utensils; appliances; furniture; cloth; rags; paper or paper products; cardboard; boxes; crates; excelsior; offal; swill; carcass of a dead animal; manure; human or animal parts or wastes, including blood; and fecal- and food-contaminated material.

205 NO BURN DAY: Any day on which agricultural burning, including prescribed burning, is prohibited by the ARB or the APCO.

206 OPEN BURNING OR OPEN OUTDOOR FIRE: Burning of any combustibles of any type, outdoors in the open air, where the products of combustion are not directed through a flue.

207 PERMISSIVE BURN DAY OR BURN DAY: Any day in which agricultural burning, including prescribed burning is not prohibited by the ARB and/or the APCO.

208 RIGHT-OF-WAY CLEARING, LEVEE, DITCH, AND RESERVOIR MAINTENANCE BURNING: The use of fires for the disposal of vegetation, which may include standing green vegetation (e.g. grasses, weeds, brush and small trees),for right-of-way clearing by a public entity or utility or for levee, ditch, or reservoir maintenance.

209 SACRAMENTO VALLEY SMOKE MANAGEMENT PROGRAM: A regional program implemented under a plan prepared by the Sacramento Valley Basin Wide Air Pollution Control Council (BCC) and its Technical Advisory Committee (TAC). The BCC and TAC are comprised of an elected district board member and air pollution control officer, respectively, from each air district in the Basin: Butte, Colusa, Glenn, Placer, Sacramento, Shasta, Tehama, Yolo/Solano, and Feather River. The BCC reviews and amends the program in cooperation with the staff of the California Air Resources Board Meteorology and Compliance Program Review sections, the affected industry, environmental groups, and other interested parties.

210 SMOKE MANAGEMENT PLAN: A document prepared for each prescribed fire by land managers or fire managers that provides the information and procedures required in Section 80160 of Title 17 of the California Code of Regulations, and as provided for in Rule 303, Prescribed Burning Smoke Management.

211 SMOKE MANAGEMENT PROGRAM: A program adopted by the District Board and approved by the ARB as required under Title 17, Chapter 1, Subchapter 2; Smoke Management Guidelines for Agricultural and Prescribed Burning. The program outlines the implementation and enforcement of a smoke management program for those portions of Placer County in the Mountain Counties and Lake Tahoe Air Basins.

300 STANDARDS

301 PROHIBITIONS ON OPEN BURNING: Except as provided in Regulation 3, no person shall use open outdoor fires (including the use of a burn barrel) for the purpose of disposal or burning of any disallowed combustibles.

302 BURN PERMITS

302.1 A person shall not ignite or allow agricultural burning, including the burning of agricultural wastes, without first obtaining a valid burn permit from the District.

302.2 A separate burn permit may also be required by the fire protection agency that has jurisdiction in the area of the proposed burn project.

303 BURN PERMIT VALIDITY: No burn permit shall be construed to authorize open outdoor fires for any day during which:

303.1 It is a no-burn day.

303.2 Open burning is prohibited by a fire protection agency for fire control or prevention.

304 BURN DAYS

304.1 No person shall knowingly ignite or allow ignition of agricultural waste burning on no burn days or when burning is prohibited by fire protection agency.

304.2 Burn Hours: No field crop burning shall commence before 10:00 AM or after 5:00 PM of any day unless otherwise designated. The District may further restrict burning hours if it is deemed necessary to prevent adverse impacts to downwind receptors.

305 VEGETATION PREPARATION AND DRYING TIMES

305.1 Rice Harvesting - Mechanical Straw Spreader: All rice harvesting shall employ a mechanical straw spreader to ensure even distribution of the straw, with the following exception.

305.1.1 Rice straw may be left in rows, provided it meets the drying time criteria prior to a burn, as described in Section 306.1.

305.1.2 After harvest, no spread rice straw shall be burned prior to a three day drying period. No rowed rice straw shall be burned prior to a ten day drying period.

305.2 Other Agricultural Waste Burning: To assure rapid and complete combustion with a minimum of smoke, and to lower the moisture content of the vegetation being burned, (from when the vegetation was cut and is to be burned), the following are drying times.

305.2.1 A minimum of three days for other agricultural waste such as field crop residue (other than rice stubble), vegetable tops, and seed screenings to assure rapid and complete combustion with a minimum of smoke.

305.2.2 A minimum of 15 days of drying time for fine prunings or cuttings, less than 3 inches in diameter, at the cut end.

305.2.3 A minimum of three to six weeks of drying time for prunings or brush or small branches 3 to 6 inches in diameter, at the cut end.

305.2.4 A minimum of six weeks of drying time for trees, stumps, and large branches greater than 6 inches in diameter, at the cut end.

305.2.5 No vegetation shall be burned unless it is reasonably free of dirt, soil, and surface moisture and shall be burned in a manner to prevent excessive smoke. Excessive smoke is that which causes a nuisance.

305.2.6 Vegetation stacked for burning shall not be burned unless it is stacked in such a manner to promote drying and ensure combustion with a minimum amount of smoke.

305.2.7 The vegetation to be burned shall be free of disallowed combustibles and other material that is not produced in an agricultural operation.

306 STRAW MOISTURE DETERMINATION (CRACKLE TEST)

306.1 Water Moisture: After a rain exceeding 0.15 inches, the provisions of Section 305.1.2, notwithstanding, rice straw shall not be burned unless the straw makes an audible crack when tested just prior to burning. The method of testing shall be as described in subsection 306.2.

306.2 Straw: When checking a field for moisture a composite sample of straw from under the mat in the center of the mat and from different areas of the field shall be taken to ensure a representative sample. The provisions of Section 305.1 notwithstanding, straw shall only be deemed dry enough to burn if a handful of straw selected crackles audibly when it is bent sharply.

307 LIGHTING PRACTICES: Field crop straw and residue shall be ignited only by strip firing into-the-wind or by backfiring except when and where an extreme fire hazard is declared by a fire protection agency or where crops are determined not to lend themselves to these techniques.

308 APPROVED IGNITION DEVICES: All open outdoor fires as authorized by this regulation shall be ignited only with approved ignition devices. The vegetation to be burned should be ignited as rapidly as practicable within applicable fire control restrictions.

309 WIND DIRECTION: Burning shall be curtailed when smoke is drifting into a nearby populated area or which is or may become a nuisance or hazard.

310 DETERMINATION OF AMOUNT BURNED DAILY:

310.1 Sacramento Valley Air Basin:

310.1.1 The daily acreage allotment on permissive burn days for open outdoor burning in agricultural operations in the growing of crops or the raising of fowl or animals shall be no more than that amount determined by the ARB from the daily basin wide acreage allotment equation contained in the approved Sacramento Valley Smoke Management Program.

310.1.2 A prescribed burn conducted under a Smoke Management Plan, shall be considered a part of the daily agricultural burn acreage allocation.

310.2 Mountain Counties and Lake Tahoe Air Basins: Only that amount of vegetation that can be reasonably expected to burn completely within 24 hours of ignition.

311 RIGHT-OF-WAY CLEARING, LEVEE, DITCH, AND RESERVOIR MAINTENANCE BURNING: The following conditions apply:

311.1 Disallowed combustibles must be removed prior to burning.

311.2 Vegetation has been prepared by stacking, drying, or other methods to promote combustion as specified by the District.

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT APPLICATION INFORMATION

401.1 Type of burning;

401.2 Name and/or Business Name and address of the permittee;

401.3 Location of the proposed burn;

401.4 Distance from the proposed burn to the nearest neighboring home or structure;

401.5 The type of vegetation or agricultural waste to be burned;

401.6 Acreage or estimated tonnage or size of pile of the vegetation to be burned;

401.7 Reason for burning;

401.8 Applicant's signature with date signed. The applicant signing the burn permit shall read and attest to the accuracy of the information provided.

401.9 Each burn permit issued shall bear a statement of warning containing the following words or words of like or similar import: "THIS BURN PERMIT IS VALID ONLY FOR THOSE DAYS ON WHICH THE STATE AIR RESOURCES BOARD DOES NOT PROHIBIT AGRICULTURAL BURNING PURSUANT TO SECTION 41855 OF THE HEALTH AND SAFETY CODE."

401.10 The applicant or representative shall have the burn permit available for inspection at the burn site during the burn.

402 REVOCATION OF A BURN PERMIT: The APCO, or his/her designee, may revoke a burn permit if it is found that the burn permit conditions, any state or federal laws, or the provisions of this Rule have been violated. The designated agency or the APCO shall notify the burn permit holder in writing of the revocation and the reasons for the revocation. Service of the notification of revocation may be by personal delivery or certified mail. In the case of service by mail, service shall be deemed complete at the time of deposit of the notification in the United States Post Office, or a mail box, sub-Post Office, substation, or mail chute, or other like facility.

402.1 Within ten days after service of the notice of revocation specified in Section 402, the burn permit holder may petition the Hearing Board in writing for a public hearing. The Hearing Board, after notice and a public hearing held within 30 days after filing the petition, may sustain or reverse the decision of the APCO or the designated agency.

403 SMOKE MANAGEMENT PROGRAM

403.1 Sacramento Valley Air Basin: The Sacramento Valley Smoke Management Program applies to agricultural and other burning operations, as defined by Section 80101 of Title 17 of the CCR, which are conducted at all elevations in the Sacramento Valley Air Basin. Policies and procedures specified by the Sacramento Valley Smoke Management Program apply throughout the year unless otherwise specified in the program.

403.2 Mountain Counties and Lake Tahoe Air Basins: The Placer County Smoke Management Program applies to agricultural and other burning operations, as defined by Section 80101 of Title 17 of the CCR, which are in the Mountain Counties and Lake Tahoe Air Basins. Policies and procedures specified by this program apply throughout the year unless otherwise specified in the program.

404 APCO APPROVAL: No person shall commence an agricultural burn without receiving permission from the APCO, or his/her designee. For those air basins using a daily allocation system, the APCO shall distribute the daily allocated acreage for the purposes of minimizing the density of emissions and protecting downwind urban areas.

405 BURN PERMIT FEES: Burn permits are valid only following receipt of fees specified in Rule 607, BURN PERMIT FEES.

500 MONITORING AND RECORDS

501 BURN REPORTS

501.1 Annual Report: A report of agricultural burning conducted shall be submitted to the ARB by the District within 45 days of the end of each calendar year. The

report shall include the estimated tonnage or acreage of each agricultural waste type burned from open outdoor burning in agricultural operations and the location of where the burning was performed.

501.2 Special Burn Permits Issuance Report: A report of burn permits issued, each year, pursuant to subsection 103.2.2 shall be submitted to the ARB within 45 days of the end of the calendar year. The report shall include the number of such burn permits issued, the date of issuance, the person or persons to whom the burn permit was issued, an estimate of the amount of agricultural wastes burned, and a summary of the reasons why denial of each burn permit would have threatened imminent and substantial economic loss, including the nature and dollar amounts of such loss.

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RULE 303 PRESCRIBED BURNING SMOKE MANAGEMENT

Adopted 02-10-11
(Amended 02-09-12)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 AGRICULTURAL BURNING
202 AIR QUALITY
203 AMBIENT AIR
204 BURN PROJECT
205 BRUSH TREATMENT
206 CLASS I AREA
207 DISALLOWED COMBUSTIBLES
208 FIRE PROTECTION AGENCY
209 FOREST MANAGEMENT BURNING
210 FORTY-EIGHT (48) HOUR FORECAST
211 LAND MANAGER
212 NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)
213 NINETY-SIX (96) HOUR TREND
214 NO-BURN DAY
215 OPEN BURNING OR OPEN OUTDOOR FIRE
216 PARTICULATE MATTER (PM)
217 PERMISSIVE BURN DAY OR BURN DAY
218 PRESCRIBED BURN
219 PRESCRIBED BURNING
220 RANGE IMPROVEMENT BURNING
221 SACRAMENTO VALLEY SMOKE MANAGEMENT PROGRAM
222 SEVENTY-TWO (72) HOUR OUTLOOK
223 SHEETING
224 SILVICULTURAL PRACTICES
225 SMOKE MANAGEMENT PLAN
226 SMOKE MANAGEMENT PRESCRIPTION
227 SMOKE MANAGEMENT PROGRAM
228 SMOKE SENSITIVE AREAS
229 STATE AMBIENT AIR QUALITY STANDARDS
230 TIMBER OPERATIONS
231 WILDFIRE
232 WILDLAND
233 WILDLAND FIRE
234 WILDLAND/URBAN INTERFACE
235 WILDLIFE OR GAME HABITAT
236 WILDLAND VEGETATION MANAGEMENT BURNING

300 STANDARDS

301 PROHIBITIONS ON OPEN BURNING
302 BURN PERMITS
303 BURN PERMIT VALIDITY
304 BURN DAYS

305 REGISTRATION OF PRESCRIBED BURNS
306 SMOKE MANAGEMENT PLANS
307 VEGETATION PREPARATION AND DRYING TIMES
308 BURN AUTHORIZATION
309 APPROVED IGNITION DEVICES
310 WIND DIRECTION
311 DETERMINATION OF AMOUNT BURNED DAILY

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT APPLICATION INFORMATION
402 REVOCATION OF A BURN PERMIT
403 SMOKE MANAGEMENT PROGRAM
404 APCO APPROVAL
405 BURN PERMIT FEES

500 MONITORING AND RECORDS

501 BURN REPORTS

100 GENERAL

101 PURPOSE: To establish standards and administrative requirements under which agricultural burning, including prescribed burning, may occur in a reasonably regulated manner that manages the generation of smoke and reduces the emission of particulates and other air contaminants from such burning. This rule regulates the use of open outdoor fires used in forest management, range improvement, improvement of land for wildlife and game habitat or disease or pest prevention, or the use of open outdoor fires used in the operation or the maintenance of a system for the delivery of water and wildland vegetation management burning.

To establish the requirements pursuant to Title 17 CCR Subchapter 2 - Smoke Management Guidelines for Agricultural and Prescribed Burning, Article 2 - District Smoke Management Program.

102 APPLICABILITY: The provisions of this Rule apply to all prescribed burning conducted in Placer County except where otherwise prohibited by a local jurisdiction.

103 EXEMPTIONS:

103.1 Rule Exemptions

103.1.1 Burning conducted pursuant to Rule 301, NONAGRICULTURAL BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.2 Burning conducted pursuant to Rule 302, AGRICULTURAL WASTE BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.3 Burning conducted pursuant to Rule 304, LAND DEVELOPMENT BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.4 Burning conducted pursuant to Rule 305, RESIDENTIAL ALLOWABLE BURNING is exempt from this Rule.

103.1.5 Burning conducted pursuant to Rule 306, OPEN BURNING OF NONINDUSTRIAL WOOD WASTE AT DESIGNATED DISPOSAL SITES is exempt from this Rule.

103.2 Exemptions From Section 304, Burn Days

103.2.1 Empty Sacks or Containers: The APCO may, by special burn permit, authorize the burning of empty sacks or containers which contained pesticides or other toxic substances on the premises where used, provided the sacks or containers are within the definition of agricultural wastes.

103.2.2 Burn Day Exemption for Threat of Imminent and Substantial Economic Loss: The APCO may, by burn permit, allow agricultural burning on days designated by the ARB or APCO as "no burn days" if the denial of the burn permit would threaten imminent and substantial economic loss. The granting of an exception does not exempt the applicant from any other District or fire control regulations. Such authorization shall be limited to the amount of acreage which can be burned in any one day and will only authorize burning which is not likely to cause or contribute to exceedances of air quality standards or result in smoke impacts to smoke sensitive areas.

200 DEFINITIONS: (Unless otherwise defined below, the terms used in this Rule are as defined in Rule 102, DEFINITIONS or Rule 301, NONAGRICULTURAL BURNING SMOKE MANAGEMENT.)

201 AGRICULTURAL BURNING: Open outdoor fires used in agricultural operations in the growing of crops or raising of fowl or animals; open outdoor fires used in forest management, range improvement; or the improvement of land for wildlife and game habitat or disease or pest prevention; or the use of open outdoor fires used in the operation or the maintenance of a system for the delivery of water and wildland vegetation management burning.

202 AIR QUALITY: The characteristics of the ambient air as indicated by state ambient air quality standards which have been adopted by the ARB pursuant to Section 39606 of the Health and Safety Code and by National Ambient Air Quality Standards which have been established pursuant to Sections 108 and 109 of the federal Clean Air Act pertaining to criteria pollutants and Section 169A of the federal Clean Air Act pertaining to visibility.

203 AMBIENT AIR: That portion of the atmosphere, external to buildings, to which the general public has access.

204 BURN PROJECT: An active or planned prescribed burn or a naturally ignited wildland fire managed for resource benefits.

205 BRUSH TREATMENT: Vegetation to be burned that has been felled, crushed or uprooted with mechanical equipment, or has been desiccated with herbicides.

206 CLASS I AREA: A mandatory visibility protection area designated pursuant to Section 169A of the federal Clean Air Act.

207 DISALLOWED COMBUSTIBLES: Any waste or manufactured material, including but not limited to petroleum products and petroleum wastes; construction and demolition debris; coated wire; putrescible (rotten wastes) and non-putrescible solid, semisolid and liquid materials or wastes; tires; tar; tarpaper; non-natural wood waste; processed or treated wood and wood products; metals; motor vehicle bodies and parts; rubber; synthetics; plastics, including plastic film, twine and pipe; fiberglass; styrofoam; garbage; trash; refuse; rubbish; disposable diapers; ashes; glass; industrial wastes; manufactured products; equipment; instruments; utensils; appliances; furniture; cloth; rags; paper or paper products; cardboard; boxes; crates; excelsior; offal; swill; carcass of a dead animal; manure; human or animal parts or wastes, including blood; and fecal- and food-contaminated material.

208 FIRE PROTECTION AGENCY: Any agency with the responsibility and authority to protect people, property, and the environment from fire, and having jurisdiction within the District.

209 FOREST MANAGEMENT BURNING: The use of open outdoor fires, as part of a forest management practice, to remove forest debris. Forest management practices include timber operations, silvicultural practices, and forest protection practices.

210 FORTY-EIGHT (48) HOUR FORECAST: A prediction of the meteorological and air quality conditions that are expected to exist for a prescribed burn in a specific area 48 hours from the day of the prediction. The prediction should indicate a degree of confidence.

211 LAND MANAGER: Any federal, state, local, or private entity that administers, directs, oversees, or controls the use of public or private land, including the application of fire to the land.

212 NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS): Standards promulgated by the United States Environmental Protection Agency that specify the maximum acceptable concentrations of pollutants in the ambient air to protect public health with an adequate margin of safety, and to protect public welfare from any known or anticipated adverse effects of such pollutants (e.g., visibility impairment, soiling, harm to wildlife or vegetation, materials damage, etc.) in the ambient air.

213 NINETY-SIX (96) HOUR TREND: A prediction of the meteorological and air quality conditions that are expected to exist for a prescribed burn in a specific area 96 hours from the day of the prediction.

214 NO BURN DAY: Any day on which agricultural burning, including prescribed burning, is prohibited by the ARB or the APCO.

215 OPEN BURNING OR OUTDOOR FIRE: Burning of any combustibles of any type, outdoors in the open air, where the products of combustion are not directed through a flue.

216 PARTICULATE MATTER (PM): Any material, except uncombined water, which can exist in a finely divided form as a liquid or solid.

217 PERMISSIVE BURN DAY OR BURN DAY: Any day in which agricultural burning, including prescribed burning, is not prohibited by the ARB and/or the APCO.

218 PRESCRIBED BURN: Includes Forest Management, Range Improvement, Wildland Vegetation Management, Wildland/Urban Interface, and naturally-ignited burns for resource benefits.

219 PRESCRIBED BURNING: The planned application and confinement of fire to wildland fuels on lands selected in advance of that application, to achieve any of the following objectives:

219.1 Prevention of high-intensity wildland fires through the reduction of the volume and continuity of wildland fuels;

219.2 Watershed management;

219.3 Range improvement;

219.4 Vegetation management;

219.5 Forest improvement and/or forest management;

219.6 Wildlife habitat improvement;

219.7 Air quality maintenance.

220 RANGE IMPROVEMENT BURNING: The use of open outdoor fires to remove vegetation for a wildlife, game, or livestock habitat or for the initial establishment of an agricultural practice on previously uncultivated land.

221 SACRAMENTO VALLEY SMOKE MANAGEMENT PROGRAM: A regional program outlined under a plan prepared by the Sacramento Valley Basinwide Air Pollution Control Council (BCC) and its Technical Advisory Committee (TAC). The BCC and TAC are comprised of an elected district board member and APCO, respectively, from each air district in the Basin: Butte, Colusa, Glenn, Placer, Sacramento, Shasta, Tehama, Yolo/Solano, and Feather River. The BCC reviews and amends the program in

cooperation with the staff of the California Air Resources Board Meteorology and Compliance Program Review sections, the affected industry, environmental groups, and other interested parties.

222 **SEVENTY-TWO (72) HOUR OUTLOOK:** A prediction of the meteorological and air quality conditions that are expected to exist for a prescribed burn, in a specific area, 72 hours from the day of the prediction.

223 **SHEETING:** Polyethylene, kraft paper or other products commercially manufactured for covering piles of vegetation prior to burning for the purpose of keeping vegetation dry. Covers on piles have been shown to reduce emissions, by keeping some of the pile dry, which allows more rapid ignition of the piles with a minimum need for ignition accelerants.

224 **SILVICULTURAL PRACTICES:** The establishment, development, care, maintenance, or reproduction of stands of timber.

225 **SMOKE MANAGEMENT PLAN:** A document prepared for each prescribed fire by land managers or fire managers that provides the information and procedures required in Section 80160 of Title 17 of the California Code of Regulations.

226 **SMOKE MANAGEMENT PRESCRIPTION:** Measurable criteria that define conditions under which a prescribed fire may be ignited, guide selection of appropriate management responses, and indicate other required actions. Prescription criteria may include, but are not limited to minimizing smoke impacts, and safety, economic, public health, environmental, geographic, administrative, social, or legal considerations such as complying with Health and Safety Code Section 41700, public nuisance statute.

227 **SMOKE MANAGEMENT PROGRAM:** A program adopted by the District Board and approved by the California Air Resources Board as required under Title 17 of the California Code of Regulations, Chapter 1, Subchapter 2, Smoke Management Guidelines for Agricultural and Prescribed Burning. The program outlines the implementation and enforcement of a smoke management program for those portions of Placer County in the Mountain Counties and Lake Tahoe Air Basins.

228 **SMOKE SENSITIVE AREAS:** Populated areas and other areas where the District has determined that smoke and air pollutants can adversely affect public health or welfare. Such areas can include, but are not limited to, cities, towns and villages, campgrounds, trails, populated recreational areas, hospitals, nursing homes, schools, roads, airports, public events, shopping centers, and mandatory Class I areas.

229 **STATE AMBIENT AIR QUALITY STANDARDS:** Specified concentrations and durations of air pollutants which reflect the relationship between the intensity and composition of air pollution to undesirable effects, as established by the state board pursuant to Health and Safety Code Section 39606.

230 **TIMBER OPERATIONS:** The cutting or removal of timber or other forest vegetation.

231 **WILDFIRE:** An unwanted wildland fire.

232 **WILDLAND:** An area where development is generally limited to roads, railroads, power lines, and widely scattered structures. Such land is not cultivated (i.e., the soil is disturbed less frequently than once in 10 years), is not fallow, and is not in the United States Department of Agriculture Conservation Reserve Program. The land may be neglected altogether or managed for such purposes as wood or forage production, wildlife, recreation, wetlands, or protective plant cover. For CAL FIRE only, “Wildland” as specified in California Public Resources Code (PRC) Section 4464(a) means any land that is classified as a state responsibility area pursuant to Article 3 (commencing with

Section 4125) of Chapter 1, Part 2 of Division 4 and includes any such land having a plant cover consisting principally of grasses, forbs, or shrubs that are valuable for forage.

Any lands that are contiguous to lands classified as a state responsibility area if wildland fuel accumulation is such that a wildland fire occurring on these lands would pose a threat to the adjacent state responsibility area.

233 WILDLAND FIRE: Any nonstructural fire, other than prescribed fire, that occurs in the wildland.

234 WILDLAND/URBAN INTERFACE: The line, area, or zone where structures and other human development meet or intermingle with the wildland.

235 WILDLIFE OR GAME HABITAT: Any area used or planned to be used for conservation or management of wild plants or animals.

236 WILDLAND VEGETATION MANAGEMENT BURNING: The use of prescribed burning conducted by a public agency or through a cooperative agreement or contract involving a public agency to burn land predominantly covered with chaparral, (As defined in California Code of Regulations, Title 14, Division 1.5, Chapter 9.8, Article 1, Section 1561.1), trees, grass or standing brush. The planned application of fire may include naturally ignited burns.

300 STANDARDS

The provisions of the Smoke Management Program, pursuant to Title 17 CCR Subchapter 2 - Smoke Management Guidelines for Agricultural and Prescribed Burning, Article 2 - District Smoke Management Program are included within Sections 300 and 400.

301 PROHIBITIONS ON OPEN BURNING: Except as provided in Regulation 3, no person shall use open outdoor fires (including the use of a burn barrel) for the purpose of disposal or burning of any disallowed combustibles.

302 BURN PERMITS

302.1 A person shall not ignite or allow agricultural burning or prescribed burning without first obtaining a valid burn permit from the District.

302.2 A separate burn permit may also be required from the fire protection agency that has jurisdiction in the area of the proposed burn project.

303 BURN PERMIT VALIDITY: No burn permit shall be construed to authorize open outdoor fires for any day during which:

303.1 It is a no-burn day.

303.2 Open burning is prohibited by a fire protection agency for fire control or prevention.

304 BURN DAYS: No person shall knowingly ignite or allow ignition of agricultural burning or prescribed burning on no burn days or when burning is prohibited by a fire protection agency.

305 REGISTRATION OF PRESCRIBED BURNS

305.1 All persons who want to conduct prescribed burning in the District in any particular calendar year must register their planned burn projects with the District.

Burn projects shall be registered semi-annually prior to the spring and fall burn season. Updates and late additions to this registration process are accepted.

305.1.1 The burn registration shall include the name and address of the permittee, including a contact person with phone number.

305.1.2 A listing of all projects planned, with legal descriptions of their locations (township, range, section number).

305.1.3 An estimate of the total acreage and/or tons of vegetation to be burned.

305.1.4 The scheduled month of expected burning for each listed burn project.

305.1.5 A meteorological prescription addressing smoke management concerns, if applicable.

305.2 Burn registrations are not required to be in a specific format but shall contain all the required information in subsection 305.1.

306 SMOKE MANAGEMENT PLANS

Smoke management plans may be required for the following types of burns: planned wildland, wildland vegetation management, forest management, and range improvement burn projects.

306.1 Submittal and District approval of a smoke management plan, unless otherwise indicated.

306.1.1 Submittal of a smoke management plan shall occur at least 14 days in advance of the burn. District approval of the smoke management plan shall be obtained at least 72 hours prior to the burn.

306.2 For burn projects less than 10 acres in size and/or that will emit less than one ton of particulate matter, the land manager must obtain a District burn permit.

306.3 For burn projects between 10 and 100 acres and/or that will emit between one ton and 10 tons of particulate matter, the land manager must obtain a District burn permit, and submit the following information in a smoke management plan:

306.3.1 Location, types and amounts of vegetation to be burned;

306.3.2 Expected duration of the prescribed fire from ignition to extinction;

306.3.3 Identification of responsible personnel, including telephone contacts; and

306.3.4 Identification and location of all smoke sensitive areas

306.4 For burn projects greater than 100 acres or estimated to produce more than 10 tons of particulate matter, the land manager must obtain a District burn permit, and submit the information in Section 306.3, along with the following information in a smoke management plan:

306.4.1 Identification of meteorological conditions necessary for burning;

306.4.2 The smoke management criteria the land manager or his/her designee will use in making burn ignition decisions;

306.4.3 Projections, including a map, of where the smoke is expected to travel, both day and night;

306.4.4 Specific contingency actions, including fire suppression or containment plans, that will be taken if smoke impacts occur or meteorological conditions deviate from those specified in the smoke management plan; and

306.4.5 An evaluation of alternatives to burning considered; if an analysis of alternatives has been prepared as part of the environmental documentation required for the burn project pursuant to the National Environmental Policy Act or the California Environmental Quality Act as applicable, the analysis shall be attached to the smoke management plan in satisfaction of this requirement or the location of where such information may be found can be referred to in the smoke management plan.

306.5 For burn projects that are greater than 250 acres, or will continue burning or producing smoke overnight, or are near smoke sensitive areas or as otherwise required by the District, the land manager must obtain a District burn permit and submit the information in Sections 306.3 and 306.4, along with the following information in a smoke management plan.

306.5.1 Visual monitoring;

306.5.2 Ambient particulate monitoring; or

306.5.3 Other monitoring as approved by the APCO.

306.6 The land manager shall coordinate daily with the District, or the ARB, for multi-day burns that may impact smoke sensitive areas, to affirm that the burn project complies with the conditions specified in the smoke management plan, and/or whether contingency actions are necessary. If the land manager or District staff observes unacceptable smoke impacts occurring to a smoke sensitive area from an authorized burn, then the burner shall promptly take such contingency actions as necessary.

306.7 Naturally-Ignited Burns for Resource Benefits: When a natural ignition occurs on a no burn day, the initial “go/no-go” decision to manage the fire for resource benefit shall be a “no-go” unless:

306.7.1 After consultation with the appropriate land manager, the District determines, for smoke management purposes, that the burn can be managed for resource benefit; or

306.7.2 For periods of less than 24 hours, the land manager has made a reasonable effort to contact the District, or if the District is not available, the ARB.

306.7.3 After 24 hours, the land manager has made a reasonable effort to contact the District, or if the District is not available, the ARB has been contacted and concurs that the burn can be managed for resource benefit.

A “no-go” decision does not necessarily mean that the fire must be extinguished, but that the fire cannot be considered as a prescribed fire.

Smoke management plans shall be submitted within 72 hours of the start of the fire for naturally ignited wildland fires managed for resource benefits that are expected to exceed 10 acres in size.

306.8 Adherence with an Approved Smoke Management Plan: The land manager or his/her designee conducting a prescribed burn shall ensure that all conditions and requirements stated in the approved smoke management plan are met on the day of the burn event, prior to ignition.

306.9 Post-Burn Evaluation Requirements: The land manager shall submit a post-burn evaluation for fires greater than 250 acres or fires with adverse smoke impacts, as determined by the APCO, within thirty (30) days of project completion.

306.10 Fish and Game Certification: For burns done primarily for the improvement of land for wildlife and game habit, the burn permit applicant shall file with the District a statement from the California Department of Fish and Game (CDFG) certifying that the prescribed burn is desirable and proper. The CDFG may specify the amount of brush treatment required, along with any other conditions it deems appropriate. Alternatively, the APCO may accept a wildlife biologist opinion contained in a land management plan approved by the appropriate state or federal authority or certifications by the United States Fish and Wildlife Service.

307 VEGETATION PREPARATION AND DRYING TIMES: To assure rapid and complete combustion with a minimum of smoke, and to lower the moisture content of the vegetation being burned, (from when the vegetation was cut until it is to be burned), the following are drying times.

307.1 No vegetation shall be burned unless it is reasonably free of disallowed combustibles, dirt, soil, and surface moisture and shall be burned in a manner to prevent excessive smoke. Excessive smoke is that which causes a nuisance.

307.2 For pile burning, the vegetation shall be burned in place or stacked loosely, dried and be free of dirt and surface moisture when possible. Piled vegetation shall be prepared so that it will burn with a minimum of smoke.

307.3 Drying times for vegetation to be included in a range improvement burn shall be at least six months, if economically and technically feasible.

307.4 A minimum of three to six weeks of drying time for prunings or brush or small branches 3 to 6 inches in diameter, at the cut end is suggested for prescribed burning.

307.5 A minimum of six weeks of drying time, for trees stumps, and large branches greater than 6 inches in diameter, at the cut end is suggested for prescribed burning. Stumps should be free of dirt and rocks.

307.6 Unwanted trees shall be felled and dried prior to the burn.

307.7 The vegetation to be burned must originate within the boundaries of the prescribed burning project.

307.8 Vegetation should be windrowed or piled if technically feasible.

307.9 Burn Pile Sheeting: Sheeting may be burned with the vegetation provided that:

307.9.1 The sheeting has been covering piled vegetation for at least one month prior to burning;

307.9.2 The amount of sheeting burned is no more than the minimum necessary to cover the pile;

307.9.3 Removal of the sheeting before burning is impractical; and

307.9.4 The land manager is able to provide evidence, such as purchase records or package labeling, that the sheeting is manufactured for this purpose.

308 BURN AUTHORIZATION: The burn authorization specifies the amount, timing, and location for the burn projects on a daily basis.

308.1 Burn authorizations shall be given on a first come - first served basis. A burn authorization may be rescinded if meteorological conditions change such that adverse air quality impacts, including complaints, are likely, or if burning by a fire protection agency to abate an imminent fire hazard is suddenly and unexpectedly required in the same area. Authorization requests to the District can be made by phone, fax, email, in person or through a web-based program, prior to ignition.

308.2 Burning shall only be conducted on a burn day except as allowed under Section 103.2.

308.3 Prior to requesting a burn authorization from the District, land managers can obtain a 48-hour forecast, 72-hour outlook, and a 96-hour trend for specific burns from the California Air Resources Board duty meteorologist. These forecasts are not a substitute for a burn authorization, and contain no guarantee that a favorable forecast will necessarily lead to a burn authorization approval from the District.

308.4 For multi-day burns the burner shall obtain daily authorization from the District prior to continuing with the burn.

309 APPROVED IGNITION DEVICES: All open outdoor fires as authorized by this regulation shall be ignited only with approved ignition devices. The vegetation to be burned should be ignited as rapidly as practicable within applicable fire control restrictions.

310 WIND DIRECTION: Burning shall be curtailed when smoke is drifting into a nearby populated area or which is or may become a nuisance or hazard.

311 DETERMINATION OF AMOUNT BURNED DAILY

311.1 Sacramento Valley Air Basin: A prescribed burn conducted under a Smoke Management Plan, located in the Sacramento Valley Air Basin, shall be considered a part of the daily agricultural burning acreage allocation that was burned on a given day.

311.2 Mountain Counties and Lake Tahoe Air Basins: Only that amount of vegetation that can be reasonably expected to burn completely within 24 hours of ignition.

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT APPLICATION INFORMATION

401.1 Type of burning;

401.2 Name and/or Business Name and address of the permittee;

401.3 Location of the proposed burn;

401.4 Distance from the proposed burn to the nearest neighboring home or structure;

401.5 The type of vegetation or agricultural waste to be burned;

401.6 Acreage or estimated tonnage or size of pile of the vegetation to be burned;

401.7 Reason for burning;

401.8 Applicant's signature with date signed. The applicant signing the burn permit shall read and attest to the accuracy of the information provided.

401.9 Each burn permit issued shall bear a statement of warning containing the following words or words of like or similar import: "THIS BURN PERMIT IS VALID ONLY FOR THOSE DAYS ON WHICH THE STATE AIR RESOURCES BOARD DOES NOT PROHIBIT AGRICULTURAL BURNING PURSUANT TO SECTION 41855 OF THE HEALTH AND SAFETY CODE."

401.10 The applicant or representative shall have the burn permit available for inspection at the burn site during the burn.

402 REVOCATION OF A BURN PERMIT: The APCO, or his/her designee, may revoke a burn permit if it is found that the burn permit conditions, any state or federal laws, or the provisions of this Rule have been violated. The designated agency or the APCO shall notify the burn permit holder in writing of the revocation and the reasons. Service of the notification of revocation may be by personal delivery or certified mail. In the case of service by mail, service shall be deemed complete at the time of deposit of the notification in the United States Post Office, or a mail box, sub-Post Office, substation, or mail chute, or other like facility.

402.1 Within ten days after service of the notice of revocation specified in Section 402 the burn permit holder may petition the Hearing Board in writing for a public hearing. The Hearing Board, after notice and a public hearing held within 30 days after filing the petition, may sustain or reverse the decision of the APCO or the designated agency.

403 SMOKE MANAGEMENT PROGRAM

403.1 Sacramento Valley Air Basin: The Sacramento Valley Smoke Management Program applies to agricultural and other burning operations, as defined by Section 80101 of Title 17 of the CCR, which are conducted at all elevations in the Sacramento Valley Air Basin. Policies and procedures specified by the Sacramento Valley Smoke Management program apply throughout the year unless otherwise specified in the program.

403.2 Mountain Counties and Lake Tahoe Air Basins: The Placer County Smoke Management Program applies to agricultural and other burning operations, as defined by Section 80101 of Title 17 of the CCR, which are in the Mountain Counties and Lake Tahoe Air Basins. Policies and procedures specified by this program apply throughout the year unless otherwise specified in the program.

404 APCO APPROVAL: No person shall commence an agricultural burn without receiving permission from the APCO, or his/her designee. For those air basins using a daily allocation system, the APCO shall distribute the daily allocated acreage for the purposes of minimizing the density of emissions and protecting downwind urban areas.

405 BURN PERMIT FEES: Burn permits are valid only following receipt of fees specified in Rule 607, BURN PERMIT FEES.

500 MONITORING AND RECORDS

501 BURN REPORTS

501.1 Annual Report: A report of agricultural burning conducted shall be submitted to the ARB by the air district within 45 days of the end of each calendar year. The report shall include the estimated tonnage of vegetation from prescribed burning, and the location of where the burning was performed.

501.2 Special Permits Issuance Report: A report of burn permits issued, each year, pursuant to subsection 103.2.2 shall be submitted to the ARB within 45 days of the end of the calendar year. The report shall include the number of such burn permits issued, the date of issuance of each burn permit, the person or persons to whom the burn permit was issued, and an estimate of the amount of vegetation burned pursuant to the burn permit, and a summary of the reasons why denial of each burn permit would have threatened imminent and substantial economic loss, including the nature and dollar amounts of such loss.

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RULE 304 LAND DEVELOPMENT BURNING SMOKE MANAGEMENT

Adopted 02-10-11
(Amended 02-09-12)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 CONSTRUCTION-DEMOLITION DEBRIS
202 DISALLOWED COMBUSTIBLES
203 LAND DEVELOPMENT BURNING
204 NO-BURN DAY
205 SEASONAL OUTDOOR BURN SUSPENSION

300 STANDARDS

301 AUTHORIZATION TO BURN
302 PROHIBITIONS ON OPEN BURNING
303 ALLOWABLE COMBUSTIBLES
304 BURN PERMITS
305 BURN PERMIT VALIDITY
306 BURN DAYS
307 VEGETATION PREPARATION AND DRYING TIMES
308 APPROVED IGNITION DEVICES
309 WIND DIRECTION
310 DETERMINATION OF AMOUNT BURNED DAILY
311 INSPECTION REQUIRED PRIOR TO BURNING

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT REVIEW
402 BURN PERMIT APPLICATION INFORMATION
403 REVOCATION OF A BURN PERMIT
404 BURN PERMIT FEES

500 MONITORING AND RECORDS (None)

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100 GENERAL

101 PURPOSE: To establish standards and administrative requirements under which land development burning, may occur in a reasonably regulated manner that manages the generation of smoke and reduces the emission of particulates and other air contaminates from such burning.

102 APPLICABILITY: The provisions of this rule shall apply to all residential or commercial land development burning located in Placer County except where otherwise prohibited by a local jurisdiction.

103 EXEMPTIONS

103.1 Rule Exemptions

103.1.1 Burning conducted pursuant to Rule 301, NONAGRICULTURAL BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.2 Burning conducted pursuant to Rule 302, AGRICULTURAL WASTE BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.3 Burning conducted pursuant to Rule 303, PRESCRIBED BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.4 Burning conducted pursuant to Rule 305, RESIDENTIAL ALLOWABLE BURNING is exempt from this Rule.

103.1.5 Burning conducted pursuant to Rule 306, OPEN BURNING OF NONINDUSTRIAL WOOD WASTE AT DESIGNATED DISPOSAL SITES is exempt from this Rule.

200 DEFINITIONS:

(Unless otherwise defined below, the terms used in this Rule are as defined in Rule 102, DEFINITIONS or Rule 301, NONAGRICULTURAL BURNING SMOKE MANAGEMENT.)

201 CONSTRUCTION-DEMOLITION DEBRIS: Any material associated with the construction or demolition of any building, dwelling, or other man-made structures, including but not limited to lumber, tar paper, roofing material, wiring, flooring material, insulation, and plywood.

202 DISALLOWED COMBUSTIBLES: Any waste or manufactured material, including but not limited to petroleum products and petroleum wastes; construction and demolition debris; coated wire; putrescible (rotten wastes) and non-putrescible solid, semisolid and liquid materials or wastes; tires; tar; tarpaper; non-natural wood waste; processed or treated wood and wood products; metals; motor vehicle bodies and parts; rubber; synthetics; plastics, including plastic film, twine and pipe; fiberglass; styrofoam; garbage; trash; refuse; rubbish; disposable diapers; ashes; glass; industrial wastes; manufactured products; equipment; instruments; utensils; appliances; furniture; cloth; rags; paper or paper products; cardboard; boxes; crates; excelsior; offal; swill; carcass of a dead animal; manure; human or animal parts or wastes, including blood; and fecal- and food-contaminated material.

203 LAND DEVELOPMENT BURNING: The use of open outdoor fires for the disposal of vegetation grown on property being developed for commercial or residential purposes.

204 NO-BURN DAY: Any day on which agricultural burning, including prescribed burning, is prohibited by the ARB or the APCO.

205 SEASONAL OUTDOOR BURN SUSPENSION: A suspension by fire agencies of open burning activities typically begins on July 1st of each year (or sooner) and extending through the fire season until lifted by those fire agencies in the fall.

300 STANDARDS

301 AUTHORIZATION TO BURN: Pursuant to Section 41802 of the California Health and Safety Code, this Rule authorizes land development burning.

302 PROHIBITIONS ON OPEN BURNING: Except as provided in Regulation 3, no person shall use an open outdoor fire (including the use of a burn barrel) for the purpose of disposal or burning of any disallowed combustibles.

303 ALLOWABLE COMBUSTIBLES: The only allowable combustibles that can be burned is vegetation originating on the premises and reasonably free of dirt, soil, and visible surface moisture. The burning of poison oak (*toxicodendron diversilobum*) or oleander (*nerium oleander*) may be subject to additional permit conditions under Section 304.

304 BURN PERMITS

304.1 A person shall not ignite or allow open outdoor burning, pursuant to this Rule, without first obtaining a valid burn permit from the District.

304.2 A separate burn permit may also be required from the fire protection agency that has jurisdiction in the area of the proposed burn project.

304.3 No permit shall be issued for land development burning, except for vegetation removed for residential development purposes from the property of a single or two family dwelling or when the burn permit applicant has provided a demonstration in Section 400 that there is no practical alternative to burning and the APCO has determined that the demonstration has been made. The APCO may weigh the relative impacts of burning on air quality in requiring a more persuasive demonstration for more densely populated regions for a large proposed burn versus a smaller one.

304.4 The APCO may add additional specific burn permit conditions for the burning of poison oak (*toxicodendron diversilobum*) or oleander (*nerium oleander*).

305 BURN PERMIT VALIDITY: No burn permit shall be construed to authorize open outdoor fires for any day during which:

305.1 It is a no-burn day.

305.2 Open burning is prohibited by a fire protection agency for fire control or prevention.

306 BURN DAYS: No person shall knowingly ignite, or allow ignition of allowable combustibles on days when it is:

306.1 A no burn day, or

306.2 When it is prohibited by a fire protection agency including, during the seasonal outdoor burn suspension, or

306.3 Those days during the ozone season (May – October) when there is a potential for a violation of the National Ambient Air Quality Standards (NAAQS).

307 VEGETATION PREPARATION AND DRYING TIMES: To assure rapid and complete combustion with a minimum of smoke, and to lower the moisture content of the vegetation being burned, (from when the vegetation was cut and is to be burned), the following are drying times.

307.1 No vegetation shall be burned unless it is reasonably free of disallowed combustibles, dirt, soil, and surface moisture and shall be burned in a manner to prevent excessive smoke. Excessive smoke is that which causes a nuisance.

307.2 Vegetation should be windrowed if economically and technically feasible.

307.3 Vegetation stacked for burning shall not be burned unless it is stacked in such a manner to promote drying and ensure combustion with a minimum amount of smoke.

307.4 A minimum of 15 days of drying time for fine prunings or cuttings less than 3 inches in diameter, at the cut end.

307.5 A minimum of three to six weeks of drying time for prunings or brush or small branches 3 to 6 inches in diameter, at the cut end.

307.6 A minimum of six weeks of drying time for trees, stumps and large branches greater than 6 inches in diameter, at the cut end.

307.7 Vegetation or stumps, greater than 12 inches in diameter, shall not be burned unless they are split smaller than 12 inches in diameter and are free of dirt.

308 APPROVED IGNITION DEVICES: All open outdoor fires as authorized by this regulation shall be ignited only with approved ignition devices. The vegetation to be burned should be ignited as rapidly as practicable within applicable fire control restrictions.

309 WIND DIRECTION: Burning shall be curtailed when smoke is drifting into a nearby populated area or when it is or may become a nuisance or hazard.

310 DETERMINATION OF AMOUNT BURNED DAILY: Only that amount of vegetation that can be reasonably expected to burn completely within 24 hours of ignition.

311 INSPECTION REQUIRED PRIOR TO BURNING: Prior to burning pursuant to an issued burn permit an inspection is required to assess compliance with Section 300 Standards and Section 400 Administrative Requirements, and any non-compliance shall be remedied, including the removal of all disallowed combustibles, and the corrections verified, before burning can proceed.

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT REVIEW: The APCO or staff shall review and sign all burn permits prior to the authorization of burning.

402 BURN PERMIT APPLICATION INFORMATION

402.1 A demonstration that there is no practical alternative that can be used in lieu of burning to dispose of the vegetation. In addition to other information provided in the application, the demonstration shall include a discussion of the availability and feasibility of the alternatives to open burning, including implementation costs; efforts made to reduce the quantity of material to be burned; the impact of burning upon air quality conditions; and such other factors that warrant inclusion such as weather considerations, topography, and hazardous fire conditions.

402.2 Type of burning;

402.3 Name and/or Business Name and address of the permittee;

402.4 Location of the proposed burn;

402.5 Distance from the proposed burn to the nearest neighboring home or structure;

402.6 The type of vegetation to be burned;

402.7 Acreage or estimated tonnage or size of pile of the vegetation to be burned;

402.8 Reason for burning;

402.9 Applicant's signature with date signed. The applicant signing the permit shall read and attest to the accuracy of the information provided.

402.10 Each permit issued shall bear a statement of warning containing the following words or words of like or similar import: "THIS BURN PERMIT IS VALID ONLY FOR THOSE DAYS ON WHICH THE STATE AIR RESOURCES BOARD DOES NOT PROHIBIT AGRICULTURAL BURNING PURSUANT TO SECTION 41855 OF THE HEALTH AND SAFETY CODE."

402.11 When burning the applicant or representative shall have the burn permit available for inspection at the burn site.

403 REVOCATION OF A BURN PERMIT: The APCO, or his/her designee, may revoke a burn permit if it is found that the burn permit conditions, any state or federal laws, or the provisions of this Rule have been violated. The designated agency or the APCO shall notify the burn permit holder in writing of the revocation and the reasons therefore, service of the notification of revocation may be by personal delivery or certified mail. In the case of service by mail, service shall be deemed complete at the time of deposit of the notification in the United States Post Office, or a mail box, sub-Post Office, substation, or mail chute, or other like facility.

403.1 Within ten days after service of notice of revocation specified in Section 403 above, the burn permit holder may petition the Hearing Board in writing for a public hearing. The Hearing Board, after notice and a public hearing held within 30 days after filing the petition, may sustain or reverse the decision of the APCO or the designated agency.

404 BURN PERMIT FEES: Burn permits are valid only following receipt of fees specified in Rule 607, BURN PERMIT FEES.

500 MONITORING AND RECORDS (None)

RULE 305 RESIDENTIAL ALLOWABLE BURNING

Adopted 02-10-11
(Amended 02-09-12)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 EXEMPTIONS

200 DEFINITIONS

201 RESIDENTIAL ALLOWABLE COMBUSTIBLES
202 BURN BARREL
203 COMBUSTIBLE
204 DISALLOWED COMBUSTIBLES
205 NO-BURN DAY
206 OPEN BURNING OR OPEN OUTDOOR FIRE
207 PERMISSIVE BURN DAY OR BURN DAY
208 RESIDENCE

300 STANDARDS

301 PROHIBITIONS ON OPEN BURNING
302 RESIDENTIAL ALLOWABLE BURNING
303 BURN PERMITS
304 BURN DAYS
305 VEGETATION PREPARATION AND DRYING TIMES
306 APPROVED IGNITION DEVICES
307 WIND DIRECTION
308 DETERMINATION OF AMOUNT BURNED DAILY

400 ADMINISTRATIVE REQUIREMENTS (None)

500 MONITORING AND RECORDS (None)

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100 GENERAL

101 PURPOSE: To reduce emissions of toxic air contaminants from smoke from allowed outdoor burning at a residence, of allowable combustibles originating, on the premises where burned.

102 APPLICABILITY

102.1 This rule shall apply to persons conducting outdoor burning of residential allowable combustibles.

102.2 Title 17 of the California Code of Regulations for the Airborne Toxic Control Measure (ATCM) to Reduce Emissions of Toxic Air Contaminants from Outdoor Residential Waste Burning.

103 EXEMPTIONS

103.1 Rule Exemptions

103.1.1 Burning conducted pursuant to Rule 301, NONAGRICULTURAL BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.2 Burning conducted pursuant to Rule 302, AGRICULTURAL WASTE BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.3 Burning conducted pursuant to Rule 303, PRESCRIBED BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.4 Burning conducted pursuant to Rule 304, LAND DEVELOPMENT BURNING SMOKE MANAGEMENT is exempt from this Rule.

103.1.5 Burning conducted pursuant to Rule 306, OF OPEN BURNING OF NONINDUSTRIAL WOOD WASTE AT DESIGNATED DISPOSAL SITES is exempt from this Rule.

103.2 Exempt Areas: Effective January 1, 2004, on burn days only, fires for the disposal of dry, non-glossy paper and cardboard originating from, and being burned on the premises of a residence, may only be burned if an exemption has been approved by the District Board of Directors that meets all the following subsections 103.2.1 through 103.2.4.

103.2.1 The residence is not in an incorporated place; and

103.2.2 The residence lies within the boundaries of a census zip code or census zip code sub-area, within the district where the population density is equal to or less than 10.0 persons, as calculated from the last decennial United States Census Data; and

103.2.3 The residence is in an area not served on a weekly basis by an organized waste disposal service; and

103.2.4 The residence does not lie within the boundary of a jurisdiction which prohibits the burning of dry, non-glossy paper and cardboard as of January 4, 2002, or thereafter.

103.2.5 Within the boundaries of the census zip code or zip code sub-area, if the population density remains equal to or below 10.0 persons the air district may renew the exemption every ten years pursuant to Section 93113(e), Title 17 of the California Code of Regulations.

200 DEFINITIONS: (Unless otherwise defined below, the terms used in this Rule are as defined in Rule 102, DEFINITIONS or Rule 301, NONAGRICULTURAL BURNING SMOKE MANAGEMENT.)

201 ALLOWABLE COMBUSTIBLES: Vegetation originating on the premises of a residence, limited to the following: dry trees and trimmings, dry brush/shrubs, dry leaves, pine needles, grasses and forbs, dry plants and flowers, dry weeds, and dry vines. Lawn clippings, oleander (*nerium oleander*), and poison oak (*toxicodendron diversilobum*) are excluded. Vegetation that is not reasonably free of dirt, soil, and visible surface moisture, is not an allowed combustible.

202 BURN BARREL: A metal container used to hold combustible or flammable waste materials, so that they can be ignited outdoors for purpose of disposal.

203 COMBUSTIBLE: Any substance capable of burning or any substance that will readily burn.

204 DISALLOWED COMBUSTIBLES: Any waste or manufactured material, including but not limited to petroleum products and petroleum wastes; construction and demolition debris; coated wire; putrescible (rotten wastes) and non-putrescible solid, semisolid and liquid materials or wastes; tires; tar; tarpaper; non-natural wood waste; processed or treated wood and wood products; metals; motor vehicle bodies and parts; rubber; synthetics; plastics, including plastic film, twine and pipe; fiberglass; styrofoam; garbage; trash; refuse; rubbish; disposable diapers; ashes; glass; industrial wastes; manufactured products; equipment; instruments; utensils; appliances; furniture; cloth; rags; paper or paper products; cardboard; boxes; crates; excelsior; offal; swill; carcass of a dead animal; manure; human or animal parts or wastes, including blood; and fecal- and food-contaminated material.

205 NO-BURN DAY: Any day on which agricultural burning, including residential burning, is prohibited by the ARB or the APCO.

206 OPEN BURNING OR OPEN OUTDOOR: Burning of any combustibles of any type, outdoors in the open air, where the products of combustion are not directed through a flue.

207 PERMISSIVE BURN DAY OR BURN DAY: Any day in which agricultural burning including residential burning, is not prohibited by the ARB and/or the APCO.

208 RESIDENCE: A single or two-family dwelling unit and the land and ancillary surrounding (nonresidential) structures.

300 STANDARDS

301 PROHIBITIONS ON OPEN BURNING: Except as provided in Regulation 3, no person shall use an open outdoor fire (including the use of a burn barrel) for the purpose of disposal or burning of any disallowed combustibles.

302 RESIDENTIAL ALLOWABLE BURNING: Only allowable combustibles, originating at a residence, and free of disallowed combustibles, and reasonably free from dirt, soil, and visible surface moisture, may be burned in an open outdoor burn pile. Burning in a burn barrel is prohibited.

303 BURN PERMITS

303.1 A District burn permit is not required for residential allowable burning.

303.2 A separate burn permit may also be required from the fire protection agency that has jurisdiction in the area of the residential allowable burning.

304 BURN DAYS: No person shall knowingly ignite, or allow ignition of allowable combustibles on no-burn days or when it is prohibited by a fire protection agency.

305 VEGETATION PREPARATION AND DRYING TIMES: To assure rapid and complete combustion with a minimum of smoke, and to lower the moisture content of the vegetation being burned, (from when the vegetation was cut and is to be burned), the following are drying times.

305.1 No vegetation shall be burned unless it is free of disallowed combustibles, dirt, soil, and surface moisture and shall be burned in a manner to prevent excessive smoke. Excessive smoke is that which causes a nuisance.

305.2 Vegetation stacked for burning shall not be burned unless it is stacked in such a manner to promote drying and ensure combustion with a minimum amount of smoke.

305.3 A minimum of 15 days of drying time for fine prunings or cuttings less than 3 inches in diameter, at the cut end.

305.4 A minimum of three to six weeks of drying time, for prunings or brush or small branches 3 to 6 inches in diameter, at the cut end.

305.5 A minimum of six weeks of drying time for trees, stumps and large branches greater than 6 inches in diameter, at the cut end.

305.6 Vegetation or stumps, greater than 12 inches in diameter, shall not be burned unless they are split smaller than 12 inches in diameter and are free of dirt.

306 APPROVED IGNITION DEVICES: All open fires as authorized by this regulation shall be ignited only with approved ignition devices. The vegetation to be burned should be ignited as rapidly as practicable within applicable fire control restrictions.

307 WIND DIRECTION: Burning shall be curtailed when smoke is drifting into a nearby populated area or when it is or may become a nuisance or hazard.

308 DETERMINATION OF AMOUNT BURNED DAILY: Only that amount of vegetation that can be reasonably expected to burn completely within 24 hours of ignition unless the burn hours are further restricted.

400 ADMINISTRATIVE REQUIREMENTS (None)

500 MONITORING AND RECORDS (None)

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RULE 306 OPEN BURNING OF NONINDUSTRIAL WOOD WASTE AT DESIGNATED DISPOSAL SITES

Adopted 02-10-11
(Amended 02-09-12)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 ELEVATION ABOVE 1500 FEET
104 EXEMPTIONS

200 DEFINITIONS

201 DISALLOWED COMBUSTIBLES
202 NO-BURN DAY
203 NONINDUSTRIAL WOOD WASTE

300 STANDARDS

301 PROHIBITIONS ON OPEN BURNING
302 ARB SITE APPROVAL
303 BURN PERMITS
304 BURN PERMIT VALIDITY
305 BURN DAYS
306 VEGETATION PREPARATION AND DRYING TIMES
307 APPROVED IGNITION DEVICES
308 WIND DIRECTION
309 INSPECTION
310 LAWFUL POSSESSION

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT REVIEW
402 BURN PERMIT APPLICATION INFORMATION
403 REVOCATION OF A BURN PERMIT
404 BURN PERMIT FEES

500 MONITORING AND RECORDS

501 REPORTING
502 POST BURN INFORMATION

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100 GENERAL

101 PURPOSE: To control and monitor open burning of nonindustrial wood waste at designated disposal sites above 1500 feet elevation, mean sea level.

102 APPLICABILITY: Pursuant to California Health and Safety Code, Sections 41803 and 41804.5, this Rule authorizes the use of open outdoor fires for the burning of nonindustrial wood waste at designated disposal sites where such use has been permitted by the District and approved by the California Air Resources Board.

103 ELEVATION ABOVE 1500 FEET: Only city or county officials, in their official capacity, may apply for a burn permit to dispose of non-industrial wood waste at disposal sites located above 1500 feet, mean sea level.

104 EXEMPTIONS:

104.1 Rule Exemptions

104.1.1 Burning conducted pursuant to Rule 301, NONAGRICULTURAL BURNING SMOKE MANAGEMENT is exempt from this Rule.

104.1.2 Burning conducted pursuant to Rule 302, AGRICULTURAL WASTE BURNING SMOKE MANAGEMENT is exempt from this Rule.

104.1.3 Burning conducted pursuant to Rule 303, PRESCRIBED BURNING SMOKE MANAGEMENT is exempt from this Rule.

104.1.4 Burning conducted pursuant to Rule 304, LAND DEVELOPMENT BURNING SMOKE MANAGEMENT is exempt from this Rule.

104.1.5 Burning conducted pursuant to Rule 305, RESIDENTIAL ALLOWABLE BURNING is exempt from this Rule.

104.2 Exemption, Determination of Amount Burned Daily: Open burning of nonindustrial wood waste at designated disposal sites are exempt from burning that which can be reasonably expected to burn completely within the following 24 hours, once ignition occurs.

200 DEFINITIONS:

(Unless otherwise defined below, the terms used in this Rule are as defined in Rule 102, DEFINITIONS or Rule 301, NONAGRICULTURAL BURNING SMOKE MANAGEMENT.)

201 DISALLOWED COMBUSTIBLES: Any waste or manufactured material, including but not limited to petroleum products and petroleum wastes; construction and demolition debris; coated wire; putrescible (rotten wastes) and non-putrescible solid, semisolid and liquid materials or wastes; tires; tar; tarpaper; non-natural wood waste; processed or treated wood and wood products; metals; motor vehicle bodies and parts; rubber; synthetics; plastics, including plastic film, twine and pipe; fiberglass; styrofoam; garbage; trash; refuse; rubbish; disposable diapers; ashes; glass; industrial wastes; manufactured products; equipment; instruments; utensils; appliances; furniture; cloth; rags; paper or paper products; cardboard; boxes; crates; excelsior; offal; swill; carcass of a dead animal; manure; human or animal parts or wastes, including blood; and fecal- and food-contaminated material.

202 NO-BURN DAY: Any day on which agricultural burning, including burning at a designated disposal site, is prohibited by the ARB or the APCO.

203 NONINDUSTRIAL WOOD WASTE: Vegetation consisting of trees, vines and brush, which has been brought to the designated disposal site.

300 STANDARDS

301 PROHIBITIONS ON OPEN BURNING: Except as provided in this Rule or Regulation 3, no person shall use an open outdoor fire for the purpose of disposal or burning of any disallowed combustibles.

302 ARB SITE APPROVAL: Open burning of nonindustrial wood waste shall not be permitted at a disposal site until the ARB has approved the use of open outdoor fires for disposing of nonindustrial wood waste at the site.

303 BURN PERMITS

303.1 A person shall not ignite or allow open outdoor burning without a valid burn permit from the District.

303.2 A separate burn permit may also be required from the fire protection agency that has jurisdiction in the area of the proposed burn project.

304 BURN PERMIT VALIDITY: No burn permit shall be construed to authorize open outdoor fires for any day during which:

304.1 It is a no-burn day.

304.2 Open burning is prohibited by a fire protection agency for fire control or prevention.

305 BURN DAYS: No person shall knowingly ignite, or allow ignition of allowable combustibles, on no burn days or when it is prohibited by a fire protection agency.

305.1 If burning begins on a permissive burn day and in the subsequent days, a no-burn day occurs, only that which is burning can continue to burn; no new or additional vegetation can be added.

306 VEGETATION PREPARATION AND DRYING TIMES: To assure rapid and complete combustion with a minimum of smoke, and to lower the moisture content of the vegetation being burned, (from when the vegetation was cut and is to be burned), the following are drying times.

306.1 No vegetation shall be burned unless it is reasonably free of disallowed combustibles, dirt, soil, and surface moisture and shall be burned in a manner to prevent excessive smoke.

306.2 Vegetation stacked for burning shall not be burned unless it is stacked in such a manner to promote drying and ensure combustion with a minimum amount of smoke.

306.3 A minimum of 15 days of drying time for fine prunings or cuttings less than 3 inches in diameter, at the cut end.

306.4 A minimum of three (3) to six (6) weeks of drying time for prunings or brush or small branches 3 to 6 inches in diameter, at the cut end.

306.5 A minimum of six weeks of drying time for trees stumps, and large branches greater than 6 inches in diameter, at the cut end.

307 APPROVED IGNITION DEVICES: All open outdoor fires as authorized by this regulation shall be ignited only with approved ignition devices. The vegetation to be burned should be ignited as rapidly as practicable within applicable fire control restrictions.

308 WIND DIRECTION: Burning shall be curtailed when smoke is drifting into a nearby populated area or when it is or may become a nuisance or hazard.

309 INSPECTION: The APCO or his/her designee may require the inspection of the wood waste to be burned to verify that it is exclusively nonindustrial wood waste.

310 LAWFUL POSSESSION: The owner or person lawfully in possession of the land on which the disposal site is located shall file written approval of such burning with the District.

400 ADMINISTRATIVE REQUIREMENTS

401 BURN PERMIT REVIEW: The APCO or his/her designee shall review and sign all burn permits prior to authorizing burning.

401.1 The fire protection agency having jurisdiction over the area on which the designated disposal site is located shall also approve the burn permit.

402 BURN PERMIT APPLICATION INFORMATION:

402.1 Type of burning;

402.2 Name and/or Business Name and address of the permittee;

402.3 Location of the proposed burn;

402.4 Distance from the proposed burn to the nearest neighboring home or structure;;

402.5 The type of vegetation to be burned;

402.6 Acreage or estimated tonnage or size of pile of the vegetation to be burned;

402.7 Reason for burning;

402.8 Applicant's signature with date signed. The applicant signing the burn permit shall read and attest to the accuracy of the information provided.

402.9 Each burn permit issued shall bear a statement of warning containing the following words or words of like or similar import: "THIS BURN PERMIT IS VALID ONLY FOR THOSE DAYS ON WHICH THE STATE AIR RESOURCES BOARD DOES NOT PROHIBIT AGRICULTURAL BURNING PURSUANT TO SECTION 41855 OF THE HEALTH AND SAFETY CODE."

402.10 The applicant or representative shall have the burn permit available for inspection at the burn site during the burn.

403 REVOCATION OF A BURN PERMIT: The APCO, or his/her designee, may revoke a burn permit if it is found that the burn permit conditions, any state or federal laws, or the provisions of this Rule have been violated. The designated agency or the APCO shall

notify the burn permit holder in writing of the revocation and the reasons therefore, service of the notification of revocation may be made by personal delivery or certified mail. In the case of service by mail, service shall be deemed complete at the time of deposit of the notification in the United States Post Office, or a mail box, sub-Post Office, substation, or mail chute, or other like facility.

403.1 Within ten days after service of notice of revocation specified in Section 403 above, the burn permit holder may petition the Hearing Board in writing for a public hearing. The Hearing Board, after notice and a public hearing held within 30 days after filing the petition, may sustain or reverse the decision of the APCO or the designated agency.

404 BURN PERMIT FEES: Burn permits are valid only following receipt of fees specified in Rule 607, BURN PERMIT FEES.

500 MONITORING AND RECORDS

501 REPORTING: Notification shall be made to the District at least 72 hours prior to ignition.

502 POST-BURN INFORMATION: A post-burn report shall be submitted to the District, within 10 days following the completion of the burn.

502.1 Submitter's name and agency;

502.2 Location of burn;

502.3 Date of burn;

502.4 Burn day status, each day of burn;

502.5 Ignition date and time;

502.6 Completion date of burn;

502.7 Any smoke impacts including any reason for impacts;

502.8 Recommendations for future burns in the area to minimize impacts.

Adopted 11-12-74
(Revised 05-24-77)

REGULATION 4

MISCELLANEOUS PROVISIONS

All permits issued pursuant to these Rules and Regulations are subject to the following Rules:

RULE 401 RESPONSIBILITY

The fact that an authorization to construct or modify, or a permit to operate an article, machine, equipment or other contrivance described herein shall have been issued by the Air Pollution Control Officer shall not be an endorsement of such article, machine, or other contrivance; neither shall it be deemed or construed to be a warranty, guarantee or representation on the part of the Air Pollution Control Officer that emission standards would not be exceeded by such article, machine, equipment, or other contrivance. In every instance the person, firm or corporation to whom such authorization or permit is issued shall be and remain responsible under these regulations for each and every instance wherein emission standards are exceeded by the article, machine, equipment, or other contrivance described in the permit, and the fact of issuance or authorization shall not be a defense to or mitigation of any charge of violation.

Adopted 11-12-74
(Revised 05-24-77)

A. If air contaminants from two or more source operations are combined prior to emission and there are adequate and reliable means reasonably susceptible for confirmation and use by the Air Pollution Control District in establishing a separation of the components of the combined emission to indicate the nature, extent, quantity and degree of emission from each such source operation, the Rules and Regulations shall apply to each such source operation separately.

B. If air contaminants from two or more source operations are combined prior to emission and the combined emissions cannot be separated according to the requirements of RULE 406 A., the Rules and Regulations shall be applied to the combined emissions as if it originated in a single source operation subject to the most stringent limitations and requirements placed by the Rules and Regulations of any of the source operations whose air contaminants are so combined.

PLAAPCD RULE 407 CIRCUMVENTION

LAST REVISED 05/24/77

Adopted 11-12-74

(Revised 05-24-77)

A person shall not build, erect, install or use any article, machine, equipment or other contrivance, the use of which, without resulting in an actual reduction in the total release of air contaminants to the atmosphere, superficially reduces or conceals an emission which would otherwise constitute a violation of Division 26 of the Health and Safety Code of the State of California or of these Rules and Regulations. This rule shall not apply to cases in which the only violations involved are of Section 41700, or of RULE 205 of these Rules and Regulations.

PLAAPCD RULE 408 SOURCE RECORD KEEPING AND REPORTING

LAST REVISED 05/24/77

Adopted 11-12-74

(Revised 05-24-77)

The owner or operator of any stationary source, shall, upon notification from the District, maintain records of the nature and amounts of emissions from such sources and/or any other information as may be deemed necessary by the District to determine whether such source is in compliance with applicable emission limitations or other control measures. The Air Pollution Control Officer may require that such records be certified by a professional engineer, registered in the State of California. Such studies shall be at the expense of the person causing the emissions.

The information recorded shall be summarized and reported to the District, on forms or formats as furnished by the District, and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1 - June 30 and July 1 - December 31, except that the initial report period shall commence on the date the District issues notification of the recordkeeping requirements.

Information reported by the owner or operator and copies of the summarizing reports submitted to the District shall be retained by the owner or operator for two years after the date on which the pertinent report is subm

PLAAPCD RULE 410 RECORDKEEPING FOR VOC EMISSIONS

LAST REVISED 11/03/94

Adopted 09-25-90

(Revised 11-03-94)

CONTENTS

100 GENERAL

101 APPLICABILITY

102 RULES REQUIRING RECORDKEEPING

200 DEFINITIONS

201 EXEMPT COMPOUNDS

202 GRAPHIC ARTS MATERIALS

203 LOW SOLIDS ADHESIVE, ADHESIVE PRIMER, OR STAIN

204 PERMIT UNIT

205 STATIONARY SOURCE

206 VOLATILE ORGANIC COMPOUND (VOC)

300 STANDARDS

301 REQUIREMENTS

302 CALCULATING VOC CONTENT

303 INITIAL BOILING POINT

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE

100 GENERAL

101 APPLICABILITY: The provisions of this rule shall apply to an owner or operator of a stationary source within the District conducting operations, which include the use of fuels, adhesives, coatings, solvents, and/or graphic arts materials, when records are required to determine a District rule's applicability or source's exemption from a rule, rule compliance, or specifically as a Permit to Operate or an Authority to Construct condition.

102 RULES REQUIRING RECORDKEEPING: District rules requiring recordkeeping as outlined by Rule 410 include, but are not limited to, the following:

Rule 212 - Storage of Petroleum Products

Rule 213 - Gasoline Transfer into Stationary Storage Containers

Rule 215 - Transfer of Gasoline into Tank Trucks, Trailers and Railroad Tank Cars at Loading Facilities

Rule 216 - Organic Solvent Cleaning and Degreasing Operations

Rule 217 - Cutback and Emulsified Asphalt Paving Materials

Rule 223 - Metal Container Coating

200 DEFINITIONS

201 EXEMPT COMPOUNDS - For the purposes of this rule, exempt compounds are the following:

201.1 Methane

201.2 Carbon dioxide

201.3 Carbon monoxide

201.4 Carbonic acid

201.5 Metallic carbides or carbonates

201.6 Ammonium carbonate

201.7 1,1,1-trichloroethane

201.8 Methylene chloride

201.9 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)

201.10 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)

201.11 Trichlorofluoromethane (CFC-11)

201.12 Dichlorodifluoromethane (CFC-12)

201.13 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)

201.14 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114)

201.15 Chloropentafluoroethane (CFC-115)

201.16 Pentafluoroethane (HFC-125)

201.17 1,1,2,2-tetrafluoroethane (HFC-134)

201.18 Tetrafluoroethane (HFC-134a)

201.19 1,1-dichloro-1-fluoroethane (HCFC-141b)

201.20 1-chloro-1,1-difluoroethane (HCFC-142b)

201.21 1,1,1-trifluoroethane (HFC-143a)

201.22 Chlorodifluoromethane (HCFC-22)

201.23 Trifluoromethane (HFC-23)

201.24 Difluoroethane (HFC-152a)

201.25 The following four classes of perfluorocarbon 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.

d. Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

202 GRAPHIC ARTS MATERIALS - Any inks, coatings, adhesives, fountain solutions, thinners, retarders, or cleaning solutions used in printing or related coating or laminating processes.

203 LOW SOLIDS ADHESIVE, ADHESIVE PRIMER, OR STAIN - One which has less than one pound of solids per gallon of material.

204 PERMIT UNIT - Any article, machine, equipment, or other contrivance, or combination thereof, which may cause the issuance or control the issuance of air contaminants, and which requires a written permit pursuant to the provisions of Rule 501.

205 STATIONARY SOURCE - Any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. "Building, structure, facility, or installation" includes all pollutant emitting activities including emissions units which:

205.1 Are located on one or more contiguous or adjacent properties; and

205.2 Are under the same or common ownership or operation, or which are owned or operated by entities which are under common control; and

205.3 Belong to the same industrial grouping either by virtue of falling within the same two-digit standard industrial classification code, or by virtue of being part of a common industrial process, manufacturing process, or connected process involving a common raw material.

206 VOLATILE ORGANIC COMPOUND (VOC) - Any compound which contains at least one atom of carbon, except exempt compounds.

300 STANDARDS

301 REQUIREMENTS

301.1 An owner or operator of a stationary source using fuels, adhesives, coatings, solvents,

and/or graphic arts materials and subject to this rule shall maintain daily records of operations for the most recent two (2) year period, and not less than the most recent five (5) years for sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM. In addition, the operating parameters of basic process equipment, any control equipment and capture system(s) shall be recorded and those records maintained as specified above.

301.2 The records shall be retained on the premises of the affected operation for a period of not less than two (2) years, and not less than five (5) years for sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM. Said records shall be made available to the District upon request. The records shall include, but are not limited to, the following:

a. Each applicable District rule number pertinent to the operation for which records are being maintained;

b. A list of the permit units involved in the operation(s) using fuels, adhesives, coatings, solvents, and/or graphic arts materials;

c. The method of application and substrate type;

d. The amount and type of fuel(s), adhesive(s), coating(s) (including catalyst and reducer), solvent(s) (including diluent, surface preparation, clean-up, and wash-up solvents), and/or graphic arts material(s) used in each permit unit or dispensing station;

e. For each adhesive, coating (including catalyst

and reducer), solvent, and/or graphic arts material; the material density; VOC content in percent by weight of material, less water and exempt compounds; exempt compounds in percent by weight of material; solids content in percent by volume, gallons per gallon of material, or liter per liter of material; constituent composition in percent by weight of material; and pounds of VOC emitted per volume of solids. Data shall be recorded for the material(s) as applied;

f. For fuels, a record of the fuel specification which may include, but is not limited to: constituent analyses, ultimate analyses, and physical properties;

g. The composition and amount of diluent, surface preparation, clean-up, or wash-up solvent used per day and the VOC content of each including the amount used of exempt compounds. In addition, the method of application (wipe, dipping in a vat, spray, etc.), the substrate the solvent is applied to (metal, plastic, etc.), and the purpose of use (cleanup of equipment or parts, surface preparation, etc.) should also be recorded;

h. Where applicable, the initial boiling point of solvents used as surface cleaners;

i. Oven temperatures (for coating operations); and

j. Operating parameters of basic process equipment, control devices, and the capture system, which effect or have the potential to effect the quantity, extent, or characteristics of emitted pollutants.

302 CALCULATING VOC CONTENT

302.1 VOC content (less water and exempt compounds) for paint, varnish, adhesive, lacquer, non-solvent-borne inks, or related surface coatings shall be calculated using EPA Reference Method 24 (Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coatings, Code of Federal Regulations Title 40, Part 60, Appendix A).

302.2 The test method shall be documented. The VOC content of any material applicable under this rule may be supplied by a Material Safety Data Sheet (MSDS) or data sheet provided the test method described above is used and specified on the MSDS or data sheet.

302.3 VOC content and density of solvent-borne (solvent reducible) printing inks or related coatings shall be determined by EPA Reference Method 24A (Determination of Volatile Matter Content and Density of Printing Inks and Related Coatings, Code of Federal Regulations Title 40, Part 60, Appendix A).

303 INITIAL BOILING POINT: The Initial Boiling Point for surface preparation and cleanup solvents shall be determined by the current ASTM 1078-78.

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE: Provisions of this rule shall become effective upon the date of its adoption.

RULE 502 NEW SOURCE REVIEW

Adopted 11-12-74
(Amended 05-24-77, 06-19-79, 09-21-93, 11-03-94, 08-09-01, 12-09-04, rescinded and re-adopted 2-11-10, amended 10-13-11, 8-8-13)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 PUBLIC NOTIFICATION REQUIREMENTS

200 DEFINITIONS

201 ACTUAL EMISSIONS
202 ACTUAL EMISSIONS REDUCTIONS (AER)
203 ACTUAL INTERRUPTIONS OF ELECTRICAL POWER
204 ALLOWABLE EMISSIONS
205 AMBIENT AIR QUALITY STANDARDS
206 BASELINE ACTUAL EMISSIONS (BAE)
207 BEGIN ACTUAL CONSTRUCTION
208 BEST AVAILABLE CONTROL TECHNOLOGY (BACT)
209 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
210 CLASS I AREA
211 COMMENCE
212 CARGO CARRIERS
213 CONSTRUCTION
214 CONTIGUOUS PROPERTY
215 COST-EFFECTIVE
216 EMERGENCY ENGINES
217 EMERGENCY USE
218 EMISSION DECREASE
219 EMISSION REDUCTION CREDITS (ERCs)
220 EMISSIONS LIMITATION
221 EMISSIONS UNIT
222 FEDERALLY ENFORCEABLE
223 FUGITIVE EMISSIONS
224 FUNCTIONALLY EQUIVALENT EMSSION UNIT
225 HALOGENATED HYDROCARBONS
226 HAZARDOUS AIR POLLUTANT (HAP)
227 HISTORIC ACTUAL EMISSIONS (HAE)
228 IDENTICAL EMISSION UNIT
229 LAKE TAHOE AIR BASIN
230 MAJOR STATIONARY SOURCE – SACRAMENTO AIR BASIN
231 MAJOR STATIONARY SOURCE – MOUNTAIN COUNTIES AIR BASIN
232 MAJOR MODIFICATION
233 MODIFICATION
234 MOUNTAIN COUNTIES AIR BASIN
235 NECESSARY PRECONSTRUCTION APPROVALS OR PERMITS
236 NONATTAINMENT POLLUTANT
237 NSR REGULATED POLLUTANT
238 PM2.5
239 PM10
240 PORTABLE EQUIPMENT
241 POTENTIAL TO EMIT (PTE)

242 PRECURSOR
243 PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
244 PRIORITY RESERVE BANK
245 PROPOSED EMISSIONS
246 QUARTERLY
247 QUARTERLY EMISSION LIMITATION
248 REACTIVE ORGANIC COMPOUND
249 RECONSTRUCTED SOURCE
250 REDUCED SULFUR COMPOUNDS
251 REPLACEMENT EQUIPMENT
252 SACRAMENTO VALLEY AIR BASIN
253 SIGNIFICANT
254 SIGNIFICANT EMISSIONS INCREASE
255 STATIONARY SOURCE (SOURCE OR FACILITY)
256 STATIONARY SOURCE PTE
257 SURPLUS
258 TEMPORARY SOURCE
259 TOTAL REDUCED SULFUR COMPOUNDS

300 STANDARDS

301 EMISSION AND OFFSET CALCULATIONS
302 REQUIREMENT TO APPLY BEST AVAILABLE CONTROL TECHNOLOGY
303 OFFSET REQUIREMENTS
304 MAJOR SOURCE ADMINISTRATIVE REQUIREMENTS
305 GENERAL PROVISIONS

400 APPLICATION PROCESSING

401 REQUIREMENT TO SUBMIT APPLICATION
402 COMPLETE APPLICATION REQUIREMENT
403 PRELIMINARY DECISION
404 TIMING FOR FINAL ACTION
405 AUTHORITY TO CONSTRUCT AND PERMIT TO OPERATE CONTENT
406 PUBLICATION AND PUBLIC COMMENT
407 PUBLIC INSPECTION
408 DENIAL, FAILURE TO MEET STANDARDS
409 DENIAL, FAILURE TO MEET CEQA
410 ISSUANCE, PERMIT TO OPERATE

500 ADDITIONAL PROVISIONS FOR POWER PLANTS

600 MONITORING AND RECORDS

601 RECORDKEEPING

100 GENERAL

101 PURPOSE: The purpose of this rule is to provide for the review of new and modified stationary air pollution sources and to provide mechanisms, including emission offsets, by which authorities to construct for such sources may be granted without interfering with the attainment or maintenance of ambient air quality standards.

102 APPLICABILITY: This rule shall apply to all new stationary sources and emissions units and all modifications to existing stationary sources and emissions units that, after construction, emit or may emit any NSR regulated pollutant within the District.

If any source or modification becomes a major source or major modification solely by virtue of the relaxation of any limitation that was established after August 7, 1980, on the capacity of the source or modification to emit a federal nonattainment pollutant or its precursor such as a restriction on hours of operation, then the requirements of this rule shall apply to such a source or modification as though construction had not yet commenced on the source or modification.

This rule shall not apply to prescribed burning of forest, agriculture or range land; open burning in accordance with District Regulation 3, OPEN BURNING; road construction, or any non-point source common to timber harvesting or agricultural practices.

The regulations in effect at the time any application for an Authority to Construct for a new or modified source is deemed complete shall apply to that source except when a new federal requirement not yet incorporated into this Rule applies to the new or modified source.

103 PUBLIC NOTIFICATION REQUIREMENTS: The public notice requirements of Sections 406 and 407 shall apply if the project is for a new or modified stationary source or emissions unit for which offsets are required pursuant to Section 303.1, and to all new or modified stationary sources that are projected to emit increased actual lead emissions at a rate of 5 tons per year or greater.

200 DEFINITIONS: The following definitions apply for all terms used in this Rule. If a term is not defined below, then the definitions provided in Rule 102, DEFINITIONS, and Rule 504, EMISSIONS REDUCTION CREDITS, apply in that hierarchical order.

201 ACTUAL EMISSIONS: Emissions having occurred from a source, based on source test and actual fuel consumption or process data, or monitoring data. If source test or monitoring data is not available, other appropriate, APCO-approved, emission factors may be used. Fugitive emissions associated with the emissions unit shall be included in the actual emissions of the emissions unit.

202 ACTUAL EMISSIONS REDUCTIONS (AER): The decrease of actual emissions, compared to Baseline Actual Emissions, from an emissions unit. AER shall be real, federally enforceable, quantifiable, surplus, and permanent.

203 ACTUAL INTERRUPTIONS OF ELECTRICAL POWER: When electrical service is interrupted by an unforeseeable event.

204 ALLOWABLE EMISSIONS: The emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, hours of operation, or both) and the most stringent of the following:

204.1 Any applicable standards set forth in these regulations and 40 CFR Part 60, 61, or 63;

204.2 Any applicable emission limitation in the State Implementation Plan (SIP), including those with a future compliance date; or

204.3 The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

205 AMBIENT AIR QUALITY STANDARDS: There are both State and federal ambient air quality standards. For the purpose of submittal to the U.S. Environmental Protection Agency for inclusion in the California State Implementation Plan all references in this rule to Ambient Air Quality Standards shall be interpreted as National Ambient Air Quality Standards.

206 BASELINE ACTUAL EMISSIONS (BAE):

206.1 "Baseline Actual Emissions" are the actual emissions for the existing emissions unit averaged over the consecutive two (2) year period immediately preceding the date of the application. If the last two years are unrepresentative of normal source operations as determined by the APCO, then any other 2 consecutive year period during the last five years which the APCO determines represents normal source operations may be used.

206.2 If, at any time during the 2 year period, actual emissions exceeded allowable emission levels, then actual emissions shall be reduced to reflect emission levels that would have occurred if the unit were in compliance with all applicable limitations and rules.

206.3 Where an emissions unit has been in operation for less than 2 years, a shorter averaging period of at least 12 months may be used, provided that the averaging period is representative of the full operational history of the emissions unit. If less than 12 months has passed since the date of issuance of the Permit to Operate then Actual Emissions shall be used as the Baseline Actual Emissions.

207 BEGIN ACTUAL CONSTRUCTION: Initiation of physical on-site construction activities on an emissions unit which is of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipe work, and construction of permanent storage structures. With respect to a change in method of operation that does not involve a physical change, this term refers to those on-site activities, other than preparatory activities, which mark the start of the change in the method of operation.

208 BEST AVAILABLE CONTROL TECHNOLOGY (BACT): The most stringent emission limitation or control technique of the following:

208.1 Achieved in practice for such category and class of source; or

208.2 Contained in any SIP approved by the EPA for such category and class of source. A specific limitation or control technique shall not apply if the owner of the proposed emissions unit demonstrates to the satisfaction of the APCO that such a limitation or control technique is not presently achievable; or

208.3 Contained in an applicable federal New Source Performance Standard; or

208.4 Any other emission limitation or control technique, including process and equipment changes of basic or control equipment, found by the APCO to be cost effective and technologically feasible for such class or category of sources.

209 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA): The California Environmental Quality Act, Public Resources Code, Section 21000, et seq.

210 CLASS I AREA: Any area listed as Class I in 40 CFR 81.405 or an area otherwise specified as Class I in the legislation that creates a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore. The only designated Class I area within 20 miles of Placer County as of October 13, 2011 was Desolation Wilderness Area in El Dorado County.

211 COMMENCE: As applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

211.1 Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

211.2 Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

212 CARGO CARRIERS: Cargo carriers are trains dedicated to a specific source.

213 CONSTRUCTION: Means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

214 CONTIGUOUS PROPERTY: Two or more parcels of land with a common point or boundary or separated solely by a public roadway or other public right-of-way.

215 COST-EFFECTIVE: A cost per unit of emissions reduction which is lower than or equivalent to the maximum unit costs of the same emissions reduction through the use of Best Available Control Technology, calculated in current year dollars, in accordance with methodology and criteria specified in guidelines developed by the District.

216 EMERGENCY ENGINES: A stationary engine that meets the criteria specified below:

216.1 It is installed for the primary purpose of providing electrical power or mechanical work for emergency use and is not the source of primary power at the facility; and

216.2 It is operated to provide electrical power or mechanical work during any emergency use; and

216.3 It is operated no more than 100 hours per year for maintenance and testing, emissions testing or initial start-up testing. Diesel engines may be further limited by the California Air Resources Board's Airborne Toxic Control Measure for Stationary Compression Engines in Section 93115.6(a)).

217 EMERGENCY USE: The providing of electrical power or mechanical work during any of the following events.

217.1 The failure or loss of all or part of normal electrical power service or normal natural gas supply to the facility, or the failure of a facility's internal power distribution system:

217.1.1 Which is caused by any reason other than the adherence to a contractual obligation the owner or operator has with a third party or any other party; and

217.1.2 Which is demonstrated by the owner or operator, to the APCO's satisfaction, to have been beyond the reasonable control of the owner or operator.

217.2 The pumping of water or sewage to prevent or mitigate a flood or sewage overflow.

217.3 The pumping of water for fire suppression or protection.

217.4 The powering of ALSF-1 or ALSF-2 airport runway lights under category II or III weather conditions.

217.5 The pumping of water to maintain pressure in the water distribution system for the following reasons:

217.5.1 A pipe break that substantially reduces water pressure; or

217.5.2 High demand on the water supply system due to high use of water for fire suppression; or

217.5.3 The breakdown of electric-powered pumping equipment at sewage treatment facilities or water delivery facilities.

217.6 The emergency operation of ski lifts during an actual interruption of normal electrical power service to the facility.

218 EMISSION DECREASE: Any modification that would result in an emission decrease of actual emissions.

219 EMISSION REDUCTION CREDITS (ERC): Reductions of actual emissions from emission units that are certified by an air district in accordance with that district's rules and are issued by the air district in the form of ERC certificates.

220 EMISSIONS LIMITATION: One or more federally enforceable permit conditions specific to an emissions unit that restricts its maximum emissions, at or below the emissions associated with the maximum design capacity; and that is contained in the latest Authority to Construct or enforceable by the latest Permit to Operate for the emission unit.

Emissions limitations should be stated in a manner consistent with testing procedures. They may be expressed as an enforceable design, operational, or equipment standard.

221 EMISSIONS UNIT: An identifiable operation or piece of process equipment such as an article, machine, or other contrivance which controls, emits, may emit, or results in the emissions of any air pollutant directly or as fugitive emissions.

222 FEDERALLY ENFORCEABLE: All limitations and conditions which are enforceable by the EPA administrator, including those requirements developed pursuant to 40 CFR parts 60, 61 and 63, requirements within the California State Implementation Plan (SIP), any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the SIP and expressly requires adherence to any permit issued under such program.

223 FUGITIVE EMISSIONS: Those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

224 FUNCTIONALLY EQUIVALENT EMISSION UNIT: An emission unit that serves the identical function as the unit being replaced. The maximum rating and the potential to emit any pollutant shall not be greater from the functionally equivalent emission unit than the replaced unit. The emission increase from any such replacement shall not result in a major modification.

225 HALOGENATED HYDROCARBONS: For the purposes of this rule, halogenated hydrocarbons are the following:

225.1 1,1,1-trichloroethane
225.2 methylene chloride
225.3 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
225.4 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
225.5 trichlorofluoromethane (CFC-11)
225.6 dichlorodifluoromethane (CFC-12)
225.7 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
225.8 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114)
225.9 chloropentafluoroethane (CFC-115)
225.10 pentafluoroethane (HFC-125)
225.11 1,1,2,2-tetrafluoroethane (HFC-134)
225.12 tetrafluoroethane (HFC-134a)
225.13 1,1-dichloro-1-fluoroethane (HCFC-141b)
225.14 1-chloro-1,1-difluoroethane (HCFC-142b)
225.15 1,1,1-trifluoroethane (HFC-143a)
225.16 chlorodifluoromethane (HCFC-22)
225.17 trifluoromethane (HFC-23)
225.18 1,1-difluoroethane (HFC-152a)
225.19 The following four classes of perfluorocarbon 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.
d. Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
e. Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

226 HAZARDOUS AIR POLLUTANT (HAP): Any air pollutant listed pursuant to Section 112(b) of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.).

227 HISTORIC ACTUAL EMISSIONS (HAE): Historic Actual Emissions shall be calculated for each pollutant.

227.1 For a new emissions unit Historic Actual Emissions are equal to zero.

227.2 For an existing emissions unit, Historic Actual Emissions equals either, in hierarchical order;

227.2.1 The federally enforceable potential to emit (PTE) limit contained in the most recent Authority to Construct or Permit to Operate, if actual emissions are at least 80% of the permitted PTE limit, or

227.2.2 The federally enforceable PTE limit contained in the most recent Authority to Construct or Permit to Operate, if the emission unit was fully offset for any emission increases incurred since September 21, 1993, within the 5 year period prior to the date of application for the current project, or

227.2.3 The Baseline Actual Emissions.

228 IDENTICAL EMISSION UNIT: A replacement emissions unit which is the same as the original unit in all respects except for serial number.

229 LAKE TAHOE AIR BASIN: Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60113 (b), the basin includes that portion of Placer County within the drainage area naturally tributary to Lake Tahoe including said Lake, plus that area in the vicinity of the head of the Truckee River described as follows: commencing at the point common to the aforementioned drainage area crest line and the line common to Townships 15 North and 16 North, Mount Diablo Base and Meridian (M.D.B. & M.), and following that line in a westerly direction to the northwest corner of Section 3, Township 15 North, Range 16 East, (M.D.B. & M.), thence south along the west line of Sections 3 and 10, Township 15 North, Range 16 East, M.D.B. & M., to the intersection with the drainage crest line, thence following the said drainage area boundary in a southwesterly, then northeasterly direction to and along the Lake Tahoe Dam, thence following the said drainage area crest line in a northeasterly, then northwesterly direction to the point of beginning. This Air Basin is delineated on an official map on file at the California Air Resources Board Headquarters Office.

230 MAJOR STATIONARY SOURCE – SACRAMENTO AIR BASIN: A stationary source which emits or has the potential to emit: 25 tons per year (tpy) or more of nitrogen oxides or reactive organic compounds, or 100 tpy or more of sulfur oxides, or PM2.5. In addition, any physical change occurring at a stationary source not otherwise qualifying as a major stationary source, which would constitute a major stationary source by itself, makes the source a major stationary source.

231 MAJOR STATIONARY SOURCE – MOUNTAIN COUNTIES AIR BASIN: A stationary source which emits or has the potential to emit 25 tons per year (tpy) or more of nitrogen oxides or reactive organic compounds. In addition, any physical change occurring at a stationary source not otherwise qualifying as a major stationary source, which would constitute a major stationary source by itself, makes the source a major stationary source.

232 MAJOR MODIFICATION: A modification to a major stationary source in the Sacramento or Mountain Counties Air Basins which results in a significant emissions increase of the pollutant for which the source is classified as a major stationary source. For nitrogen oxides and reactive organic compounds, the increase shall be aggregated with all other increases and decreases in potential to emit over the period of the four consecutive years before the application for modification, plus the calendar year of the most recent application.

233 MODIFICATION: Any physical change, change in method of operation (including change in fuel characteristics), addition to, or any change in hours of operation, or change in production rate of, which:

233.1 For an emissions unit: would necessitate a change in permit conditions, permit equipment description, or emissions limitation.

233.2 For a stationary source: is a modification of any emissions unit, or addition of any new emissions unit.

233.3 Unless previously limited by a permit condition and that permit condition must be changed, the following shall not be considered a modification:

233.3.1 A change in ownership.

233.3.2 Routine maintenance and repair, or an identical replacement.

233.3.3 The addition of a continuous emission monitoring system.

233.3.4 The replacement of air pollution control equipment with new control equipment if the actual emissions of the new equipment are less than or equal to those from the original piece of equipment and the replacement is not a major modification under the United States Environmental Protection Agency (EPA) regulations promulgated pursuant to Title I of the Federal Clean Air Act, including 40 CFR Part 51.

233.3.5 Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan pursuant to the Federal Power Act.

233.3.6 Use of an alternative fuel by reason of an order or rule under Section 125 of the Act.

233.4 A reconstructed stationary source or emissions unit shall be treated as a new stationary source or emissions unit, not as a modification.

234 MOUNTAIN COUNTIES AIR BASIN: Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60111 (I), the Mountain Counties Air Basin includes all of Placer County except that portion included in the Lake Tahoe Air Basin, defined by 17 CCR 60113(b), and that portion included in the Sacramento Valley Air Basin, defined by 17 CCR 60106(k).

235 NECESSARY PRECONSTRUCTION APPROVALS OR PERMITS: Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the SIP.

236 NONATTAINMENT POLLUTANT: Any pollutant as well as any precursors of such pollutants which have been designated "nonattainment" by the U.S. Environmental Protection Agency as codified in 40 CFR 81.305, or which has been designated nonattainment by the California Air Resources Board pursuant to Section 39607 of the Health and Safety Code for specific air basins in Placer County.

237 NSR REGULATED POLLUTANT: A pollutant for which an Ambient Air Quality Standard has been established by the EPA or by the California Air Resources Board (ARB), and the precursors to such pollutants, including, but not limited to, reactive organic compounds (ROC), nitrogen oxides (NOx), sulfur oxides (SOx), PM10, PM2.5, carbon monoxide (CO) and lead.

238 **PM2.5:** Particulate matter with an aerodynamic diameter smaller than or equal to a nominal 2.5 microns. Gaseous emissions which condense to form PM2.5 shall also be counted as PM2.5.

239 **PM10:** Particulate matter with an aerodynamic diameter smaller than or equal to a nominal 10 microns. Gaseous emissions which condense to form PM10 shall also be counted as PM10.

240 **PORTABLE EQUIPMENT:** Equipment that is periodically relocated and is not operated more than a total of 180 days at any one location in the District within any continuous twelve (12) month period.

241 **POTENTIAL TO EMIT (PTE):** The maximum physical and operational design capacity to emit an air pollutant. Any limitation on the physical or operational design capacity, including emission control devices and restrictions on hours of operation, or on the type, or amount of material combusted, stored, or processed, may be considered as part of the design only if the limitation, or the effect it would have on emissions, is incorporated into the Authority to Construct as a federally enforceable permit condition. Fugitive emissions associated with the emissions unit or stationary source shall be included in the potential to emit of the emissions unit or stationary source.

242 **PRECURSOR:** A pollutant that, when emitted into the atmosphere, may undergo either a chemical or physical change which then produces another pollutant for which an Ambient Air Quality Standard has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more Ambient Air Quality Standards. The following precursor-secondary air contaminant relationships shall be used for the purposes of this rule:

Precursor		Secondary Air Contaminant
Reactive Organic Compound		a. Photochemical oxidants (Ozone) b. Organic fraction of PM10
Nitrogen Oxides		a. Nitrogen dioxide b. Nitrate fraction of PM10 c. Nitrate fraction of PM2.5 d. Photochemical oxidants (Ozone)
Sulfur Oxides		a. Sulfur dioxide b. Sulfates c. Sulfate fraction of PM10 d. Sulfate fraction of PM2.5

243 **PREVENTION OF SIGNIFICANT DETERIORATION (PSD):** A federal permitting program for new and modified major stationary sources of air pollution for pollutants that do not exceed National Ambient Air Quality Standards.

244 **PRIORITY RESERVE BANK:** A depository for preserving emission reduction credits pursuant to Rule 505, PRIORITY RESERVE.

245 **PROPOSED EMISSIONS:** Emissions based on the potential to emit for the new or modified emissions unit which will be incorporated into the permit as federally enforceable permit conditions.

246 **QUARTERLY:** Calendar quarters beginning January 1, April 1, July 1, and October 1.

247 **QUARTERLY EMISSION LIMITATION:** One or a combination of permit conditions specific to an emissions unit that restricts its maximum emissions, in pounds per quarter, at or below the emissions associated with the maximum design capacity. A quarterly emissions limitation must be:

247.1 Contained in the latest Authority to Construct or enforceable by the latest Permit to Operate for the emissions unit, and

247.2 Enforceable on a quarterly basis.

248 REACTIVE ORGANIC COMPOUND: For the purposes of this rule, reactive organic compound (ROC) has the same definition as volatile organic compound (VOC) in Rule 102, DEFINITIONS.

249 RECONSTRUCTED SOURCE: Any stationary source or emissions unit undergoing physical modification where the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost of a comparable entirely new stationary source or emissions unit. Fixed capital cost means that capital needed to provide all the depreciable components. A reconstructed source shall be treated as a new stationary source or emissions unit.

250 REDUCED SULFUR COMPOUNDS: The sulfur compounds hydrogen sulfide, carbon disulfide and carbonyl sulfide.

251 REPLACEMENT EMISSION UNIT: An emissions unit for which all the criteria listed below are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced unless:

251.1 The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit, or

251.2 The emissions unit is an identical emission unit or a functionally equivalent emission unit, or

251.3 The replacement does not alter the basic design parameters of the process unit, and

251.4 The replaced emissions unit is permanently removed from the stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is federally enforceable. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

252 SACRAMENTO VALLEY AIR BASIN: Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60106(k), the basin includes that portion of Placer County which lies west of Range 9 east, Mount Diablo Base and Meridian (M.D.B. & M.).

253 SIGNIFICANT: In reference to an emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

253.1 Carbon monoxide: 100 tpy;

253.2 Nitrogen oxides: 25 tpy;

253.3 Sulfur dioxide: 40 tpy;

253.4 Ozone: 25 tpy of VOCs or 25 tpy of nitrogen oxides;

253.5 PM10: 15 tpy

253.6 PM2.5: 10 tpy of direct PM2.5 emissions or 40 tpy of sulfur dioxide emissions or 40 tpy of nitrogen oxide emissions

253.7 Lead: 0.6 tpy.

254 SIGNIFICANT EMISSIONS INCREASE: For a regulated NSR pollutant, an increase in emissions that is significant for that pollutant.

255 STATIONARY SOURCE (SOURCE OR FACILITY): Any building, structure, facility, or emissions unit that emits or may emit any NSR regulated pollutant directly or as fugitive emissions.

255.1 Building, structure, facility, or emissions unit includes all pollutant emitting activities which:

255.1.1 belong to the same industrial grouping, and;

255.1.2 are located on one property or on two or more contiguous properties, and;

255.1.3 are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.

255.2 Pollutant emitting activities shall be considered as part of the same industrial grouping if:

255.2.1 they belong to the same two digit standard industrial classification code under the system described in the 1987 Standard Industrial Classification Manual, or;

255.2.2 they are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material.)

255.3 The emissions of cargo carriers associated with the stationary source shall be considered emissions from the stationary source to the extent that emission reductions from these cargo carriers are proposed as offsets.

256 STATIONARY SOURCE PTE: The sum of the PTE for each emission unit which has been issued a Permit of Operate, Authority to Construct or for which an application has been submitted. Any fugitive emissions from such emission units shall be included in this calculation.

257 SURPLUS: The amount of emission reductions that are, at the time of generation of an Emissions Reduction Credit (ERC), not otherwise required by federal, state, or local law, not required by any legal settlement or consent decree, and not relied upon to meet any requirement related to the California State Implementation Plan (SIP). However, emission reductions required by a state statute that provides that the subject emission reductions shall be considered surplus may be considered surplus for purposes of this Rule if those reductions meet all other applicable requirements.

Examples of federal, state, and local laws, and of SIP-related requirements, include, but are not limited to, the following:

257.1 The federally-approved California SIP;

257.2 Other adopted state air quality laws and regulations not in the SIP, including but not limited to, any requirement, regulation, or measure that: (1) the District or the state has included on a legally-required and publicly-available list of measures that are scheduled for adoption by the District or the State in the future; or (2) is the subject of a public notice distributed by the District or the State regarding an intent to adopt such revision;

257.3 Any other source- or source-category specific regulatory or permitting requirement, including, but not limited to, Reasonable Available Control Technology (RACT), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Best Available Control Measures (BACM), Best Available Control Technology (BACT), and the Lowest Achievable Emission Rate (LAER); and

257.4 Any regulation or supporting documentation that is required by the federal Clean Air Act but is not contained or referenced in 40 C.F.R. Part 52, including but not limited to: assumptions used in attainment and maintenance demonstrations (including Reasonable Further Progress demonstrations and milestone demonstrations), including any proposed control measure identified as potentially contributing to an enforceable near-term emissions reduction commitment; assumptions used in conformity demonstrations; and assumptions used in emissions inventories.

258 TEMPORARY SOURCE: Temporary emission sources such as pilot plants, and portable facilities which will be terminated or located outside the District after less than a cumulative total of 90 days of operation in any 12 continuous months.

259 TOTAL REDUCED SULFUR COMPOUNDS: The sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide and dimethyl disulfide.

300 STANDARDS

301 EMISSION AND OFFSET CALCULATIONS: The following provisions shall be used to calculate emission increases and decreases from all new and modified emissions units located at a stationary source.

301.1 BACT – Emissions Increase: The emissions increase for each emissions unit related to the project for the purposes of determining BACT applicability shall be calculated as the proposed emissions minus the Baseline Actual Emissions. Calculations shall be performed separately for each emissions unit for each calendar quarter.

301.2 Offsets - Emissions Increase or Decrease: The emissions increase or decrease for each emissions unit related to the project for the purposes of determining Offset applicability shall be calculated as the proposed emissions, minus the Historic Actual Emissions. Emission increases or decreases shall be calculated for each emission unit and the project as a whole.

301.3 Project Emissions: If a project consists of more than one emission unit, the total emissions from all emissions units shall be summed for each pollutant to determine the emissions increase for the project. The project includes the entire scope of the preconstruction application for a new or modified stationary source.

301.4 Calculation Periods: The emissions increase or decrease for a project shall be calculated on a daily, quarterly and annual basis for each pollutant.

301.5 Potential To Emit - Stationary Sources: The potential to emit of a new or modified stationary source shall be calculated as the sum of the potential to emit, including fugitive emissions, for all emissions units, based on emission limitations established by current Permits to Operate, Authorities to Construct where permits to operate have not been issued, and the pending application.

301.6 Quantity of Offsets Required For New Major Sources or Major Modifications: If offsets are required pursuant to Section 303.2, the quantity of offsets to be provided shall be determined by calculating the emission increase for the project and applying the appropriate offset ratio based on pollutant and location as specified in Section 303.3. The calculations shall be performed separately for each pollutant and each emissions unit for each calendar quarter.

301.7 Quantity of General (State) Offsets Required: If offsets are required pursuant to Section 303.1, the quantity of offsets to be provided shall be determined as follows:

301.7.1 If offsets have already been provided by a stationary source for a particular pollutant, then multiply the emission increase calculated for the project by the appropriate offset ratio based on pollutant and location as specified in Section 303.3, or

301.7.2 If no offsets have been provided previously by a stationary source for a particular pollutant, then subtract the offset threshold specified in Section 303.1 for that pollutant from the stationary source PTE and multiply the value by the appropriate offset ratio based on pollutant and location as specified in Section 303.3.

301.8 Quantity of Offsets Required For A Modification That Makes An Existing Source A Major Stationary Source: When the proposed modification will make an existing minor source a new major source, offsets required shall be calculated as the sum of proposed PTE for all emissions units installed after September 21, 1993 based on current permits to operate and Authority to Constructs where permits to operate have not been issued, plus the pending application, minus offsets supplied since September 21, 1993. Calculations shall be performed separately for each pollutant and each emissions unit for each calendar quarter. The offset ratios of Section 303.3 shall be applied to determine the ERCs required.

302 REQUIREMENT TO APPLY BEST AVAILABLE CONTROL TECHNOLOGY: An applicant shall apply Best Available Control Technology (BACT) to a new emissions unit or modification of an existing emissions unit, except cargo carriers, if the change would result in an increase in quarterly emissions of a NSR regulated pollutant from the new or modified emissions unit and if the PTE of the new or modified emissions unit equals or exceeds the levels specified below.

Pollutant	lb/day
Reactive organic compounds	10
Nitrogen oxides	10
Sulfur oxides	80
PM10	80
PM2.5	80
Carbon monoxide	550
Lead	3.3
Vinyl chloride	5.5
Sulfuric acid mist	38
Hydrogen sulfide	55

Total reduced sulfur compounds	55
Reduced sulfur compounds	55

303 OFFSET REQUIREMENTS

303.1 General Requirement to Provide Offsets: An applicant whose facility is located in the Sacramento Valley Air Basin or the Mountain Counties Air Basin shall provide offsets for a NSR regulated pollutant if the potential to emit of a new or modified source exceeds either of the threshold quantities listed below:

Pollutant	Pounds per quarter	Tons per year
Reactive organic compounds	5,000	10
Nitrogen oxides	5,000	10
Sulfur oxides	13,750	27.5
PM10	7,500	15
PM2.5	7,500	15
Carbon monoxide	49,500	99

303.2 Major Source or Major Modification Requirement to Provide Offsets**:** An applicant whose facility is located in the Sacramento Valley Air Basin or the Mountain Counties Air Basin, and whose project emissions will result in a new major source or major modification, shall provide offsets for each NSR regulated pollutant that constitutes a major source or major modification.

303.3 Location of Offsets and Offset Ratios**:** The applicable offset ratio shall be determined based on the location of the new or modified stationary source required to provide offsets and the distance to the location of the emission offsets, as indicated in the following table.

		Offset Ratio		Offset Ratio
Location of Offset		NOx and ROC		Other Pollutants
Same Source		1.0 to 1.0		1.0 to 1.0
Within 15-Mile radius and within the same air basin		1.3 to 1.0		1.2 to 1.0
Greater than 15-Miles but within 50-Mile radius within the same air basin		1.5 to 1.0		1.5 to 1.0
Greater than 50-Mile radius and within the same air basin		Greater than 1.5 to 1.0		Greater than 1.5 to 1.0

303.3.1 The APCO may impose, based on the air quality analysis, a higher offset ratio such that the new or modified stationary source will not prevent or interfere with the attainment or maintenance of any ambient air quality standard.

303.3.2 Applicants providing offsets obtained pursuant to Rule 505, PRIORITY RESERVE, shall be subject to an offset ratio of 1.2 to 1.0 for all pollutants, except NOx and VOC, at all distances. The offset ratio for NOx and VOC offsets obtained pursuant to Rule 505, PRIORITY RESERVE, shall be subject to an offset ratio of 1.3 to 1.0 at all distances.

303.4 General Offset Provisions

303.4.1 All offsets shall be real, surplus, federally enforceable, quantifiable and permanent.

303.4.2 All offsets provided for major sources and major modifications shall be surplus at the time ERCs are surrendered to the District.

303.4.3 All offsets shall be surrendered to the District prior to the initial startup of the new or modified source, and the offsets shall be maintained throughout the operation of the new or modified source which is the beneficiary of the offsets.

303.4.4 Offsets can only come from air basins with the same or worse air quality designations than that of the stationary source requiring the offsets.

303.4.5 In no case shall halogenated hydrocarbons, exempt compounds or any other compound excluded from the definition of reactive organic compounds, be used as offsets for reactive organic compounds.

303.4.6 For sources which have provided full offsets of total suspended particulate (TSP), the PM10 emissions from an existing stationary source shall be recalculated from the TSP emission increases and decreases which have occurred since December 31, 1976, using PM10 emission factors. When PM10 emission factors do not exist, it shall be assumed that 50% of the TSP is PM10.

303.5 Timing of Quarterly Emission Offsets: Sufficient offsets shall be provided, from the same calendar quarter as the proposed emission increase, with the following exceptions:

303.5.1 Emission reductions of reactive organic compounds or nitrogen oxides during the quarters starting April 1 or July 1 may be used to offset emission increases of the same pollutants during any calendar quarter.

303.5.2 Emission reductions of carbon monoxide during the quarters starting January 1 or October 1 may be used to offset emission increases of carbon monoxide during any calendar quarter.

303.5.3 Emission reductions of PM10 or PM2.5 during the quarters starting January 1 or October 1 may be used to offset emission increases of PM10 or PM2.5 during any calendar quarter.

303.5.4 Emission reductions of sulfur oxides during any quarter may be used to offset emission increases of sulfur oxides during any calendar quarter.

303.6 Interpollutant Offsets

303.6.1 The APCO may approve interpollutant offsets for precursor pollutants on a case by case basis, provided that the applicant demonstrates, through the use of an air quality model, that the emission increases from the new or modified source will not cause or contribute to a violation of an ambient air quality standard.

303.6.2 Interpollutant offsets between PM10 and PM10 precursors are allowed only if PM10 precursors contribute significantly to the PM10 levels that exceed the PM10 ambient standards.

303.6.3 PM10 emissions shall not be allowed to offset nitrogen oxides or reactive organic compound emissions in ozone nonattainment areas,

nor be allowed to offset sulfur oxide emissions in sulfate nonattainment areas.

303.6.4 Interpollutant emission offsets between PM2.5 precursors are not allowed unless modeling demonstrates that PM2.5 interpollutant offset ratios are appropriate in an approved PM2.5 attainment plan.

303.6.5 EPA and ARB must concur with all proposed interpollutant offsets ratios prior to use.

303.7 Intra-District Offsets

303.7.1 ERCs generated in another district may be used to offset emission increases in Placer County.

303.7.2 If the ERC generating source and the source with the proposed emissions increase are not in the same air basin, both of the following requirements must be met:

a. The ERC generating source must be located in an upwind district that is classified, pursuant to Health and Safety Code Section 40910 et seq., as being in the same or a worse nonattainment status than the downwind district where the stationary source with the proposed emission increases will be located.

b. The stationary source at which the emission increases are to be offset must be located in a downwind district that is overwhelmingly impacted, as determined pursuant to Health and Safety Code Section 39610, by emissions transported from the upwind district where the ERC generating source is located.

303.7.3 Any offset credited to a stationary source in one district using offsets obtained from reductions at a stationary source in another district shall be approved by a resolution adopted by the governing boards of both the upwind and downwind districts, after taking into consideration the impact of the offset on air quality, public health, and the regional economy. The District's governing board may delegate to the APCO the Board's authority to approve the offsets credited.

303.7.4 For ERCs generated in another district, the District may adjust the value of such credits to reflect any District requirements that would have applied if the credits had been generated within the District.

303.8 Emission Reductions, Shutdowns, and Curtailments: Actual emission reductions from an internal shutdown or curtailment of a permitted emission unit may be credited for the purposes of providing internal offsets provided:

303.8.1 The crediting of emission reductions from source shutdowns and curtailments comply with the current U.S. Environmental Protection Agency emissions trading policy and applicable federal regulations; and

303.8.2 Emissions reductions are ensured by federally enforceable emission limitations contained in the Permit to Operate, or the permanent surrender or cancellation of the Permit to Operate; and

303.8.3 If the shutdown emission unit is being replaced with a new or modified emission unit, the APCO may allow a maximum of 90 days as a

shakedown period for simultaneous operation of the existing and the new or modified emission unit.

303.9 Exemptions From Offset Requirements

303.9.1 Offsets shall not be required for temporary sources or portable equipment, if the emissions from such units do not constitute a major source or major modification to a major source.

303.9.2 Offsets shall not be required for an emergency engine which is used exclusively for testing, maintenance and emergency use, if the emissions from the emergency engine, excluding emergency use, do not exceed the offset limit by itself.

303.9.3 Offsets shall not be required for increases in carbon monoxide emissions if the applicant, using an Air Quality Model approved by the APCO, demonstrates that the increase in ambient concentration does not exceed 500 micrograms per cubic meter, 8 hour average, at or beyond the property line of the stationary source.

303.9.4 The requirement to provide offsets shall not apply to the following:

a. Relocation of emissions units solely within only one air basin within the District, and the relocation does not result in any increase in potential to emit.

b. Replacement emissions units, provided the replacement does not constitute a major source or major modification.

c. Modifications necessary to comply with any regulations contained in Regulation 2 – PROHIBITIONS, or in the SIP, unless the modification will result in a major modification. This provision does not apply to changes in production rate, hours of operation, or any other change or modification not required for compliance with Regulation 2 or the SIP.

d. If requested by the APCO, the applicant shall demonstrate through the use of an air quality model that the emission increases from the new or modified source will not cause or contribute to a violation of an ambient air quality standard.

304 MAJOR SOURCE ADMINISTRATIVE REQUIREMENTS: The following administrative requirements shall apply to any new major source or major modification regulated by the rule. Power plants over 50 megawatts shall be subject to the additional requirements of Section 500.

304.1 Alternative Siting: The applicant shall prepare an analysis functionally equivalent to the requirements of Division 13 of the Public Resources Code (California Environmental Quality Act-CEQA). The District will not issue an Authority to Construct unless the APCO has concluded, based on the information included in the Alternative Siting Analysis that the benefits of the proposed source significantly outweigh the environmental and social cost imposed as a result of its location, construction, or modification.

304.2 Certification of Compliance: The owner or operator of the proposed new or modified source has certified that all existing major stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under

common control with such person) in California which are subject to emission limitations are in compliance, or on an expeditious schedule for compliance, with all applicable emission limitations and standards.

304.3 Potential Visibility Impacts: The APCO shall consult with the Federal Land Manager on a proposed major stationary source or major modification that may impact visibility in any Class 1 Area, in accordance with 40 CFR 51.307 if the net emissions increase from the new or modified source exceeds 10 tons/year of PM2.5, 15 tons/year of PM10, or 40 tons/year of NOx; and the location of the source, relative to the closest boundary of a specified federal Class I area is within 20 miles.

305 GENERAL PROVISIONS

305.1 Air Quality Models: All estimates of ambient concentrations required pursuant to this rule shall be based on applicable air quality models, databases, and other requirements specified in 40 CFR Part 51, Appendix W ("Guideline on Air Quality Models"). Where an air quality model specified in 40 CFR Part 51, Appendix W ("Guideline on Air Quality Models") is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis. Written approval from the United States Environmental Protection Agency (EPA) must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment.

305.2 Ambient Air Quality Standards: In no case shall emissions from the new or modified stationary source prevent or interfere with the attainment or maintenance of any applicable ambient air quality standard. The Air Pollution Control Officer (APCO) may require the use of an air quality model to estimate the effects of a new or modified stationary source. The analysis shall estimate the effects of the new or modified stationary source, and verify that the new or modified stationary source will not prevent or interfere with the attainment or maintenance of any ambient air quality standard. In making this determination the APCO shall take into account the mitigation of emissions through offsets pursuant to this rule and the impacts of transported pollutants on downwind pollutant concentrations. The APCO may impose, based on an air quality analysis, offset ratios greater than the requirements of Section 303.2.

400 APPLICATION PROCESSING

401 REQUIREMENT TO SUBMIT APPLICATION: Any person building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, shall first obtain authorization for such construction from the APCO as specified in this rule. Exemptions from this requirement are listed in Rule 501, GENERAL PERMIT REQUIREMENTS. The application shall be submitted on forms supplied by the District.

402 COMPLETE APPLICATION REQUIREMENT: The APCO shall determine whether an application is complete no later than 30 days after receipt of the application, or after such longer time period that the applicant and the APCO have agreed to in writing.

If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision specifying the information required. Upon receipt of any re submittal of the application, a new 30-day period to determine completeness shall begin. Completeness of an application or a re-submitted application shall be evaluated on the basis of the information requirements set forth in District regulations as they exist on

the date on which the application or re-submitted application was received, or when the CEQA-related information which satisfies the requirements of the District's CEQA Guidelines has been received, whichever is later.

The APCO may, during the processing of the application, request an applicant to clarify, amplify, correct, or otherwise supplement the information submitted in the application.

403 PRELIMINARY DECISION: Following acceptance of an application as complete, the APCO shall perform the evaluations required to determine compliance with all applicable District rules and regulations and make a preliminary written decision as to whether an Authority to Construct should be approved, conditionally approved, or denied.

The decision shall be based on the Section 300 standards in force on the date the application is deemed complete, except when a new federal requirement not yet incorporated into this Rule applies to the new or modified source.

When the District is the CEQA Lead Agency for a project, the APCO shall not issue a preliminary decision until the draft Environmental Impact Report or Negative Declaration is available for public review. The decision shall be supported by a succinct written analysis. For projects requiring offsets, the APCO shall transmit its preliminary written decision and analysis to the California Air Resources Board and the U.S. Environmental Protection Agency for a 45 day review period.

404 TIMING FOR FINAL ACTION

404.1 The APCO shall not take final action for any project for which an Environmental Impact Report (EIR) or a Negative Declaration is being prepared until a final EIR for that project has been certified or a Negative Declaration for that project has been approved, and the APCO has considered the information in that final EIR or Negative Declaration.

The APCO shall take final action on the application within whichever of the following periods of time is longer:

404.1.1 Within 180 days after the certification of the final EIR or approval of the Negative Declaration, or

404.1.2 Within 180 days of the date on which the application was determined complete by the APCO.

404.2 Except as provided in Section 103, the APCO shall provide written notice of the final action to the applicant, any commenters, the U.S. Environmental Protection Agency, and the California Air Resources Board.

405 AUTHORITY TO CONSTRUCT AND PERMIT TO OPERATE CONTENT: Each Authority to Construct and/or Permit to Operate issued by the APCO shall include the following minimum terms and conditions:

405.1 A provision stating that the emission unit shall be operated in a manner consistent with the application used to determine compliance with this rule.

405.2 The following emissions limitations shall be included, if applicable:

405.2.1 BACT emission limitations if required by Section 302. Such condition(s) shall be expressed in a manner consistent with testing procedures, such as ppmv NOx, g/liter VOC, or lbs/hr.

405.2.2 A quarterly emissions limitation for each offset pollutant, if offsets are required pursuant to Section 303.

405.2.3 An emission limitation (daily, monthly, or quarterly) shall be contained in the Authority to Construct and Permit to Operate for all NSR pollutants for which offsets are not being provided pursuant to Section 303, or when required to be consistent with ambient air quality standards.

405.3 Design, Operational, or Equipment Standards: If the APCO determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of a numerical emission standard infeasible, the APCO may instead prescribe a design, operational, or equipment standard. In such cases, the District shall make its best estimate as to the emission rate that will be achieved and shall specify that rate in required submissions to the U.S. Environmental Protection Agency. Any Authority to Construct or permit issued without an enforceable numerical emission standard must contain enforceable conditions which assure that the design characteristics or equipment will be properly maintained, or that the operational conditions will be properly performed, so as to continuously achieve the assumed degree of control.

406 PUBLICATION AND PUBLIC COMMENT: If a proposed project is required to provide offsets pursuant to Section 303, or if a proposed project may emit increased actual lead emissions at a rate of 5 tons per year or greater, within ten calendar days following a preliminary decision, the APCO shall publish in at least one newspaper of general circulation in the District a notice stating the preliminary decision of the APCO, noting how the pertinent information can be obtained, and inviting written public comment for a 30-day period following the date of publication.

407 PUBLIC INSPECTION: Except as provided in Section 103, the APCO shall make available for public inspection at the District's office the information submitted by the applicant and the APCO's analysis no later than the date the notice of the preliminary decision is published. Information submitted which contains trade secrets shall be handled in accordance with Section 6254.7 of the California Government Code and relevant sections of the California Administrative Code. Further, all such information shall be transmitted no later than the date of publication to the California Air Resources Board and the U.S. Environmental Protection Agency regional office, and to any party which requests such information.

408 DENIAL, FAILURE TO MEET STANDARDS: The APCO shall deny any Authority to Construct or Permit to Operate if the APCO finds that the subject of the application would not comply with the standards set forth in District, state, or federal rules or regulations.

409 DENIAL, FAILURE TO MEET CEQA: The APCO shall deny any Authority to Construct or Permit to Operate if the APCO finds that the subject of the application would not comply with the standards set forth in CEQA.

410 ISSUANCE, PERMIT TO OPERATE: The APCO shall issue a Permit to Operate an emissions unit subject to the requirements of this rule after determining that all conditions specified in the Authority to Construct have been complied with or will be complied with by the dates specified on the Authority to Construct. Such applicable conditions shall be contained in the Permit to Operate. Where a new or modified stationary source is, in whole or in part, a replacement for an existing stationary source on the same property, the APCO may allow a maximum of 90 days as a shakedown period for simultaneous operation of the existing stationary source and the new source or replacement.

500 ADDITIONAL PROVISIONS FOR POWER PLANTS: This Section shall apply to power plants with maximum ratings equal to, or in excess of 50 megawatts proposed to be constructed in the District and for which a Notice of Intention (NOI) or Application for Certification (AFC) has been accepted by the California Energy Commission.

501 Within 14 days of receipt of a Notice of Intention, the APCO shall notify the California Air Resources Board and the California Energy Commission of the District's intent to participate in the Notice of Intention proceeding. If the District chooses to participate in the Notice of Intention proceeding, the APCO shall prepare and submit a report to the California Air Resources Board and the California Energy Commission prior to the conclusion of the non-adjudicatory hearing specified in Section 25509.5 of the California Public Resources Code. That report shall include, at a minimum:

501.1 A preliminary specific definition of Best Available Control Technology for the proposed facility;

501.2 A preliminary discussion of whether there is substantial likelihood that the requirements of this rule and all other District regulations can be satisfied by the proposed facility;

501.3 A preliminary list of conditions which the proposed facility must meet in order to comply with this rule or any other applicable District regulation.

The preliminary determinations contained in the report shall be as specific as possible within the constraints of the information contained in the Notice of Intention.

502 Upon receipt of an Application for Certification for a power plant, the APCO shall conduct a determination of compliance review. This determination shall consist of a review identical to that which would be performed if an application for an Authority to Construct had been received for the power plant. If the information contained in the Application for Certification does not meet the requirements of this rule, the APCO shall, within 20 calendar days of receipt of the Application for Certification, so inform the California Energy Commission, and the Application for Certification shall be considered incomplete and returned to the applicant for re-submittal.

503 The APCO shall consider the Application for Certification to be equivalent to an application for a permit to construct during the determination of compliance review, and shall apply all provisions of this rule which apply to applications for an Authority to Construct.

504 The APCO may request from the applicant any information necessary for the completion of the determination of compliance review. If the APCO is unable to obtain the information, the APCO may petition the presiding Commissioner of the California Energy Commission for an order directing the applicant to supply such information.

505 Within 180 days of accepting an Application for Certification as complete, the APCO shall make a preliminary decision on:

505.1 Whether the proposed power plant meets the requirements of this rule and all other applicable District regulations, and;

505.2 In the event of compliance, what permit conditions will be required including the specific Best Available Control Technology requirements and a description of required mitigation measures.

The preliminary written decision of this Section shall be treated as a preliminary decision under Section 403 of this Rule, and shall be finalized by the APCO only after being

subject to the public notice and comment requirements of Sections 406 and 407. The APCO shall not issue a determination of compliance for the power plant unless all requirements of this rule are met.

506 Within 240 days of the filing date, the APCO shall issue and submit to the California Energy Commission a determination of compliance or, if such a determination cannot be issued, shall so inform the California Energy Commission. A determination of compliance shall confer the same rights and privileges as an Authority to Construct only when and if the California Energy Commission approves the Application for Certification, and the California Energy Commission certificate includes all requirements of the conditions contained within the determination of compliance.

507 Any applicant receiving a certificate from the California Energy Commission pursuant to this Section and in compliance with all conditions of the certificate shall be issued a Permit to Operate by the APCO.

600 MONITORING AND RECORDS

601 RECORDKEEPING: The following records shall be maintained for two years. Records shall be provided to the APCO upon request.

601.1 Emergency Engines: Records of hours of operation for maintenance purposes and for actual interruptions of electrical power. Such records shall include the date and hours of operation, as well as the reason for operation.

601.2 Portable and Temporary Equipment: Records of operating location(s) and corresponding dates of operation.

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RULE 503 EMISSION STATEMENT

Adopted 09-21-93
(Amended 8-12-10)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY

200 DEFINITIONS

201 ACTUAL EMISSIONS
202 AFFECTED POLLUTANTS
203 RENEWAL INFORMATION REQUEST
204 RESPONSIBLE OFFICIAL
205 VOLATILE ORGANIC COMPOUNDS

300 STANDARDS

301 EMISSION STATEMENT REQUIREMENTS

400 ADMINISTRATIVE REQUIREMENTS

401 DISTRICT REQUIREMENTS
402 FAILURE TO SUBMIT

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100 GENERAL

101 PURPOSE: To establish the requirements for the submittal of emission statements from specified stationary sources pursuant to the requirements of the 1990 amendments to the Federal Clean Air Act [Section 182 (a)(3)(B)].

102 APPLICABILITY: The requirements of this rule are applicable to every stationary source permitted by the District which has actual emissions or potential in excess of ten (10) tons per year of volatile organic compounds or oxides of nitrogen.

200 DEFINITIONS: Unless otherwise defined below, the terms used in this rule are defined in Rule 102, DEFINITIONS and Rule 502, NEW SOURCE REVIEW.

201 ACTUAL EMISSIONS: Measured or estimated emissions which most accurately represent the emissions from an emissions unit. Fugitive emissions associated with the emissions unit shall be included in the actual emissions of the emissions unit.

202 AFFECTED POLLUTANTS: For the purposes of this rule only, volatile organic compounds (VOC) and oxides of nitrogen (NOx) are the affected pollutants.

203 RENEWAL INFORMATION REQUEST: An annual information request by the APCO to each District permit holder subject to this rule for operational data including, but not limited to, actual emissions and/or operational data allowing the District to estimate actual emissions.

204 RESPONSIBLE OFFICIAL: An individual, who is responsible for the data presented in the emission inventory statement, and who accepts legal responsibility for the emission statement's accuracy. The responsible official is liable to legal review, or in case of fault, to penalties.

300 STANDARDS

301 EMISSION STATEMENT REQUIREMENTS:

301.1 The owner or operator of any stationary source that is subject to this rule shall provide the District with an annual written emission statement showing actual emissions, or operational data allowing the District to estimate actual emissions from that source.

301.2 The emission statement shall be on a form or in a format specified by the Air Pollution Control Officer (the Renewal Information Request) and shall contain the following information:

301.2.1 Operational data necessary to estimate actual emissions of volatile organic compounds and oxides of nitrogen, in tons per year, for the calendar year prior to the preparation of the emission statement; and

301.2.2 Information regarding seasonal or diurnal peaks in the emission of affected pollutants; and

301.2.3 Certification by a responsible official of the company that the information contained in the emission statement is accurate to the best of their knowledge.

301.3 Annual emission statements shall be submitted to the District no later than the date specified in the Renewal Information Request.

400 ADMINISTRATIVE REQUIREMENTS

401 DISTRICT REQUIREMENTS:

401.1 The Air Pollution Control Officer shall annually request and require the submission of a Renewal Information Request pursuant to Subsection 301.1 from each source within the District which has actual emissions or potential in excess of ten (10) tons per year of volatile organic compounds or oxides of nitrogen.

402 FAILURE TO SUBMIT: A failure by the responsible official to submit a Renewal Information Request by the date required shall be deemed a willful failure to furnish information required to disclose the nature and quantity of emissions discharged by the stationary source.

402.1 The Air Pollution Control Officer may suspend the permit(s) of such a source.

402.2 The Air Pollution Control Officer shall serve notice in writing of such suspension and the reasons for the suspension upon the permittee.

402.3 The Air Pollution Control Officer will reinstate the suspended permit(s) when furnished with the required information.

PLAAPCD RULE 508 GENERAL CONFORMITY RULE

LAST REVISED 11/03/94

Adopted 11-03-94

CONTENTS

100 GENERAL

101 APPLICABILITY

102 EXEMPTIONS, LAKE TAHOE AIR BASIN

100 GENERAL

101 APPLICABILITY: The conditions of the Code of Federal Regulations (CFR), Title 40, Chapter I, Subchapter C, Parts 6 and 51 in effect January 31, 1994, are made part of the Rules and Regulations of the Placer County Air Pollution Control District.

102 EXEMPTIONS, LAKE TAHOE AIR BASIN: The Lake Tahoe Air Basin portion of Placer County is exempt from this rule.

RULE 515 STATIONARY RAIL YARD CONTROL EMISSION REDUCTION CREDITS

Adopted October 9, 2008
(Amended February 19, 2015)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY

200 DEFINITIONS

201 ACTUAL EMISSIONS
202 ACTUAL EMISSION REDUCTIONS
203 APCO
204 APPLICANT
205 BANKING
206 CERTIFIED ERCs
207 CONTROL DEVICE
208 EMISSION REDUCTION CREDITS (ERCs)
209 EMISSION REDUCTION SHORTFALL
210 ENFORCEABLE
211 ERC CERTIFICATE
212 ERC OWNER
213 BASELINE ACTUAL EMISSIONS
214 OFFSET
215 PERMANENT
216 PRIORITY RESERVE BANK
217 QUANTIFIABLE
218 QUARTERLY
219 REAL
220 REGISTER
221 RELATIVE ACCURACY TEST AUDIT (RATA)
222 SURPLUS
223 TRANSFER

300 STANDARDS

301 CONTROL DEVICE PERMIT REQUIREMENTS
302 PROPOSED ERC ISSUANCE
303 FINAL ERC ISSUANCE
304 RESTRICTIONS ON USE OF ERCs

400 ADMINISTRATIVE REQUIREMENTS

401 APPLICATION PROCEDURES
402 ADMINISTRATIVE PROCEDURES AND TIMETABLE
403 REGISTRATION OF EMISSION REDUCTION CREDITS
404 QUANTIFICATION PROTOCOL
405 EMISSION REDUCTION CREDIT ADJUSTMENTS OF CALCULATED CREDITS
406 VIOLATIONS

500 MONITORING, TESTING, RECORDKEEPING AND REPORTING

501 CONTINUOUS MONITORS
502 TESTING
503 RECORDKEEPING AND REPORTING

600 PROGRAM EVALUATION

100 GENERAL

101 PURPOSE: To provide the owners of a rail yard a mechanism for quantifying, certifying, and banking emission reductions from the installation and use of a control device which reduces emissions from locomotive engines in rail yards.

102 APPLICABILITY:

102.1 Geographic: The provisions of this rule apply to rail operations located anywhere in Placer County.

102.2 Application: This rule applies to the owner of a rail yard who installs a control device to reduce emissions from locomotive engines to generate ERCs. The use of ERCs for offsets is subject to the requirements of Rule 502, NEW SOURCE REVIEW and Section 304 of this rule.

102.3 Severability: If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity of the remaining portions of the rule.

200 DEFINITIONS

201 ACTUAL EMISSIONS: The emissions measured by a certified CEMS at the inlet of a control device which reduces emissions from locomotive engines in rail yards.

202 ACTUAL EMISSION REDUCTIONS: Actual emission reductions means the difference in emissions exiting a control device and emissions entering a control device, as measured by a certified CEMS.

203 APCO: Air Pollution Control Officer.

204 APPLICANT: The owners of a rail yard submitting an application to bank ERCs and obtain ERC certificates in accordance with this rule.

205 BANKING: The system of quantifying, adjusting, certifying, recording, and registering ERCs for future use or transfer. This system shall be called the Emission Reduction Credit Bank (ERC Bank).

206 CEMS: Continuous emission monitoring system.

207 CERTIFIED ERCs: ERCs which have been evaluated under the requirements of this rule and other applicable District, state and federal rules and regulations and which have been authorized by the Air Pollution Control Officer.

208 CONTROL DEVICE: Stationary equipment used to treat and/or control various air emissions such that the outlet emissions are less than the inlet emissions.

209 EMISSION REDUCTION CREDITS (ERCs): Reductions of actual emissions that are registered with the District in accordance with the requirements of this rule.

210 EMISSION REDUCTION SHORTFALL: Amount of emissions in pounds that the quarterly emission reductions achieved by the control device falls short of the permit requirement.

211 ENFORCEABLE: Emission reductions and other required actions are enforceable if: (1) they are independently verifiable; (2) program and permit violations are defined; (3) those liable can be identified; (4) the U.S. Environmental Protection Agency (EPA) and the APCO

maintain the ability to seek penalties for violations and, where applicable, to secure appropriate corrective action; (5) citizens have access to all the emissions-related information obtained from the source; (6) citizens can file suits against sources for violations; and (7) they are practicably enforceable in accordance with EPA guidance on practicable enforceability.

212 ERC CERTIFICATE: A document which provides title to a defined quantity and pollutant type of ERC's issued by the District.

213 ERC OWNER: The person or legal entity in whose name the ERC Certificate is issued and listed in the Register.

214 BASELINE ACTUAL EMISSIONS: Baseline actual emissions are those exhaust emissions captured from locomotive engines and measured at the control device inlet during the first four calendar quarters of operation after the CEMS has been certified.

215 OFFSET: The use of an ERC to compensate for an emission increase of an affected pollutant from a new or modified source subject to the requirements of Rule 502, NEW SOURCE REVIEW.

216 PERMANENT: Permanent means the actual emission reductions continue or endure for the duration of any project utilizing the resulting ERCs as offsets.

217 PRIORITY RESERVE BANK: A depository for preserving ERCs pursuant to Rule 505, PRIORITY RESERVE.

218 QUANTIFIABLE: Ability to reliably replicate measured emission reductions by adhering to the quantification protocol.

219 QUARTERLY: Pertaining to any calendar quarter beginning in January, April, July, and October.

220 REAL: Actually occurring, implemented, and not artificially devised.

221 REGISTER: The document that records all ERC deposits, withdrawals, transfers, and transactions.

222 RELATIVE ACCURACY TEST AUDIT (RATA): A quality performance procedure performed pursuant to 40 CFR Part 60, Appendix F, Procedure 1 to certify the accuracy of the continuous emissions monitors.

223 SURPLUS: The amount of emission reductions that are, at the time of generation of an ERC, not otherwise required by federal, state, or local law, not required by any legal settlement or consent decree, and not relied upon to meet any requirement related to the California State Implementation Plan (SIP). However, emission reductions required by a state statute that provides that the subject emission reductions shall be considered surplus may be considered surplus for purposes of the Rule if those reductions meet all other requirements of this section. Examples of federal, state, and local laws and of SIP-related requirements include, but are not limited to, the following:

223.1 The federally-approved California SIP;

223.2 Other adopted State air quality laws, and regulations not in the SIP, including but not limited to, any requirement, regulation, or measure that: (1) the District or the State has included on a legally-required and publicly-available list of measures that are scheduled for adoption by the District or the State in the future; or (2) is the subject of a public notice distributed by the District or the Date regarding an intent to adopt such revision;

223.3 And other source- or source-category specific regulatory or permitting requirement, including, but not limited to, Reasonable Available Control Technology (RACT), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Best Available Control Measures (BACM), Best Available Control Technology (BACT), and the Lowest Achievable Emission Rate (LAER); and

223.4 Any regulation or supporting documentation that is required by the federal Clean Air Act but is not contained or referenced in 40 C.F.R. Part 52, including but not limited to: assumptions used in attainment and maintenance demonstrations (including Reasonable Further Progress demonstrations and milestone demonstrations), including any proposed control measure identified as potentially contributing to an enforceable near-term emissions reduction commitment; assumptions used in conformity demonstrations, and assumptions used in emissions inventories.

224 TRANSFER: The change in ownership of an ERC from one person or legal entity to another.

300 STANDARDS

301 CONTROL DEVICE PERMIT REQUIREMENTS:

301.1 The applicant shall obtain a permit pursuant to Rule 501, GENERAL PERMIT REQUIREMENTS to install a stationary control device in rail yards for the purpose of reducing exhaust emissions from locomotive engines.

301.2 The control device permit shall include enforceable conditions that ensure compliance with the applicable portions of Section 500 – Monitoring, Testing, Recordkeeping, and Reporting.

302 **PROPOSED ERC ISSUANCE:** Prior to proposing issuance of an ERC certificate pursuant to Section 402.6 of this rule, the APCO shall make the following determinations:

302.1 The actual emission reductions are real, surplus, enforceable, permanent, and quantifiable.

302.2 The continuous monitors used to measure inlet and outlet emissions of the control device meet the requirements of Section 500 of this rule.

302.3 The analysis provided by the applicant of historical locomotive activity and expected future emission reductions in the locomotive fleet are adequate to project future actual emission reductions by the control device.

302.4 Actual emissions reductions have been calculated and adjusted pursuant to the provisions of Sections 404 and 405 of this rule, respectively.

302.5 The applicant has paid the fees required pursuant to Rule 601, PERMIT FEES.

303 **FINAL ERC ISSUANCE:** The APCO shall not issue an ERC certificate until the permit for the control device responsible for creating the emission reductions has been modified to include, at a minimum, the following:

303.1 The minimum quantity of ERC pollutant(s) to be removed from the exhaust stream per quarter, and

303.2 Conditions that ensure compliance with the applicable portions of Section 500 – Monitoring, Testing, Recordkeeping and Reporting, and

303.3 A statement that the permittee may not retire the permit for the control device unless the rail yard is shutdown or the permittee surrenders to the District a Certified ERC

certificate for the same quantity of quarterly emission reductions required by the permit.

303.4 Statements that incorporate all of the provisions of Section 406 – Violations.

304 RESTRICTIONS ON USE OF ERCs:

304.1 The use of PM_{10} and/or $PM_{2.5}$ ERCs generated pursuant to this rule shall not be used to provide offsets for diesel particulate matter. The ERC certificate shall contain a statement prohibiting such use.

304.2 ERCs generated pursuant to this rule from locations in Federal Attainment Areas shall not be used for offsets in Federal Non-attainment Areas.

400 ADMINISTRATIVE REQUIREMENTS

401 APPLICATION PROCEDURES:

401.1 The applicant shall submit an application on forms supplied by the District.

401.2 The application may be for reductions of one or more affected pollutants. The application shall contain sufficient information to allow for adequate evaluation of the actual emission reductions. At a minimum, for each pollutant for which an ERC certificate is requested, the application shall contain emissions data from a certified CEMS for a minimum of four consecutive calendar quarters.

401.3 The applicant shall provide an analysis of historical locomotive activity at the control device location to support emission calculations and show reasonable expectation that a specific amount of emission reductions can be achieved on an on-going basis, taking into account lower than expected activity level, and other factors.

401.4 The applicant shall provide an analysis of expected future emission reductions in the locomotive fleet as the fleet is upgraded with newer, lower-emitting locomotives.

401.5 The applicable fees shall be submitted pursuant to Rule 601, PERMIT FEES.

402 ADMINISTRATIVE PROCEDURES AND TIMETABLE:

402.1 The APCO shall determine whether an ERC application is complete no later than thirty (30) calendar days following receipt of the application, or after a longer time period if agreed upon in writing by both the applicant and the APCO.

402.2 Upon determination that the application is complete, the APCO shall notify the applicant in writing. Thereafter, only information to clarify, correct, or otherwise supplement the information submitted in the application may be requested by the District.

402.3 If the APCO determines that the application is not complete, the applicant shall be notified, in writing, of the decision, specifying the additional information that is required. The applicant shall have sixty (60) days, or a longer time period agreed upon in writing by both the applicant and the APCO, to submit the requested information. Upon receipt of additional information, the APCO shall have another thirty (30) days to determine completeness. If no information is submitted or the application is still incomplete, the APCO may cancel the application with written notification to the applicant.

402.4 Withdrawal of an ERC application by the applicant shall result in cancellation of the application. Any re-submittal shall be processed as a new application.

402.5 Upon determination that an application is complete, the APCO shall have 180 calendar days to take final action. During this time period, the District shall follow the public notification procedures in Subsections 402.6, 402.7, and 402.8.

402.6 Upon completion of the preliminary evaluation of the application, the APCO shall provide written notice of such to the applicant, the ARB, and EPA and publish a public notice in a local newspaper of general circulation. The public notice shall specify the applicant, the quantity of ERCs proposed to be certified and the location where a copy of the preliminary evaluation and proposed revised operating permit may be inspected.

402.7 Publication of the public notice required in Subsection 402.6 shall commence a thirty (30) day public comment period during which the APCO shall accept written comments on the merits of the preliminary evaluation. Upon conclusion of this thirty (30) day period, the APCO shall have another thirty (30) days to render a final decision to approve, conditionally approve, or deny the application taking into consideration all written comments. This final decision shall be provided in writing to the applicant, any commenters, the US Environmental Protection Agency, and the California Air Resources Board.

402.8 The APCO shall make available for public inspection at the District's office the information submitted by the applicant and the APCO's preliminary evaluation no later than the date the public notice of the preliminary decision is published.

402.9 The applicant or any other party may appeal the APCO's final decision in accordance with Regulation 7, PROCEDURE BEFORE THE HEARING BOARD.

403 REGISTRATION OF EMISSION REDUCTION CREDITS: ERC certificates issued in accordance with this rule shall be registered and maintained by the District according to the provisions of Rule 504, EMISSION REDUCTION CREDITS, Section 410, Registration and Section 411, ERC Register, respectively.

404 QUANTIFICATION PROTOCOL: The following procedures shall be used to calculate actual emission reductions achieved by installing a control device to reduce locomotive exhaust emissions.

404.1 Actual emission reductions shall be calculated for each calendar quarter by subtracting measured emissions exiting the control device from measured emissions entering the control device, as measured for each pollutant by a CEMS which complies with the requirements of Sections 501 and 502.

404.2 ERCs for particulate matter emission reductions shall be expressed in terms of PM_{10} and/or $PM_{2.5}$.

404.3 ERCs for nitrogen oxides, reactive organic compounds, carbon monoxide, sulfur oxides, PM_{10} and $PM_{2.5}$ shall be quantified in terms of pounds of pollutant per quarter for each calendar quarter.

404.4 Emission calculations for quantifying emission reductions shall be based upon at least four consecutive calendar quarters of CEMS data.

405 EMISSION REDUCTION CREDIT ADJUSTMENTS OF CALCULATED CREDITS: Before the APCO may issue an ERC certificate, the actual emission reductions calculated for each calendar quarter pursuant to Section 404 shall be reduced by the following amounts:

405.1 The APCO shall retire 10% of the calculated quantity of NOx emission reductions for air quality benefit.

405.2 The APCO shall transfer an additional 5% of the calculated quantity of emission reductions to the Priority Reserve Bank.

405.3 The APCO shall retire an equivalent percentage of the calculated quantity of emission reductions to account for expected future improvements in the fleet, as determined by Section 401.4.

406 VIOLATIONS:

406.1 Failure to comply with any provision of this rule or permit condition established pursuant to this rule shall constitute a violation of this rule.

406.2 Failure to provide the quarterly emission reduction incorporated in the permit to operate for the control device shall be considered an emission reduction shortfall and shall be a separate violation for each day of the quarter. If an emission reduction shortfall occurs, the permittee shall take the following corrective actions in order:

406.2.1 The permittee shall average the actual emission reductions reported for the previous four quarters to determine if a sufficient quantity of actual emission reductions occurred to satisfy the quarterly emission reduction requirement on an annual basis. If the annual emission reductions satisfy the quarterly emission reduction requirement, the violation will be deemed resolved, if not the permittee shall comply with (ii) below.

406.2.2 The permittee shall submit a compliance plan quantifying the amount of the emission reduction shortfall and indicating how the emission reduction shortfall will be remedied within the next 4 quarters. Such remedies may include cancelling any unused ERCs, reducing additional emissions during any of the next four quarters, such that on an annual basis the required quarterly amount of emission reductions is provided, or purchasing and retiring the necessary amount of ERCs.

406.3 Unnecessary idling or load testing for the sole purpose of providing the quarterly emission reduction or make-up of a prior quarter shortfall in emission reductions shall be a violation of this rule and the permit to operate.

406.4 If a compliance plan is not submitted or any emission reduction shortfall is not made up within four quarters of the shortfall occurrence, and any portion of the ERC certificate remains unused, a portion of the ERC certificate equivalent to the shortfall shall be revoked by the District.

406.5 If activity levels at the rail yard fall below those projected pursuant to Section 401.3, the permittee may submit an application to revise the quarterly emission reductions required, based on the new activity levels. EPA must also provide written concurrence as to any new quarterly emission reduction requirement prior to issuance of a revised permit to operate.

500 MONITORING, TESTING, RECORDKEEPING AND REPORTING

501 CONTINUOUS MONITORS:

501.1 For each control device installed to generate ERCs, the applicant shall install, and thereafter operate, maintain, certify, and quality-assure a continuous emission monitoring system (CEMS) which measures the inlet and outlet stack gas concentrations for each pollutant for which an ERC is to be issued and the oxygen concentrations in ppmv. The measured concentrations shall be corrected to 15 percent oxygen on a dry basis.

501.2 The CEMS shall meet the applicable requirements of 40 CFR 60 Appendix B, Performance Specifications 2 and 3, and 40 CFR Part 60 Appendix F, Procedure 1.

The CEMS shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. CEMS for PM shall not be required to include condensables.

501.3 The CEMS shall be programmed to calculate and record the actual emission reductions achieved by the control device, measured in pounds, on a daily basis, and summed quarterly.

501.4 A CEMS certification test protocol shall be submitted to the District and EPA no later than 30 days prior to the test date to allow review of the test plan and to arrange for an observer to be present at the test. The protocol shall include a process for demonstrating the accuracy of the computer programming used to calculate emissions. The certification test shall be conducted in accordance with the submitted protocol and any changes required by the District or EPA. The applicant shall furnish the District and EPA a written report of the results of performance tests within 60 days of completion. Certification testing of the CEMS may be conducted as part of the initial performance test for each control device.

501.5 For each control device installed to generate ERCs, the applicant shall install, and thereafter maintain and operate a continuous monitoring system to measure and record the stack gas volumetric flow rate. The system shall meet the 40 CFR Part 52, Appendix E Performance Specifications.

502 TESTING:

502.1 The CEMS shall be tested annually and quarterly in accordance with the requirements of 40 CFR 60 Appendix F, Procedure 1. The PM testing shall include the filter catch only.

502.2 A performance test shall be performed on the control device once every five years, in accordance with the requirements of 40 CFR 60.13.

503 RECORDKEEPING AND REPORTING:

503.1 The control device permittee shall maintain CEMS records that contain the following: The occurrence and duration of any startup, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements.

503.2 The control device permittee shall maintain records and submit a written report regarding operation of the control device and CEMS quarterly. The report is due on the 30th day following the end of the calendar quarter and shall include the applicable time and date of each period during which the CEMS was inoperative (monitor down time), except for zero and span checks, and the nature of system repairs or adjustments.

503.3 The owner of the control device shall prepare and submit to the District a quarterly report which is due on the 30th day following the end of the calendar quarter. The quarterly report shall detail the quantity and type of emissions reduced by operation of the control device; calculated pursuant to Section 404.1. If actual emission reductions achieved are less than the emission reduction requirements specified in the permit, the permittee shall also submit a compliance plan indicating how the emission reduction shortfall will be remedied.

503.4 All records required pursuant to this rule shall be kept for a minimum of five (5) years and made available to District inspectors upon request.

600 PROGRAM EVALUATION

601 The APCO shall evaluate this program at least once every 3 years after rule adoption and submit the evaluation program report to the EPA.

602 The evaluation report shall include for each applicant:

602.1 The number of Certified ERCs issued for each pollutant (pounds per quarter).

602.2 Actual emission reductions achieved for each pollutant (pounds per quarter).

602.3 The average cost of ERCs (dollars per ton) by pollutant during the evaluation period.

602.4 The attainment status for each pollutant for which an ERC was issued, at the ERC generation and use locations.

603 If there were any emission reduction shortfall, the evaluation report shall also describe:

603.1 The number of quarters where there was a shortfall.

603.2 The APCO's analysis of factors which contributed to the shortfall.

603.3 Corrective measures taken to prevent recurrence of the shortfall.

603.4 How long it took the rail yard owner to make up the shortfall.

604 The evaluation report shall also describe:

604.1 Any unintentional beneficial or detrimental effects from the program.

604.2 Cost savings, if any, experienced by sources from using these ERCs.

604.3 Whether the APCO had sufficient resources to implement this program.

604.4 Any lessons learned.

RULE 516 RICE STRAW EMISSION REDUCTION CREDITS

Adopted 02-19-09

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY

200 DEFINITIONS

201 AGRICULTURAL BURNING
202 AGRICULTURAL BURN PERMIT
203 AGRICULTURAL OPERATION
204 AIR POLLUTION CONTROL OFFICER (APCO)
205 APPLICANT
206 APPLICANT DESIGNEE
207 BANKING
208 BASELINE PERIOD
209 CERTIFIED
210 EMISSION REDUCTION CREDITS (ERCs)
211 HISTORIC BURN FRACTION (HBF)
212 NEW APPLICATION
213 PARCEL
214 RE-CERTIFICATION APPLICATION
215 REGISTER
216 RESTRICTED BURN LIST
217 RICE STRAW BURNING
218 RICE STRAW BURNING EMISSION REDUCTIONS
219 RICE GROWING ACREAGE
220 SURPLUS

300 STANDARDS

301 DETERMINATION IF A PARCEL IS ELIGIBLE
302 DETERMINATION OF AVAILABLE ACREAGE
303 DETERMINATION OF ANNUAL EMISSION REDUCTIONS AVAILABLE
304 DETERMINATION OF QUARTERLY EMISSION REDUCTIONS AVAILABLE
305 PRIORITY RESERVE ADJUSTMENT
306 DEED RESTRICTION
307 RESTRICTED BURN LIST
308 BURNING PROHIBITION

400 ADMINISTRATIVE REQUIREMENTS

401 APPLICATION FILING DEADLINE
402 APPLICATION REQUIREMENTS – NEW APPLICATIONS
403 APPLICATION REQUIREMENTS – RE-CERTIFICATION APPLICATIONS
404 AVAILABLE ACREAGE ADJUSTMENT
405 APPLICATION PROCESSING PROCEDURES
406 VIOLATONS

500 MONITORING AND RECORDS

501 BURN RECORDS

600 PROGRAM EVALUATION

100 GENERAL

101 **PURPOSE:** The purpose of this Rule is to provide a federally recognized procedure for quantifying and certifying rice straw burning emission reductions, and issuing the resulting Emission Reduction Credit (ERC) certificates.

This rule provides the only process by which ERC certificates issued for reductions in rice straw burning may be stored for later use to meet federal new source review offset requirements. Once issued in accordance with this rule, the procedures in Rule 504, EMISSION REDUCTION CREDITS shall be used as the administrative mechanism for sources to transfer ERCs to other sources for use as offsets.

102 **APPLICABILITY:** The provisions of this Rule shall apply to any agricultural operation that grew rice and burned rice straw in the District during the baseline period.

200 DEFINITIONS: Unless otherwise defined below, the terms used in this Rule are the same as defined in District Rule 504, EMISSION REDUCTION CREDITS, Rule 502, NEW SOURCE REVIEW, or Rule 501, GENERAL PERMIT REQUIREMENTS, in that order of priority.

201 **AGRICULTURAL BURNING:** Open outdoor fires used in the growing of crops. For the purpose of this Rule, agricultural burning is considered to be a source and such activity requires an agricultural burn permit.

202 **AGRICULTURAL BURN PERMIT:** A permit issued by the District, which is required in order to conduct an agricultural burn.

203 **AGRICULTURAL OPERATION:** Equipment used exclusively in the growing of agricultural crops or in the commercial raising of fowl or animals.

204 **AIR POLLUTION CONTROL OFFICER (APCO):** The Air Pollution Control Officer of the Placer County Air Pollution Control District (District), or his or her designee.

205 **APPLICANT:** For a new application, the owner (or his/her designee) of the parcel. For a re-certification application, the current owner (or his/her designee) of an existing rice straw burning ERC.

206 **APPLICANT DESIGNEE:** The person, company, or entity submitting an application on behalf of the applicant. Such designee shall provide written authorization signed by the applicant to serve as the designee.

207 **BANKING:** The system of quantifying, certifying, recording, and storing ERCs for future use and transfer. This system shall be called the ERC Bank.

208 **BASELINE PERIOD:** Calendar years 1988 through 1992.

209 **CERTIFIED:** ERCs which have been evaluated under the requirements of this Rule and other applicable District, State, and Federal Rules and Regulations and which have been granted by the APCO.

210 **EMISSION REDUCTION CREDITS (ERCs):** Reductions of actual emissions that are registered with the District in accordance with the requirements of Rule 504, EMISSION REDUCTION CREDITS or Rule 506, BIOMASS EMISSION REDUCTION CREDITS AND BANKING.

211 **HISTORIC BURN FRACTION (HBF):** The amount of rice (as a percentage of the amount planted) which was burned during the baseline period, equal to 100%.

212 **NEW APPLICATION:** An application submitted in accordance with this rule for which the District has not already issued an ERC for reductions in rice straw burning for a parcel(s) prior to adoption of this Rule.

213 **PARCEL:** A legally identifiable piece of land as registered with the County Assessor's office for property tax purposes and assigned an Assessors Parcel Number (APN).

214 **RE-CERTIFICATION APPLICATION:** An application submitted in accordance with this rule for which the District has previously issued an ERC for reductions in rice straw burning for a parcel(s) prior to adoption of this Rule.

215 **REGISTER:** The document that records all ERC deposits, withdrawals, transfers, and transactions.

216 **RESTRICTED BURN LIST:** A list (maintained by the District) of parcels which have restrictions related to future agricultural burning.

217 **RICE STRAW BURNING:** The intentional open burning of rice straw material. For the purpose of this Rule, rice straw burning is considered to be a source and such activity requires an agricultural burn permit.

218 **RICE STRAW BURNING EMISSION REDUCTIONS:** Emission reductions that qualify for banking pursuant to Section 41865 of the California Health and Safety Code.

219 **RICE GROWING ACREAGE:** The amount of acreage contained in a parcel that was used for the growing of rice during the baseline period.

220 **SURPLUS:** The amount of emission reductions that are, at the time of generation of an ERC, not otherwise required by federal, state, or local law, not required by any legal settlement or consent decree, and not relied upon to meet any requirement related to the California State Implementation Plan (SIP). However, emission reductions required by a state statute that provides that the subject emission reductions shall be considered surplus may be considered surplus for purposes of this Rule if those reductions meet all other requirements of this section. Examples of federal, state, and local laws and of SIP-related requirements include, but are not limited to, the following:

220.1 The federally-approved California SIP;

220.2 Other adopted State air quality laws, and regulations not in the SIP, including but not limited to, any requirement, regulation, or measure that: (1) the District or the State has included on a legally-required and publicly-available list of measures that are scheduled for adoption by the District or the State in the future; or (2) is the subject of a public notice distributed by the District or the State regarding an intent to adopt such revision;

220.3 Any other source- or source-category specific regulatory or permitting requirement, including, but not limited to, Reasonable Available Control Technology (RACT), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Best Available Control Measures (BACM), Best Available Control Technology (BACT), and the Lowest Achievable Emission Rate (LAER); and

220.4 Any regulation or supporting documentation that is required by the federal Clean Air Act but is not contained or referenced in 40 Code of Federal Regulations (CFR) Part 52, including but not limited to: assumptions used in attainment and maintenance demonstrations (including Reasonable Further Progress demonstrations and milestone demonstrations), including any proposed control measure identified as potentially contributing to an enforceable near-term emissions reduction commitment; assumptions used in conformity demonstrations; and assumptions used in emissions inventories.

300 STANDARDS

301 **DETERMINATION IF A PARCEL IS ELIGIBLE:** A particular parcel qualifies to generate ERCs under this rule if the following requirements are met:

301.1 The parcel is located in the Sacramento Federal Non-attainment Area (SFNA) portion of Placer County; and

301.2 Rice straw burning occurred on the parcel during the baseline period.

302 **DETERMINIATION OF AVAILABLE ACREAGE:** The acreage available for generating ERCs shall be determined by adding all of the rice growing acreage of an applicant's eligible parcels and multiplying by the HBF. In no case shall the total available acreage for the entire District exceed 10,303 acres. In the event that the District receives applications which total more than 10,303 acres, the District shall lower the amount of acreage available for each application in accordance with Section 404.

303 **DETERMINATION OF ANNUAL EMISSION REDUCTIONS AVAILABLE:** The amount of annual emission reductions available shall be determined by multiplying the available acreage times 75% times the applicable emission factor in the following table:

POLLUTANT	EMISSION FACTOR
Volatile Organic Compounds (VOC)	14.1 lbs/acre
Carbon Monoxide (CO)	172.2 lbs/acre
Oxides of Nitrogen (NOx)	15.6 lbs/acre
Oxides of Sulfur (SOx)	3.3 lbs/acre
Particulate Matter 10 (PM10)	18.9 lbs/acre

304 **DETERMINATION OF QUARTERLY EMISSION REDUCTIONS AVAILABLE:** The emission reductions shall be quantified on a calendar quarter basis. The following percentages shall be used to determine the amount of emission reductions in each calendar quarter:

CALENDAR QUARTER	PERCENTAGE
First Quarter (January – March)	24%
Second Quarter (April – June)	21%
Third Quarter (July – September)	12%
Fourth Quarter (October – December)	43%

305 **PRIORITY RESERVE ADJUSTMENT:** The APCO shall transfer 5% of the calculated quantity of emission reductions to the District's Priority Reserve Bank.

306 **DEED RESTRICTION:** Prior to the issuance of an ERC, a deed restriction shall be placed on the parcel or group of contiguous parcels for which ERCs will be granted and a copy provided to the District. The deed restriction shall prohibit agricultural burning on the parcel which is not consistent with the ERC.

307 **RESTRICTED BURN LIST:** Prior to the issuance of an ERC, the District shall place the parcel or group of contiguous parcels on the restricted burn list. In each calendar year, no agricultural burn permit may be issued for greater than 25% of the acreage of any parcel listed on the restricted burn list.

308 **BURNING PROHIBITION**: No person shall conduct agricultural burning on more than 25% of the rice growing acreage of a parcel which has received an ERC certificate pursuant to the provisions of this rule. In addition, applicants must comply with California Health & Safety Code (CH&SC) 41865.

400 ADMINISTRATIVE REQUIREMENTS

401 **APPLICATION FILING DEADLINE:** All applications to obtain rice straw ERC certificates in accordance with this rule shall be submitted by August 19, 2009. Applications submitted after this date shall not be eligible for ERCs under this rule.

402 **APPLICATION REQUIREMENTS - NEW APPLICATIONS:** The applicant shall submit one application, identifying each parcel and each set of contiguous parcels. The application shall contain the following information:

402.1 List of each parcel included in the application, including APN and any owner's designation or identifier.

402.2 The acreage of each parcel that was used to grow rice during the baseline period, and documentation of such acreage.

402.3 Documentation that rice straw burning occurred on the acreage of each parcel (identified above) during the baseline period. Examples of acceptable documentation include, but are not limited to, copies of a District agricultural burn permit, log books, pictures, or other District approved verifiable records.

402.4 A statement of intent to file a deed restriction required by Section 306 for each parcel or for each set of contiguous parcels for which an application is being submitted (a copy of the deed restriction must be provided prior to final issuance of the rice straw ERC certificate).

402.5 Filing fee in accordance with District Rule 601, PERMIT FEES.

403 **APPLICATION REQUIREMENTS – RE-CERTIFICATION APPLICATIONS:** The applicant shall submit one application for each existing ERC certificate. In addition to the information in section 402, prior to re-issuance of the ERC, the applicant must surrender all previous certificates issued for rice straw burning on the parcel or group of contiguous parcels.

404 **AVAILABLE ACREAGE ADJUSTMENT**: In the event that the District receives applications in which the requested available acreage totals more than 10,303 acres, the District shall lower the percentage available as follows:

404.1 The re-certification applications meeting the criteria of this rule shall get full credit on their acreage.

404.2 The applications with verifiable burn records will have second priority. If the total available acreage for all these applications along with the re-certification applications does not exceed 10,303 acres, these applications will get full credit. If the total of all these applications along with the re-certification applications exceeds 10,303 acres, these applications shall be adjusted proportionally so that the total acreage for which all rice straw burning ERCs are issued does not exceed 10,303 acres.

405 **APPLICATION PROCESSING PROCEDURES:**

405.1 Complete Application: The APCO shall determine whether the application is complete not later than 30 days after receipt of the application for ERC certificates. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision specifying the information required. If the specified information is not submitted within 30 days the application shall be canceled by the APCO.

405.2 Additional Information: Upon receipt of additional information for an incomplete application a new 30 day period to determine completeness shall begin. During the processing of the application, the APCO may request an applicant to clarify, amplify, correct, or otherwise supplement the information submitted in the application.

405.3 Preliminary Decision: Following acceptance of an application as complete, the APCO shall perform the evaluations required to determine compliance with all applicable District Rules and Regulations and make a preliminary written decision as to whether the emission reduction should be certified as ERCs. The decision should be supported by a succinct written analysis.

405.4 Publication and Public Comment: Within 10 calendar days following a preliminary decision, the APCO shall publish, in at least one newspaper of general circulation in the District, a notice stating the preliminary decision of the APCO, noting how the pertinent information can be obtained, and inviting written public comment for a 30 day period following the date of publication.

405.5 Deed Restriction: Within 90 calendar days of the public notice being published, the applicant shall submit a final copy of the legal deed restriction for all parcels upon which the ERC is based. The ERC shall not be issued prior to this submittal.

405.6 Public Inspection: The APCO shall make available for public inspection at the District office the information submitted by the applicant and the APCO's analysis no later than the date the notice of the preliminary decision is published, pursuant to Section 405.4. Further, all such information shall be transmitted to the California Air Resources Board and the US Environmental Protection Agency (EPA) regional office, and to any party which requests such information no later than the date of publication.

405.7 Final Action: Within 180 days after the application filing deadline in Section 401 of this rule, the APCO shall take final action on the applications, after considering all written comments.

406 **VIOLATIONS:** Failure to comply with any provision or restriction of this rule shall be considered a violation of this rule.

500 MONITORING AND RECORDS

501 BURN RECORDS: For any parcel or group of contiguous parcels for which a rice straw ERC certificate has been issued, the initial ERC holder or current land owner shall keep records of the amount of acres, crop type and burning that has occurred during the previous 5 years.

600 PROGRAM EVALUATION: Within two (2) years after adoption of this rule, the District shall evaluate the program and submit an evaluation report to EPA. The report shall include a discussion of the total number of applications approved, total acreage subject to this rule, and total amount of ERCs issued.

RULE 518 PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PERMIT PROGRAM

Adopted 02/10/11
(Amended 10/13/16)

CONTENTS

100 GENERAL

101 PURPOSE
102 APPLICABILITY
103 INCORPORATION BY REFERENCE

200 DEFINITIONS

201 ADMINISTRATOR
202 ALLOWABLE EMISSIONS
203 PARAGRAPH (q)
204 POTENTIAL TO EMIT

300 STANDARDS

301 REQUIREMENTS

400 ADMINISTRATIVE REQUIREMENTS

401 PUBLIC PARTICIPATION

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100 GENERAL

101 PURPOSE: The prevention of significant deterioration (PSD) program is a construction permitting program for new major sources and major modifications to existing major sources located in areas classified as attainment or in areas that are unclassifiable for any criteria air pollutant. The intent of this Rule is to incorporate the federal PSD rule requirements into the District's Rules and Regulations by incorporating the federal requirements by reference.

102 APPLICABILITY: The provisions of this rule shall apply to any source and the owner or operator of any source subject to any requirement under 40 Code of Federal Regulations (CFR) Part 52.21 as incorporated into this rule.

103 INCORPORATION BY REFERENCE: Except as provided below, the provisions of Title 40 of the Code of Federal Regulations (CFR) Part 52.21, in effect October 13, 2016, are incorporated herein by reference and made part of the Rules and Regulations of the Placer County Air Pollution Control District.

103.1 The following subsections of 40 CFR Part 52.21 are excluded: (a)(1), (b)(55-58), (f), (g), (p)(6-8), (q), (s), (t), (u), (v), (w), (x), (y), (z) and (cc).

200 DEFINITIONS: Unless otherwise defined below, the terms used in this rule are defined in 40 CFR Part 52.21(b):

201 ADMINISTRATOR: The term "administrator" means:

201.1 "Federal Administrator" in 40 C.F.R. 52.21(b)(17), (b)(37)(i), (b)(43), (b)(48)(ii)(c), (b)(50)(i), (b)(51), (l)(2) and (p)(2); and

201.2 "Air Pollution Control Officer (APCO)" elsewhere, as defined in District Rule 102, DEFINITIONS.

202 ALLOWABLE EMISSIONS: The definition of "allowable emissions" contained in 40 CFR, Part 52.21(b)(16), is revised so that:

202.1 The phrase "unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both" shall read, "unless the source is subject to enforceable limits which restrict the operating rate, or hours of operation, or both."

202.2 Paragraph (iii) shall read as follows: "The emissions rate specified as an enforceable permit condition, including those with a future compliance date."

203 PARAGRAPH (q): The phrase "paragraph (q) of this section" in 40 CFR 52.21(l)(2) and (p)(1) shall read as follows: "the public notice and comment provisions of Rule 502, NEW SOURCE REVIEW".

204 POTENTIAL TO EMIT: The definition of "potential to emit" contained in 40 CFR, Part 52.21(b)(4), is revised so that the phrase "is federally enforceable" shall read "is federally enforceable or enforceable as a practical matter."

300 STANDARDS

301 REQUIREMENTS:

301.1 An owner or operator must obtain a PSD permit pursuant to this Rule before beginning actual construction of a new major stationary source, a major modification, as defined in 40 CFR 52.21(b) or a Plantwide Applicability Limitation (PAL) major modification, as defined in 40 CFR 52.21(aa)(2).

301.2 Notwithstanding the provisions of any other District Rule or Regulation, the APCO shall require compliance with this rule prior to issuing a federal PSD permit as required by Clean Air Act (CAA) Section 165.

301.3 The applicant shall pay the applicable fees specified in District Rule 601, PERMIT FEES.

301.4 Greenhouse gas emissions shall not be subject to the requirements of subsections (k) or (m) of 40 CFR Part 52.21 in effect on October 13, 2016.

301.5 The APCO shall provide written notice of any permit application for a proposed major stationary source or major modification to the EPA administrator. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct.

301.6 The APCO shall determine whether an application is complete not later than 30 days after receipt of the application or after such longer time as both the applicant and the APCO may agree. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision specifying the information that is required. Upon receipt of any re-submittal of the application, a new 30-day period to determine completeness shall begin. Upon determination that the application is complete, the APCO shall notify the applicant in writing. The date of receipt of the application shall be the date on which the reviewing authority received all required information.

400 ADMINISTRATIVE REQUIREMENTS

401 PUBLIC PARTICIPATION: Prior to issuing a federal PSD permit pursuant to this rule and within one year after receipt of a complete application, the APCO shall:

401.1 Make a preliminary determination whether construction should be approved with conditions or disapproved.

401.2 Make available at the District office a copy of all materials the applicant submitted, a copy of the preliminary determination, a copy of the proposed permit and a copy or summary of other materials, if any, considered in making the preliminary determination.

401.3 Notify the public, through a notice by prominent advertisement in the affected region of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and of the opportunity for written public comment.

401.4 Send a copy of the notice of public comment to the applicant, EPA Region 9, any persons requesting such notice and any other interested parties such as: Any

other State or local air pollution control agencies, the chief executives of the city and county where the source would be located; any comprehensive regional land use planning agency, and any State, Federal Land Manager, or Indian Governing body whose lands may be affected by emissions from the source or modification.

401.5 Provide opportunity for a public hearing for persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations, if in the APCO's judgment such a hearing is warranted.

401.6 Consider all written comments that were submitted within 30 days after the notice of public comment is published and all comments received at any public hearing(s) in making a final decision on the approvability of the application and make all comments available for public inspection in the same locations where the District made available preconstruction information relating to the proposed source or modification.

401.7 Make a final determination whether construction should be approved with conditions or disapproved.

401.8 Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the District made available preconstruction information and public comments relating to the source.

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PLACER COUNTY
AIR POLLUTION CONTROL DISTRICT

Ozone Emergency Episode Plan

PREPARED IN COMPLIANCE WITH
THE FEDERAL CLEAN AIR ACT

April 2015

Purpose

This Ozone Emergency Episode Plan provides the basis for taking action to prevent ambient ozone concentrations from reaching levels which could endanger public health, or to abate such concentrations should they occur. It identifies criteria for the four levels of emergency episodes, components for public announcements whenever an episode has been identified, and specifies emission control strategies to be taken with each episode.

Legal Authority

The Federal Clean Air Act (CAA)[1] gives the U.S. Environmental Protection Agency (U.S. EPA) the legal authority to halt the emission of air pollutants causing or contributing to the injury of the public or their welfare. The U.S. EPA is further authorized to either bring a lawsuit in federal court or, if such civil action cannot assure prompt protection of public health or welfare, to issue such orders as may be necessary to protect public health, welfare, or the environment. The authority granted to the U.S. EPA Administrator is vested in the California Air Resources Board (ARB) and the air districts under the California Health & Safety Code (H&SC)[2]. This section of California law applies to a range of emissions violations and imposes penalties that are equivalent to or exceed federal penalties for comparable violations. These penalties include the imposition of fines and/or imprisonment.

Under the authority of the H&SC, the ARB is responsible for controlling emissions from mobile sources, while districts are responsible for controlling emissions from non-mobile sources. H&SC Section 41700 states that sources are prohibited from emitting any pollutant(s) that can cause injury, detriment, nuisance, or annoyance to the public, or that endanger the comfort, repose, health, or safety of the public. Furthermore, H&SC Section 42450, et seq., gives districts specific authority to abate emissions from any source violating H&SC Section 41700 or any other order, rule, or regulation that prohibits or limits the discharge of pollutants, consistent with applicable notice and hearing requirements. Under H&SC Section 41509, the ARB or other local agency rules cannot infringe upon a district's authority to declare, prohibit, or abate a nuisance, and California's Attorney General is authorized to enjoin any pollution or nuisance, either on his or her own, or by request.

In addition to the authority under H&SC, the local air districts can work with the local governing body of a city, county, or city and county, pursuant to the California Emergency Services Act[3], to proclaim a local emergency when there are conditions of disaster or of extreme peril to the safety of persons and property within the territorial

[1] Federal Clean Air Act Section 110(a)(2)(G)
[2] California Health & Safety Code Section 42400 et seq.
[3] California Emergency Services Act, California Government Code Section 8550-8668

limits of a city, county, or both a city and county, caused by such conditions as air pollution[4]. When a local emergency is declared, cities and counties shall implement their emergency plans and take actions to mitigate or reduce the emergency threat. Actions may include deploying field-level emergency response personnel such as law enforcement, activating emergency operation centers, and issuing orders to protect the public. Through a local emergency declaration, the air districts will obtain law enforcement aids from local governing bodies to accomplish necessary actions for preventing ambient ozone concentration from reaching the harmful level.

Requirement of a Plan for the Prevention of Air Pollution Emergency Episodes

Under the Code of Federal Regulations (CFR)[5], areas that (1) do not attain the federal standards for ozone, and (2) have hourly ozone concentrations above 0.10 parts per million (ppm), are required to develop a contingency plan which must, at a minimum, provide for taking action necessary to prevent ambient ozone concentrations at any location in such region from reaching the significant harm level of 0.6 ppm, averaged over two hours. As set forth in CFR, three trigger levels (stages) are established for the ozone pollution episodes: Alert level (0.2 ppm), Warning level (0.35 ppm), and Emergency level (0.5 ppm)[6]. Corresponding actions for each specified trigger level would be identified and will be implemented when the ambient ozone hourly concentration measurements reach the specified trigger levels. These elements and actions should provide for rapid short-term emission reductions at each trigger level, to avoid high ozone concentrations from reaching significant harm levels during an episode.

Development of the Ozone Emergency Episode Plan for Placer County

Placer County is classified as non-attainment for the 2008 federal ozone eight-hour average standard[7]. Since Placer County has had more than one day with the maximum one-hour concentration greater than 0.10 ppm between 2011 and 2012, the Placer County Air Pollution Control District (PCAPCD) is required to prepare an ozone emergency episode plan (Plan).

Table 1 shows the number of days exceeding the 0.10 ppm threshold at the Placer County ozone monitoring sites from 2011 through 2014. During this time, the maximum ozone one-hour concentration was 0.11 ppm, with no site having more than three days in a year that exceeded 0.10 ppm after 2011. From 2013 to 2014, there was only one day in each year that exceeded 0.10 ppm.

[4] California Government Code Section 8558 (c).
[5] 40 CFR 51.150 and 51.151
[6] 40 CFR 51 Appendix L
[7] Portions of Sacramento Valley and Mountain Counties Air Basins in Placer County are classified as Ozone Nonattainment area.

Table 1
Placer County Ozone Monitoring Sites
Number of Days with Maximum one-hour Concentration Greater than 0.10 ppm*

		2011	2012	2013	2014**
Colfax-City Hall	# of Days	0	0	0	0
	Max Conc.	0.104	0.097	0.083	0.089
Auburn-Dewitt-C Ave (relocated to Atwood Road site in 2011 summer)	# of Days	1	---	---	---
	Max Conc.	0.105	---	---	---
Auburn-Atwood Rd	# of Days	2	1	0	0
	Max Conc.	0.107	0.107	0.097	0.097
Lincoln-L Street (relocated to 1445 1st Street site at the end of 2012)	# of Days	---	1	---	---
	Max Conc.	---	0.107	---	---
Lincoln-1445 1st Street	# of Days	---	---	0	1
	Max Conc.	---	---	0.081	0.107
Roseville-N Sunrise Blvd	# of Days	3	2	1	0
	Max Conc.	0.109	0.108	0.111	0.097

*Values were rounded to 2 decimal places before comparing with 0.10 ppm to determine the number of exceedance days
**Preliminary data downloaded from ARB's Aerometric Data and Management (ADAM) system on 12/13/14

The industrial abatement plan is a preplanned document prepared by a permitted industrial source (facility) which contains the necessary actions to rapidly reduce that facility's emitted ozone precursor emissions when an episode level is triggered. In order to require such a plan, an emission threshold should be established for the industrial abatement plan requirement. Depending on the ozone emergency plans approved by the other air districts in California, the emission thresholds to require the industrial abatement plan are as low as 50 tons per year for both ROG and NOx emissions[8]. Table 2 shows the five highest facilities with emissions of ROG and NOx within Placer County[9]. The table indicates that there are two facilities in Placer County that emit more than 50 tons per year of NOx, and no facility emitting more than 50 tons per year of ROG.

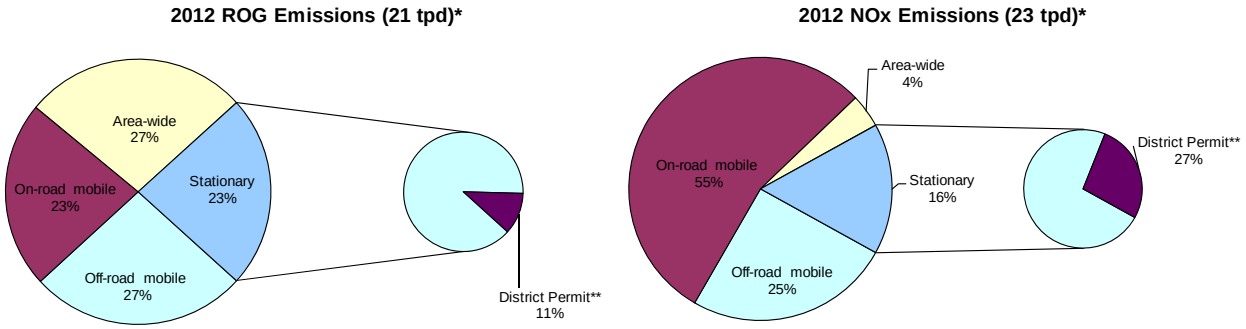
[8] SMAQMD Rule 701
[9] ARB online facility search engine http://www.arb.ca.gov/app/emsinv/facinfo/facinfo.php

Table 2
Five Highest ROG and NOx Emissions Facilities

Five Highest ROG Emissions Facilities					
Air Basin	Facility ID	Facility Name	City	Facility SIC	ROG (tons/yr)
Sacramento Valley Air Basin	233	Capital Drum Inc.	Roseville	3412	15
Sacramento Valley Air Basin	183	Pacific MDF Product Inc.	Rocklin	2431	11
Sacramento Valley Air Basin	1731	Progressive Vanguard Corporation	Rocklin	7699	9
Sacramento Valley Air Basin	730	Energy 2001 Inc.	Lincoln	7389	6
Sacramento Valley Air Basin	184	Colledgewood	Lincoln	2431	6
Five Highest NOx Emissions Facilities					
Air Basin	Facility ID	Facility Name	City	Facility SIC	NOx (tons/yr)
Sacramento Valley Air Basin	188	Sierra Pacific Industries	Lincoln	2421	135
Sacramento Valley Air Basin	212	Rio Bravo	Lincoln	4911	119
Sacramento Valley Air Basin	2046	Roseville Energy Park	Roseville	4911	14
Sacramento Valley Air Basin	730	Energy 2001 Inc.	Lincoln	7389	7
Sacramento Valley Air Basin	403	City of Roseville	Roseville	9199	7

Emissions from permitted facilities are identified as stationary source emissions. Although Placer County has two facilities that exceed the 50 tons per year threshold for NOx, permitted facilities comprise a very small portion of ROG and NOx countywide emission inventories. Figure 1 presents the reactive organic gases (ROG) and nitrogen oxides (NOx) emission inventories in Placer County in 2012[10].

Figure 1
Placer County 2012 Emission Inventory



* This is the latest complete inventory including mobile sources emissions from ARB.
** It is the latest update from the District permit database based on the actual 2012 throughput data reported by permitted facilities in 2013.

According to Figure 1, 23% of ROG emissions and 16% of NOx emissions are from stationary sources in Placer County. Within stationary source emissions, only 11% of ROG emissions and 27% of NOx emissions are from permitted industrial sources. Therefore, permitted industrial sources are responsible for approximately 2.7% and 4.3% of the countywide ROG emissions and NOx emissions, respectively. The major

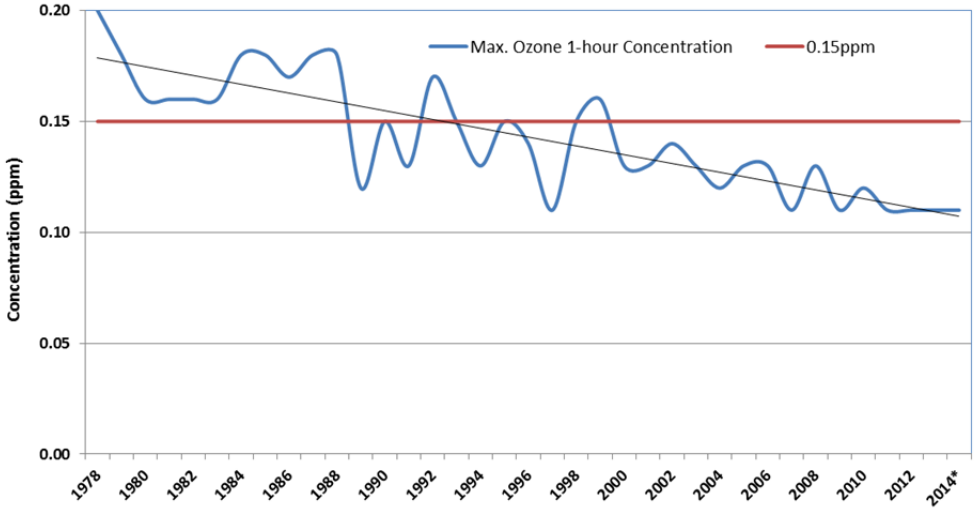
[10] ARB Emission Almanac (published in 2013)

contributions of the ROG and NOx inventories are from mobile and unpermitted area and stationary sources, with mobile source emissions more responsible for ozone formation than permitted industrial sources in Placer County.

Health Advisory Level

The PCAPCD proposes 0.15 ppm as a Health Advisory level to initiate emergency actions. The Health Advisory level (0.15 ppm) is lower than the Alert level (0.2 ppm), which is the lowest of three trigger levels required by the CFR. Figure 2 represents the annual maximum one-hour ozone concentration measured in Placer County since 1978, when air monitoring began. It also contains the red line showing the proposed Health Advisory level at 0.15 ppm.

Figure 2
Annual Maximum one-hour Ozone Concentration in Placer County since 1978



*Preliminary data downloaded from ARB ADAM on 12/13/14

Figure 2 shows that the 0.2 ppm level was last reached in 1978, which was the first year of air monitoring for ozone in Placer County. The ozone concentration trend shows a generally consistent decrease over time, and there has not been an exceedance over 0.15 ppm in the last thirteen years (2000-2013). Accordingly, Figure 2 shows that the maximum ozone one-hour concentration in Placer County has been substantially reduced and would need a high ozone concentration to trigger the Alert level, and therefore initiate the ozone emergency episode plan implementation.

Ozone concentrations in Placer County have been substantially reduced through the implementation of existing control regulations and programs. Placer County is located within the Sacramento Federal Ozone Nonattainment Area (SFONA), which is designated as nonattainment for the federal ozone standards. Two ozone State

Implementation Plans (SIP) have been developed to identify emission control strategies for mobile and non-mobile sources within the SFONA. Based on the SIP commitments, the PCAPCD adopted or amended rules and developed programs to facilitate the SFONA's progress towards attaining the federal ozone standards. The air districts within the Sacramento Region continue to work on the development of control strategies to fulfill the attainment requirement by CAA. Since the current federal ozone eight-hour average standard (0.075 ppm) is more stringent than the previous one-hour standard, the PCAPCD believes that the development and implementation of control regulations and programs identified by the ozone SIPs will ensure that the ozone one-hour maximum concentrations in Placer County will continue decreasing, and would not reach the proposed Healthy Advisory level of 0.15ppm.

In addition, the PCAPCD also regulates various types of open burning, including residential, land development, fire hazard reduction, vegetation management, prescribed fire, and agricultural[11]. For the Sacramento Valley Air Basin, the PCAPCD works cooperatively with the ARB year round, and in the fall, with the Sacramento Valley Air Basin Agricultural Burn Coordinator, to provide daily burn day allocations and notifications based on meteorological conditions and air quality forecasts. For the Mountain Counties and Lake Tahoe Air Basins, the District works cooperatively with the ARB on the daily burn day information. The burn day information is broken down into burn day types to help indicate the quality of a burn day. Through the existing burn programs, the PCAPCD works carefully to balance the public health impacts from air pollution, along with the open burning activities which exist in the county, especially since much of the county is considered a high fire hazard area.

Furthermore, the PCAPCD, along with the other air districts within the Sacramento Region, fund the regional "Spare the Air" program that is managed by the Sacramento Metropolitan Air Quality Management District. This is an air pollution forecasting program which provides notifications to the public on the daily ozone concentration forecasts, along with advisories with an episodic ozone reduction element, during the summer ozone season. It is designed to protect public health by informing people when air quality is unhealthy, and by encouraging the public to reduce vehicle trips to achieve emission reductions. The program's notification includes current ozone concentration measurements from all monitoring stations within the SFONA, including Placer County, and forecasts, based on the meteorological conditions from the national weather service advisories and local agencies. When atmospheric stagnation conditions are forecasted, the public will be notified through email, text, or the media, that a "Spare the Air Day" is issued. The participation of the Sacramento regional "Spare the Air" program will

[11] PCAPCD Rule 301~306, http://www.placer.ca.gov/departments/air/rules

promote the acquisition of forecasts of the atmospheric stagnation conditions, pursuant to the CFR requirements[12].

In conclusion, the PCAPCD believes that the proposed Health Advisory level at 0.15 ppm will be an appropriate and logical condition, in addition to the required ozone emergency episode levels set forth in the CAA, to initiate and fulfill the air pollution emergency episode actions proposed by the Plan.

Emergency Episode Criteria

Table 3 summarizes the four emergency episode trigger levels proposed by the PCAPCD for the one-hour ozone concentration measurement in Placer County. The following section identifies the corresponding actions for each trigger level, when that one-hour ozone concentration is reached.

Table 3
Trigger Levels of Ozone Emergency Episodes in Placer County

	Health Advisory	Alert (Stage 1)	Warning (Stage 2)	Emergency (Stage 3)
Ozone (one-hour average)	0.15 ppm	0.20 ppm	0.35 ppm	0.50 ppm

Proposed Actions for Ozone Emergency Episodes:

The actions identified for each trigger level of the ozone emergency episodes include public notification and emissions mitigation for industrial and mobile sources. The purposes of these actions are 1) to provide notification to the public when atmospheric stagnation conditions would result in substantially high ozone concentration measurements, and 2) to reduce the ozone precursor emissions rapidly in order to lower the ozone concentration below the triggered emergency episode level.

Air Pollution Forecast

The PCAPCD continues to use the Sacramento regional "Spare the Air" program to provide public notification for air quality forecasts when atmospheric stagnation conditions would result in substantially high ozone concentration measurements. The notification with episodic ozone reduction strategies is to encourage the public to take voluntary actions to reduce ozone precursor emissions.

Emergency Episode Declaration

Whenever the ozone one-hour concentration, measured at any location within Placer County, reaches or is predicted to reach any of the episode trigger levels as shown in

[12] 40 CFR 51.152 "Contingency Plans"

Table 3, the PCAPCD shall declare that an emergency episode is in effect in Placer County.

In addition, should the Air Pollution Control Officer (APCO) of a district adjacent to the PCAPCD declare a stage 1, 2, or 3 episode within that district and request assistance, the APCO of PCAPCD may implement measures as described in this Plan as if such episode level has been measured within the District.

Notification of an Emergency Episode

The PCAPCD shall establish and periodically update and review an emergency episode notification list (List). When any emergency episode is declared, the APCO shall notify the officials on the List. The List shall include, and is not limited to, the following public agencies and organizations:

1. California Air Resources Board,
2. The Placer County Executive Officer, chief executive officers of the incorporated municipalities within Placer County, police chiefs, fire chiefs, and any other public safety officers as deemed appropriate by the APCO,
3. The Placer County Health Officer,
4. The Placer County Office of Emergency Services,
5. The Placer County Office of Education Superintendent, school districts' superintendents , and private schools' principals,
6. All air pollution control districts within the Sacramento Valley, Mountain Counties and Lake Tahoe Air Basins, as well as all upwind districts.
7. Major newspapers in daily circulation and major television and radio stations (including those who are part of the emergency broadcast system) broadcasting within Placer County for appropriate warning, notices, and advisories,
8. Sacramento Regional Spare the Air Program,
9. PCAPCD permitted facilities, and
10. PCAPCD Staff who are responsible for public outreach.

Content of Notification

Notification of an emergency episode shall include information on the predicted or current episode level, the expected duration of the episode, the expected geographic boundaries of the affected area, a statement for the public on the health significance of the air quality during the episode, and the appropriate voluntary or mandatory control actions proposed for each episode level.

Termination of an Emergency Episode

The PCAPCD shall declare an episode as terminated when the one-hour ozone concentration measurements from all monitoring sites within Placer County fall below the level of the Alert episode and the meteorological data indicates the ozone concentration is expected to continue decreasing.

Notification of the Termination of an Episode

Upon the declaration of the termination of an episode, the PCAPCD shall notify those agencies and organizations specified in the List.

Actions for Each Emergency Episode

When an emergency episode is declared, the PCAPCD shall implement the following control actions:

1. Health Advisory Episode:
   a) Prepare the emergency episode notification;
   b) Notify those public agencies and organizations identified in the List that a health advisory episode has been declared;
   c) Advise the Placer County Office of Education Superintendent that sustained strenuous activities by students (for both public and private schools) lasting longer than one hour should be discontinued;
   d) Through the Placer County Office of Emergency Services, notify the news media to broadcast the appropriate warning to the public, which will include a recommendation that the public curtail unnecessary motor vehicle operation;
   e) Work with the industry to identify targeted facilities with possible emission control actions to reduce the relative emissions; and
   f) Coordinate with the Placer County Office of Emergency Services to identify possible actions which shall be taken when Placer County declares a local emergency for an air pollution emergency, which might include, for example, ceasing painting, construction, lawn mowing, pesticide application, and charcoal grilling.

2. Alert (Stage 1) Episode:
   a) Prepare the emergency episode notification;
   b) Notify those public agencies and organizations identified in the List that an Alert episode has been declared;
   c) Request the Placer County Office of Education Superintendent contact the School Superintendents and coordinate with private schools, to suspend students' strenuous activities;

d) Through the Placer County Office of Emergency Services, notify the news media to broadcast the appropriate warning to the public, which will include a request that the public to curtail any unnecessary motor vehicle operation;
e) Request targeted facilities to initiate specified emission control actions to reduce relative emissions and to recommend employees refrain from using their vehicles until the episode is terminated;
f) Conduct on-site inspection of targeted facilities to ascertain accomplishment of applicable emission control actions; and
g) Prohibit all open burning, including agricultural burning, and incineration throughout the affected area, except in an emergency situation as provided for in Section 41862 of the H&SC.

3. Warning (Stage 2) Episode: In addition to the actions associated with the Stage 1 Alert episode, the following actions should be implemented in a Warning episode.
   a) Request that those agencies and organizations in the List, within the scope of their authority:
      i. Prohibit all types of open burning, including agricultural waste;
      ii. Close all non-essential public agency facilities, except emergency facilities and those facilities necessary in emergencies to protect national security or national defense; and
      iii. Request that employees of closed non-essential public agency facilities refrain from using vehicles until the episode is terminated.
   b) Request closure of all public and private schools, colleges, and universities within Placer County;
   c) Request targeted facilities to shut down;
   d) Request that employees of facilities which close refrain from using vehicles until the episode is terminated;
   e) Conduct on-site inspection of facilities to ascertain the accomplishment of applicable emission control actions;
   f) Request the suspension of all indoor and outdoor events at parks or recreational facilities open to the public;
   g) Request the suspension of all scheduled athletic events; and
   h) Request that the Placer County Executive Officer and Health Officer consider declaring a local emergency for air pollution, pursuant to the Placer County Code[13], and implement emergency control measures, pursuant to the California Emergency Services Act, when the ambient ozone concentration continues rising and reaches the level at 0.45 ppm.

[13] Placer County Code Article 2.88 Emergency Services

4. Emergency (Stage 3) Episode: In addition to the actions associated with the Stage 2 Warning episode, the following actions should be implemented in the Emergency episode.
    a) Request that the Placer County Executive Officer declare a local emergency for air pollution and initiate its emergency operations plan;
    b) Request the media to broadcast to the public that a local emergency exists for air pollution, due to high ozone concentrations;
    c) Through the Placer County Office of Emergency Service operations, the following actions shall be conducted, but are not limited to:
        i. Close all government facilities which are not immediately necessary for public health and safety, national security or national defense;
        ii. Close all recreational facilities, including but not limited to those servicing boating and off-road vehicles;
        iii. Close all non-emergency commercial and industrial facilities;
        iv. Request implementation of emergency carpooling, or the use of mass transportation;
        v. Request that the public use only mass transit; and
        vi. Hospitals within the affected area shall be notified of the alert level to prepare for the possible increase in the number of patients seeking treatment.
    d) Close principal streets, as deemed necessary by the Placer County Executive Officer, Health Officer, APCO, and local law enforcement agencies, in order to protect the health and welfare of the general public;
    e) Request that the Placer County Office of Emergency Services engage with the State agency for necessary actions pursuant to the California Emergency Services Act, which includes prohibiting the use of all motor vehicles except for emergencies, or any other action deemed warranted;
    f) Restrict all non-essential construction and painting; and
    g) Restrict all lawn care and mowing activities and stop the use of lawn and garden chemicals.

The PCAPCD commits to implementing the proposed actions associated with each episode identified in this Plan. The implementation of the Plan shall prevent the ambient ozone concentration from reaching the harmful level at 0.60 ppm.