1. Comfort air conditioning or comfort ventilating systems which are not designed to remove air contaminants generated by or released from specific units or equipment.
2. Refrigeration units except those used as, or in conjunction with, control equipment.
3. Water cooling towers and water cooling ponds not used for evaporative cooling of process water or not used for evaporative cooling of water from barometric jets or from barometric condensers.
4. Equipment used exclusively for steam cleaning.
5. Presses used exclusively for extruding metals, minerals, plastics or wood.
6. Incinerators when used for burning of combustible waste of a single or two family dwelling.
7. Brazing, soldering or welding equipment.

E. Space Heaters.
F. Equipment used in eating establishments for the purpose of preparing food for human consumption.
G. Steam heated by natural gas or LPG, or both.
H. Self-propelled mobile construction equipment other than pavement burners.
I. Containers, reservoirs or tanks used exclusively for:
   1. Storage of liquefied gases.
   2. The storage of fuel oils with a gravity of 40 degrees AP1 or lower.
   3. The storage of lubricating oils.
   4. The storage of gasoline having a capacity of less than 250 gallons.
J. Structural changes which cannot change the quality, nature or quantity of air contaminant emissions.
K. Identical replacements in whole or in part of any article, machine, equipment or other contrivance.
L. Repairs or maintenance not involving structural changes to any article, machine, equipment or other contrivance.
M. Other sources of minor significance specified by the Air Pollution Control Officer.

***** ARTICLE IV PROHIBITIONS *****

Sec 75. GCAPCD PROHIBITIONS UNDER STATE LAW. The provisions of Division 26, Part 4, Chapter 3, of the State of California Health and Safety Code, entitled "Emission Limitations", are applicable within the boundaries of the Glenn County Air Pollution Control District.

Sec 76. GCAPCD VISIBLE EMISSIONS. A person shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

A. As dark or darker in shade as that designated as No. 2 on the Ringlemann Chart, as published by the United States Bureau of Mines, or
B. of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection "A" above.

Sec 77. GCAPCD EXCEPTIONS. The provisions of Section 76 do not apply to:

A. Smoke from fires set by or permitted by any public officer if such fire is set or permission given in the performance of the official duty of such officer, and such fire in the opinion of such officer is necessary:
   1. For the purpose of the prevention of a fire hazard which cannot be abated by any other means, or

2. for the instruction of public employees in the methods of fighting fires.

B. Smoke from fires set pursuant to permit on property used for industrial purposes for the purpose of instruction of employees in methods of fighting fire.

C. Orchard or citrus grove heaters which do not produce unconsumed solid carbonaceous matter at a rate in excess of one (l) gram per minute.

D. Smoke from fires set for the disposal of solid waste at dump sites operating under permit from the Air Resources Board pursuant to Section 39297.4 of the Health and Safety Code.

Sec 78. GCAPCD NUISANCE. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public of which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. Air contaminants shall not be declared a nuisance except by a court of competent jurisdiction or the District Hearing Board upon its own motion or motion of the Air Pollution Control Officer.

Sec 79. GCAPCD EXCEPTIONS. The provisions of Section 78 do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowls or animals.

Sec 80. GCAPCD OPEN FIRES. No person shall, after December 31, 1971, use open fires for the purpose of disposal of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of automobile bodies.

Sec 81. GCAPCD EXCEPTIONS. The provisions of Section 80 do not apply to:

A. Fires set or permitted by any public officer when such fire is, in his opinion, necessary for any of the following purposes:
   1. For the purpose of the prevention of a fire hazard which cannot be abated by any other means, or
   2. the instruction of public employees in the methods of fighting fire,
   3. set pursuant to permit on property used for industrial purposes for the purpose of instruction of employees in the methods of fighting fires.

B. The setting of backfires necessary to save life or valuable property pursuant to Section 4426 of the Public Resources Code.

C. Abatement of fires pursuant to Chapter 2, (commencing with Section 41704), of Part 1 of Division 12 of the California Health and Safety Code.

D. The burning for disposal of combustible waste, except garbage, of a single or two family dwelling on the premises of the dwelling between the hours of 7:00 a.m. to 3:00 p.m.

E. Burning for right-of-way clearing by a public entity or utility or for levee, reservoir and ditch maintenance, except that a permit must be obtained and all the requirements for Agricultural Burning in Article II, must be followed just as if the burning was open burning in agricultural operations.

F. Agricultural burning for which a permit has been issued pursuant to Section 10 of these Regulations.

G. Fires used to dispose of unusable wood waste from trees, vines, or shrubs only on the property where grown and being developed for commercial or residential purposes may be authorized by the Air Pollution Control Officer under the following minimum conditions, and under any more stringent conditions, which he may specify to maintain the ambient air quality in the District:

1. There has been a general finding by the Glenn County Health Officer that it is more beneficial, in terms of the general public health, to burn such waste on location, than to dispose of it by other means.
2. A permit for such burning shall be issued by the Air Pollution Control Officer prior to time of ignition. No such permit shall be issued unless satisfactory evidence has been submitted by the applicant to prove the following:
   a. That the proposed burn shall not create a nuisance.
   b. That the proposed burn is approved by the Fire Protection Agency having jurisdiction.
   c. That the moisture content of the wood waste is low enough to insure a clean burn.
3. The wood waste shall be prepared and burned so as to minimize emissions to the atmosphere. This shall include but not necessarily be limited to the following:
   a. The wood waste shall be reasonably free of dirt, mud and soil.
   b. The wood waste shall be free of extraneous materials including, but not limited to tire, tar paper, plastics and demolition debris.
   c. The wood waste shall be stacked or piled so as to insure quick ignition and clean, efficient burning.
   d. Only approved ignition devices, as published by the Air Pollution Control Officer, shall be used for ignition of fires.
   e. If economically and technically feasible, brush shall be treated at least six months prior to burning.
   f. Unwanted trees over six (6) inches in diameter at the base shall be felled and dried for thirty (30) days prior to burning.
4. The burning shall be done only on permissive burn days as declared by the State Air Resources Board.
5. If either condition A. or B. of Section 15 of these Regulations is expected to occur, the Air Pollution Control Officer may declare a "No Burn Day" under the provisions of Section 15.
6. It is unlawful to dispose of wood waste by open burning on a "No Burn Day" as declared by either the Air Resources Board or the Control Officer.

H. Fires used only for the cooking of food for human consumption, and are not a nuisance pursuant to these regulations.

I. Fires set for the disposal of solid waste at dump sites operating under permit from the Air Resources Board pursuant to Section 41808 of the Health and Safety Code.

Sec 82. GCAPCD BURNING OF GARBAGE. Not withstanding any other provisions of these Regulations, the open burning of garbage is prohibited within the boundaries of the District at any time.

Sec 83. GCAPCD PETROLEUM STORAGE AND DISPENSING. No new gasoline storage tank with a capacity of 250 gallons or more shall be installed unless it is equipped with a permanent submerged fill pipe as described in Section 41950, Health and Safety Code, or unless such tank is a pressure tank as described in Section 42400, Health and Safety Code, or is equipped with a vapor recovery system as described in Section 41952, Health and Safety Code, or with a floating roof as described in Section 41953, Health and Safety Code.

Sec 83.1. GCAPCD SERVICE STATIONS AND BULK STORAGE PLANTS. When filling bulk storage tanks at service stations and bulk plant facilities, a 90% (or greater) vapor recovery system shall be utilized during filling. Service stations with throughputs of less than 300,000 gallons per year are exempt when receiving shipments from local distributors with facilities not equipped to handle returning vapors. Listing of efficiencies for vapor recovery units may

be obtained through the California Air Resources Board. (Full compliance to be completed by November 1, 1980.)

Sec 83.2. GCAPCD PETROLEUM SOLVENTS. When it is determined by emission inventory that petroleum solvent degreasing operations amounts to 1 ton per day, the District shall notify, in writing, each distributor in the county that the following statement is required on all such solvent containers holding 49 gallons or more. "Keep contents in a closed container".

Sec 84. GCAPCD EXCEPTION. Section 83 shall not apply to any stationary tank which is used primarily for the fueling of implements of husbandry, as such vehicles are defined in Division 16 of the Vehicle Code.

Sec 85. GCAPCD PARTICULATE MATTER CONCENTRATION. Except for emissions from agricultural operations, no person shall discharge into the atmosphere from any source particulate matter in excess of 0.3 grains per cubic foot of gas at standard conditions. When the source involves a combustion process, the concentration must be calculated to 12 per cent carbon dioxide (CO2). In measuring the combustion contaminants from incinerators used to dispose of combustible refuse by burning, the carbon dioxide (CO2) produced by combustion of any liquid or gaseous fuels shall be excluded from the calculation to 12 per cent of carbon dioxide (CO2).

Sec 86. GCAPCD DUST AND FUMES TOTAL EMISSIONS. No person shall discharge in any one hour from any source dust or fumes in total quantities in excess of the amounts shown in the following table:

ALLOWABLE RATE OF EMISSION BASED ON PROCESS WEIGHT RATE

Process Weight Rate		Rate of Emission	Process Weight Rate		Rate of Emission
Lb/Hr	Tons/Hr	Lb/Hr	Lb/Hr	Tons/Hr	Lb/Hr
100	0.05	0.551	16,000	8.0	16.5
200	0.10	0.877	18,000	9.0	17.9
400	0.20	1.40	20,000	10.0	19.2
600	0.30	1.83	30,000	15.0	25.2
800	0.40	2.22	40,000	20.0	30.5
1,000	0.50	2.58	50,000	25.0	35.4
1,500	0.75	3.38	60,000	30.0	40.0
2,000	1.00	4.10	70,000	35.0	41.3
2,500	1.25	4.76	80,000	40.0	42.5
3,000	1.50	5.38	90,000	45.0	43.6
3,500	1.75	5.96	100,000	50.0	44.6
4,000	2.00	6.52	120,000	60.0	46.3
5,000	2.50	7.58	140,000	70.0	47.8
6,000	3.00	8.56	160,000	80.0	49.0
7,000	3.50	9.49	200,000	100.0	51.2

8,000	4.00	10.4	1,000,000	500.0	69.0
9,000	4.50	11.2	2,000,000	1,000	77.6
10,000	5.00	12.0	6,000,000	3,000	92.7
12,000	6.00	13.6			

To use the table, take the process weight per hour as such is defined in Section 2 of these Regulations. Then find this figure on the table, opposite which is the maximum number of pounds of contaminants which may be discharged into the atmosphere in any one hour. As an example, if A has a process which emits contaminants into the atmosphere and which process takes 4 hours to complete, he will divide the weight of all materials in the specific process, in this example, 2,400 lbs. by 4 giving a process weight per hour of 600 lbs. The table shows that A may not discharge more than 1.83 lbs. in any one hour during the process. Interpolation of the data in the table for process weights up to 60,000 pounds/hour shall be accomplished by use of the equation:

$$E = 4.10P^{0.67}$$

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

$$E = 55.0P^{0.11} - 40$$

E = Rate of emission in pounds/hour.
P = Process weight rate in tons/hour.

Sec 87. GCAPCD REDUCTION OF ANIMAL MATTER.

A. No person shall operate or use any article, machine, equipment or other contrivance for the reduction of animal matter unless all gases, vapor and gas-entrained effluents from such an article, machine, equipment or other contrivance are:
   1. Incinerated at temperatures of not less than 1200 degrees Fahrenheit for a period of not less than 0.3 second; or
   2. Processed in such a manner determined by the Air Pollution Control Officer to be equally, or more, effective for the purpose of air pollution control than A. above.

B. A person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this Regulation shall provide, properly install and maintain in calibration, in good working order and in operation devices for indicating temperature, pressure or other operating conditions.

Sec 88. GCAPCD EXCEPTIONS. The provisions of Section 87 shall not apply to any article, machine, equipment or other contrivance used exclusively for the processing of food for human consumption. Dead animals on farms are considered agricultural waste.

Sec 89. GCAPCD SULFUR OXIDES. No person shall discharge into the atmosphere from any single source of emission whatsoever, any sulfur oxides in excess of 0.2 percent by volume (2000 ppm) collectively calculated as sulfur dioxide (SO2).

Sec 90. GCAPCD REDUCED SULFUR EMISSION STANDARDS. No person shall cause or permit the emission of air contaminants from any premises which will result in ground-level concentrations of TRS, expressed as hydrogen sulfide, in excess of 0.03 ppm for a period of 60 minutes.

Sec 91. GCAPCD INCINERATOR BURNING. Except as otherwise provided by Sections 80 and 81 of these Regulations, no person shall burn any combustible waste within the boundaries of the Glenn County Air Pollution Control District unless the burning is performed in an

incinerator from which the combustion products pass through a flue or chimney. The smoke or other emissions from such incinerator burning must meet the visible emissions requirements as provided in Section 76 of these Regulations.

Sec 92. GCAPCD LEAD. (Standards for lead emissions will be adopted at a later date.)

Sec 93. GCAPCD CIRCUMVENTION.

A. No person shall build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of the Health and Safety Code of the State of California or of these Regulations. This Regulation shall not apply to cases in which the only violation involved is of Section 78 of these Regulations.
B. When the presence of uncombined water is the only reason for the failure of an emission to meet the limitation of Section 76, that Regulation shall not apply. The burden of proof which establishes the application of the Regulation, shall be upon the person seeking to come within its provisions.

Sec 94. GCAPCD SEPARATION OF EMISSIONS. If air contaminants from a single source operation are emitted through two or more emission points, the total emitted quantity of any air contaminant limited in this Regulation cannot exceed the quantity which would be the allowable emission through a single emission point, the total emitted quantity of any such air contaminant shall be taken as the product of the highest concentration measured in any of the emission points and the combined exhaust gas volume from all emission points, unless the person responsible for the source operation establishes, to the satisfaction of the Air Pollution Control Officer, the correct total emitted quantity.

Sec 95. GCAPCD ANALYSIS REQUIRED. The Board at any time may require from any person such information or analysis as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and may require that such disclosures be certified by a professional engineer registered in the State of California. In the event the findings show that no excess contaminants are in fact being discharged, then the Air Pollution Control District shall be responsible for the entire cost of the investigation.

Sec 95.1. GCAPCD RECORDS

A. The owner or operator of any stationary source causing emissions in excess of 100 tons per year of any pollutant for which there is a national air quality standard, or which causes emissions in any amount from those sources listed in Appendix C of 40 Code of Federal Regulations, Part 51, shall maintain records of the nature and amounts of emissions from such source and/or any other information as may be deemed necessary by the Air Pollution Control Officer to determine whether such source is in compliance with these Regulations.
B. The information recorded shall be summarized and reported to the Air Pollution Control Officer on forms furnished by the District, and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1 through June 30, and July 1 through December 31.
C. Information recorded by the owner or operator and copies of the summarizing reports submitted to the Air Pollution Control Officer shall be retained by the owner or operator for two years after the date on which the pertinent report is submitted.

Sec 95.2. GCAPCD MALFUNCTION OF EQUIPMENT.

A. Emissions exceeding any of the limits established in these Regulations as a result of equipment or installation malfunction or shutdown shall be deemed in violation. However, the Control Officer may elect to take no enforcement action if the owner or operator (person responsible for the equipment or installation operations) demonstrates to the Control Officer's satisfaction that a malfunction of equipment exists and the following requirements are met:
   1. The Control Officer must be notified prior to shutdown or within two(2) hours of onset of a malfunction which would be expected to result in increased emissions.
   2. The person responsible for the equipment or installation operations, upon request of the Control Officer, shall make a full report including causes and preventative measures to be taken to minimize or eliminate a reoccurrence within ten (10) working days of occurrence.
   3. The Control Officer shall be notified when the condition causing the malfunction or shutdown has been corrected and the equipment is operational.

B. On receipt of notification the Control Officer may permit the continuance of operation for a period not to exceed thirty (30) days, provided, however, if the malfunction is for a period greater than ten (10) days, the applicant must provide the Control Officer with a program of the corrective action to be taken that will bring the source into compliance. The Control Officer shall not issue permits for the continuance of operation for any single emission source for an aggregate of more than sixty (60) days during any one calendar year.

Sec 96. GCAPCD VARIANCES. The provisions of this Article do not prohibit the discharge of air contaminates to a greater extent or for a longer time, or both, if not of a greater or longer time than the Hearing Board finds necessary pursuant to the provisions of Chapter 4, Article 2, Division 26 of the California Health and Safety Code.

Sec 97. GCAPCD EXCEPTIONS. The Hearing Board is not empowered to grant variances for:

A. Emissions which result in a nuisance prohibited by Section 78 of these Regulations.
B. Emissions resulting from open fires prohibited by Sections 80 and 81 of these Regulations.

Sec 98. GCAPCD AIRBORNE TOXIC CONTROL MEASURE: RETAIL SERVICE STATIONS.

A. Purpose. To comply with the California Code of Regulations, Section 93101 of Title 17 by reducing benzene emissions from retail service stations.

B. Applicability. This rule shall apply to any new or modified retail service station, or to any existing retail service station with an annual gasoline throughput of 480,000 gallons or greater.

C. Throughput Determination. The annual throughput at an existing retail service station shall be determined from actual operations during the calendar year immediately preceding the date of district adoption. Subsequently thereafter, each retail service station shall submit to the district documentation verifying annual throughput.

D. Phase I Vapor Recovery Requirements. No owner or operator shall transfer, permit the transfer, or provide equipment for the transfer of gasoline, and no other person shall transfer gasoline from a gasoline delivery vessel equipped with a vapor recovery system into a stationary storage tank unless an ARB-certified Phase I vapor recovery system is installed on the stationary storage tank and used during the transfer.

1. Exemptions
   a. Small tanks. A transfer to a stationary storage tank with a capacity of less than 250 gallons.

b. Agricultural tanks. A transfer to a stationary storage tank used the majority of the time for the fueling of implements of husbandry as defined in Division 16, Chapter 1, of the Vehicle Code.
c. Deliveries from local distributors not equipped with vapor recovery. A transfer of gasoline to a stationary storage tank exempt vapor recovery requirements pursuant to Section 83.1.

2. Tank replacement/underground piping repair--Phase I requirement. Upon replacement of a stationary storage tank or repair of underground piping at an existing retail service station, an ARB-certified Phase I vapor recovery system shall be installed and used thereafter on all tanks at the facility unless exempted from the Phase I requirement pursuant to Section 98, Subsections D.1.a. and D.1.b.

E. Phase II Vapor Recovery System Requirements. No owner or operator of a retail service station shall transfer, permit the transfer or provide equipment for the transfer of gasoline from a stationary storage tank at a retail service station into a motor vehicle fuel tank unless an ARB-certified Phase II vapor recovery system

1. Exemptions
   a. Phase I exempt tanks. A transfer of gasoline from a stationary storage tank which is exempt from Phase I requirements pursuant to Section 98, Subsections D.1.a. and D.1.b.

F. Tank replacement/underground piping repair--Phase II requirement. Upon replacement of a stationary storage tank or repair of underground piping at an existing retail service station, an ARB-certified Phase II vapor recovery system shall be installed and used thereafter on all tanks at the facility unless exempted by Section 98, Subsection E.1.a.

G. Hold-open latch requirement. All new or existing retail service stations, regardless of annual gasoline throughput, shall install hold-open latches on all gasoline dispensing nozzles.

H. Posting of operating instructions. The owner or operator of a retail service station requiring either Phase II vapor recovery or hold-open latches shall conspicuously post in the gasoline dispensing area operating instructions for the system as well as both the district and the Air Resources Board telephone numbers for complaints. The instructions shall clearly describe how to fuel vehicles correctly using vapor recovery nozzles and hold-open latches and shall include a statement addressing the health benefits associated with the system in use as well as a warning that topping off may result in spillage or recirculation of gasoline.

I. Compliance schedule.

1. New facility. The owner/operator of a new retail service station shall comply with the provisions of this rule at the time gasoline is first received and/or dispensed.
2. Tank replacement. Upon replacement of a stationary storage tank or repair of underground piping, the owner/operator of an existing retail service station shall, regardless of annual throughput, comply with the provisions of this rule at the time gasoline is first received and/or dispensed following completion of the tank replacement or piping repair.
3. Throughput in excess of 480,000 gallons after district rule adoption. If during either 1.) the calendar year immediately preceding or 2.) any calendar year after the date of district adoption of this rule, the gasoline throughput from an existing retail service station meets or exceeds 480,000 gallons, the owner/operator of that facility shall comply with the provisions of this rule in accordance with the following schedule:
   a. Secure all necessary permits and other approvals for the installation of Phase I and Phase II vapor recovery systems within fifteen (15) months from the date the facility becomes subject to this rule.

b. Install the Phase I and Phase II vapor recovery systems within two (2) years from the date the facility becomes subject to this rule.

J. Equipment maintenance. A person shall not transfer, permit the transfer or provide equipment for the transfer of gasoline from a stationary storage tank subject to Phase II requirements into any motor vehicle fuel tank unless:

1. The vapor recovery system is operating in accordance with the manufacturer's specifications and is maintained to be leak free, vapor tight, and in good working order; and
2. The equipment subject to this rule is operated and maintained with none of the defects identified in the California Code of Regulations, Section 94006, Subchapter 8, Chapter 1, Part III, of Title 17.

K. Defective Phase II equipment--prohibition of use. Whenever the Air Pollution Control Officer or Air Pollution Control District designee determines that a Phase II vapor recovery system, or any component thereof, contains a defect specified by the Air Resources Board pursuant to Section 41960.2 (c) of the Health and Safety Code, the APCO or designee shall mark such system or component "out of order". No person shall use or permit the use of such marked component or system until it has been repaired, replaced or adjusted, as required to permit proper operation, and the APCO or designee has reinspected it or has authorized its use pending reinspection.

L. The following definitions shall apply to this section:

1. ARB-Certified Vapor Recovery System means a vapor recovery system which has been certified by the state board pursuant to Section 41954 of the Health and Safety Code.
2. Excavation means exposure to view by digging.
3. Existing Retail Service Station means any retail service station operating, constructed, or under construction as of the date this regulation is adopted.
4. Stationary Storage Tank means any stationary storage container, reservoir, or tank used for the storage of gasoline that is equipped with no vapor control, or is equipped with splash loading, submerged fill pipe loading, or Phase I or II vapor recovery loading systems.
5. Leak Free means a liquid leak of less than four (4) drops per minute.
6. New Retail Service Station means any retail service station which is not operating, constructed or under construction as of the date this regulation is adopted.
7. Owner or Operator means any person who owns, operates, controls or supervises an affected facility, or a stationary source of which an affected facility is a part.
8. Phase I Vapor Recovery System means an ARB-certified gasoline vapor recovery system which recovers vapors during the transfer of gasoline from delivery vessels into stationary storage tanks.
9. Phase II Vapor Recovery System means an ARB-certified gasoline vapor recovery system which recovers vapor during the fueling of motor vehicles from stationary storage tanks.
10. Retail Service Station means any new or existing motor vehicle fueling service station subject to payment of California sales tax on gasoline sales.
11. Tank Replacement/Underground Piping Repair means replacement of one or more stationary storage tanks at any facility or excavation of 50 percent or more of an existing facility's total underground liquid piping from the stationary storage tank to the gasoline dispensers.
12. Vapor Recovery System means a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere, with all tank gauging and sampling devices vapor-tight except when gauging or sampling is taking place.

13. Vapor Tight means a leak of less than 100 percent of the lower explosive limit on a combustible gas detector measured at a distance of 2.5 cm (one inch) from the source or no visible evidence of air entrainment in the sight glass of a liquid delivery hose.

Sec 98.1. GCAPCD AIR TOXIC CONTROL MEASURE

Airborne toxic control measures adopted by the California Air Resourses Board in Title 17 of the California Code of Regulation areautomatically adopted into the Glenn County Air Pollution Control District rules unless the District has adopted specific Airborne Toxics rules in Section 98 of the District Rules.

Sec 98.4. GCAPCD DIOXINS AIRBORNE TOXIC CONTROL MEASURE - MEDICAL WASTE INCINERATORS.

A. Definitions.

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

1. ARB means the State of California Air Resources Board.
2. ARB Test Method 2 means the test method specified in Title 17, California Code of Regulations, Section 94102.
3. ARB Test Method 428 means the test method specified in Title 17, California Code of Regulations, Section 94139.
4. Control Equipment means any device which reduces emissions from medical waste incinerators.
5. Dioxins means 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 Department of Health Services toxic equivalency factors.
6. Facility means every building, structure, appurtenance, installation, or improvement located on land which is under the same or common ownership or operation, and is on one or more contiguous or adjacent properties.
7. Medical Facilities means medical and dental offices, clinics and hospitals, skilled nursing facilities, research facilities, research laboratories, clinical laboratories, all unlicensed and licensed medical facilities, clinics and hospitals, surgery centers, diagnostic laboratories, and other providers of health care.
8. Medical Waste Incinerator means all of the furnaces or other closed fire chambers that are located at a facility and used to dispose of waste generated at medical facilities by burning.
9. Uncontrolled Emissions means the dioxins emissions measured from the incinerator at a location downstream of the last combustion chamber, but prior to the air pollution control equipment.
10. Waste means all discarded putrescible and nonputrescible solid, semisolid, and liquid materials, including garbage, trash, refuse, paper, rubbish, food, ashes, plastic, industrial wastes, demolition and construction wastes, equipment, instruments, utensils, appliances, manure, and human or animal solid and semisolid wastes.

B. Requirements For Medical Waste Incinerators That Incinerate More Than 25 Tons of Waste Per Year.

The following requirements shall apply only to medical waste incinerators that incinerate more than 25 tons of waste per year:

1. No person shall operate a medical waste incinerator unless:
   a. The dioxins emissions have been reduced by 99 percent or more of the uncontrolled emissions; or
   b. The dioxins emissions have been reduced to 10 nanograms or less per kilogram of waste burned.

2. No person shall operate a medical waste incinerator unless the control equipment is installed and used in a manner which has been demonstrated to and approved by the District Air Pollution Control Officer to meet the following requirements:
   a. 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 District Air Pollution Control Officer that lower emissions are achieved at a higher outlet temperature; and
   b. For a single chamber incinerator, the combustion chamber shall be maintained at no less than 1800 degrees (± 200 degrees) Fahrenheit. For a multiple chamber incinerator, 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 1800 degrees (± 200 degrees) Fahrenheit. The furnace design shall provide for a residence time for combustion gas of at least one second. Residence time shall be calculated using the following equation:

$$\mathrm{Re}sidenceTime = \frac{V}{Q_C}$$

   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 degrees Fahrenheit.
   Q_C means the combustion gas flow through V, as expressed in actual cubic feet per second, which is measured according to ARB 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 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 within the guidelines of Method 2 and at the discretion of the Air Pollution Control Officer.

   The calculation of the gas flow rate using the following combustion stoichiometry equation for Q_C is one alternative to measuring the gas flow rate:

$$Q_c = \{Q_{stoiwf}(1 + EA_{wf}/100) + Q_{stoiaf}(1 + EA_{af}/100)\} \times \frac{(T_c + 460)}{528} \times \frac{1\,\mathrm{min}}{60\,\mathrm{sec}}$$

   Where:

$$Q_{stoiwf} = \frac{lb-mole\,O_2}{lb\,waste} \times \frac{lb\,waste}{\mathrm{min}} \times \frac{SCF\,O_2}{lb-mole\,O_2} \times \frac{SCF\,air}{SCF\,O_2}$$

$$Q_{stoiaf} = \frac{lb-mole\,O_2}{lb\,aux\,fuel} \times \frac{lb\,aux\,fuel}{\mathrm{min}} \times \frac{SCF\,O_2}{lb-mole\,O_2} \times \frac{SCF\,air}{SCF\,O_2}$$

   EA_{wf} means the excess air ration (lbs excess air per lbs theoretical air) for the waste feed expressed as a percentage.
   EA_{af} means the excess air ratio (lbs excess air per lbs theoretical air) for the auxiliary fuel expressed as a percentage.
   T_C = means the maximum temperature, in degrees Fahrenheit, that has been reached in the incinerator.

   In order to estimate Q_{stoiwf} and EA_{wf}, a representative sample of the waste must be characterized by chemical analysis.

3. No person shall operate a medical waste incinerator unless the bottom ash, fly ash and scrubber residuals are handled and stored in a manner that prevents entrainment into ambient air.
4. The owner or operator of a medical waste incinerator shall maintain the following:
   a. A continuous data recording system which provides for each day of operation continuous recording of the primary and secondary combustion chamber temperatures; carbon monoxide emissions; the key operating parameters of the air pollution control equipment, as specified by the District Air Pollution Control Officer; the hourly waste charging rates; and the opacity of stack emissions or other indicator of particulate matter which is approved by the District Air Pollution Control Officer;
   b. Maintenance records for the incinerator, control equipment, and monitoring equipment; and calibration records for the monitoring equipment; and
   c. Equipment for determining and recording the weight of waste charged to the incinerator.
5. For purposes of demonstrating compliance with subsection (B)(1) of this rule the owner or operator of a medical waste incinerator shall conduct a minimum of two annual source tests for the dioxins stack emissions using ARB Test Method 428, using the high resolution mass spectrometry option. Annual source tests shall be conducted until at least two consecutive tests demonstrate compliance, at which time the frequency of future source tests is at the discretion of the Air Pollution Control Officer. For purposes of determining compliance with subsection (B)(1)(a) of this rule, emissions shall be sampled simultaneously from the flue at a location downstream of the last combustion chamber, but prior to the control equipment, and from the stack during source testing. For purposes of determining compliance with subsection (B)(1)(b) of this rule, the source testing shall be conducted at the stack. The information regarding the composition (moisture content, and amount of the total waste that is infectious, pathological, hazardous, or radioactive) and feed rate of the fuel charged during the source test shall be provided with the test results. In those cases where incinerator operators are required to submit information in the permit application on the type and quantity of waste burned, composition and representativeness of the waste for the compliance test will be determined by inspection and comparison with the permit application. When this comparison is not possible, the determination of composition and representativeness will be based on source generation data and inspection. The District Air Pollution Control Officer can require additional necessary information regarding the composition of the waste. Source testing shall be conducted at the maximum waste firing capacity (± 10 percent) allowed by the air district permit. A copy of all source test results conducted for the purposes of demonstrating compliance with this rule shall be provided to the ARB at the same time that it is provided to the local Air Pollution Control District.
6. 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 a.m. the next business day if the malfunction occurs outside normal business hours and the District does not maintain a radio room or an answering machine.
7. No person shall operate a medical waste incinerator unless each individual who operates or maintains the incinerator obtains either a certificate of training in medical waste incineration issued by the American Society of Mechanical Engineers within nine months of the commencement of the training program, or equivalent training as determined by the Air Pollution Control Officer. 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.

C. Requirements For Medical Waste Incinerators That Incinerate 25 Tons Or Less Of Waste Per Year.

The following requirements shall apply to incinerators that incinerate 25 tons or less of waste per year:

1. No person shall operate a medical waste incinerator that incinerates 25 tons or less of waste per year unless the requirements specified in subsections (B)(3), (B)(4)(c), and (B)(7) are met.
2. The owner or operator of a medical waste incinerator that incinerates more than 10 but less than 25 tons of waste per year shall conduct an initial source test at the incinerator stack as specified in subsection (B)(5).

D. Compliance Schedule.

1. No later than 90 days after District adoption of regulations enacting this control measure, the owner or operator of a medical waste incinerator that incinerates more than 25 tons of waste per year shall submit to the District Air Pollution Control Officer an application for an Authority to Construct the equipment necessary to meet the requirements of sections (B)(1) or (B)(2), and no later than 15 months after District adoption of regulations enacting this control measure, the owner or operator of a medical waste incinerator shall be in compliance with this regulation.
2. The owner or operator of a medical waste incinerator who intends to permanently shut down operation of the incinerator shall notify the District of the shutdown date within 90 days after District adoption of regulations enacting this control measure. The shutdown date shall be no later than six months after District adoption of regulations enacting this control measure.
3. The owner or operator of a medical waste incinerator that incinerates 25 tons or less of waste per year who intends to remain in operation shall notify the District within 90 days after District adoption of regulations enacting this control measure. The owner or operator of a medical waste incinerator shall be in compliance with this regulation no later than 15 months after District adoption of regulations enacting this control measure.

E. This Control Measure Shall Not Apply To Those Incinerators Which Are Exclusively Crematoria Of Human Or Animal Remains.

Sec 98.5. GCAPCD ASBESTOS AIRBORNE TOXIC CONTROL MEASURE-ASBESTOS CONTAINING SERPENTINE.

A. Definitions.

For the purpose of this section, the following definitions shall apply:

1. Aggregate means a mixture of mineral fragments, sand, gravel, rocks, or similar minerals.
2. Alluvial Deposit means any deposit of sediments laid down by running water including, but not limited to, streams and rivers.
3. ARB Test Method 435 means the test method specified in Title 17, California Code of Regulations, Section 94147.
4. Asbestos means asbestiforms of the following hydrated minerals: chrysotile (fibrous serpentine), crocidolite (fibrous riebecktite), amosite (fibrous cummingtonite - grunerite), fibrous tremolite, fibrous actinolite, and fibrous anthophyllite.
5. Asbestos-containing Serpentine Material means serpentine material that has an asbestos content greater than five percent (5.0%) as determined by ARB Test Method 435.

6. Receipt means any written acknowledgment that a specified amount of serpentine material was received, delivered, or purchased. Receipts include, but are not limited to, bills of sale, bills of lading, and notices of transfer.
7. Road Surface means the traveled way of a road and any shoulder which extends up to 10 feet from the edge of the traveled way.
8. Sand and Gravel Operation means any aggregate-producing facility operating in alluvial deposits.
9. Serpentine means any form of hydrous magnesium silicate minerals including, but not limited to, antigorite, lizardite, and chrysotile.
10. Serpentine Material is any material that contains at least ten percent (10%) serpentine as determined by a registered geologist. The registered geologist must document precisely how the serpentine content of the material in question was determined.
11. Surfacing means the act of covering any surface used for purposes of pedestrian, vehicular, or non-vehicular travel including, but not limited to roads, road shoulders, streets, alleys, lanes, driveways, parking lots, playgrounds, trails, squares, plazas, and fairgrounds.

B. Requirements For Use Or Sale Of Asbestos-Containing Serpentine Material.

1. No person shall use or apply serpentine material for surfacing in California unless the material has been tested using ARB Test Method 435 and determined to have an asbestos content of five percent (5.0%) or less. A written receipt or other record documenting the asbestos content shall be retained by any person who uses or applies serpentine material, for a period of at least seven years from the date of use or application, and shall be provided to the Air Pollution Control Officer or his/her designee for review upon request.
2. Any person who sells, supplies, or offers for sale serpentine material in California shall provide with each sale or supply a written receipt containing the following statement: "Serpentine material may have an asbestos content greater than five percent (5.0%). It is unlawful to use serpentine material for surfacing unless the material has been tested and found to contain less than or equal to five percent (5.0%) asbestos. All tests for asbestos content must use California Air Resources Board Test Method 435, and a written record documenting the test results must be retained for at least seven years if the material is used for surfacing."
3. No person shall sell, supply, or offer for sale serpentine material for surfacing in California unless the serpentine material has been tested using ARB Test Method 435 and determined to have an asbestos content of five percent (5.0%) or less. Any person who sells, supplies, or offers for sale serpentine material that he or she represents, either orally or in writing, to be suitable for surfacing or to have an asbestos content that is five percent (5.0%) or less, shall provide to each purchaser or person receiving the serpentine material a written receipt which specifies the following information: the amount of serpentine material sold or supplied; tested, and supplied or sold; and the asbestos content of the serpentine material as measured by ARB Test Method 435. A copy of the receipt must, at all times, remain with the serpentine material during transit and surfacing.
4. Any person who sells, supplies, or offers for sale serpentine material, shall retain for a period of at least seven years from the date of sale or supply, copies of all receipts and copies of any analytical test results from asbestos testing of the serpentine material. All receipts and test results shall be provided to the Air Pollution Control Officer or his/her designee for review upon request.
5. If ARB Test Method 435 has been used to perform two or more tests on any one volume of serpentine material, whether by the same or a different person, the

arithmetic average of these test results shall be used to determine the asbestos content of the serpentine material.

C. Exemptions.

1. The provisions of subdivision (B)(2) through (B)(5) shall not apply to sand and gravel operations.
2. The provisions of subdivision (B)(1) shall not apply to roads located at serpentine quarries, asbestos mines, or mines located in serpentine deposits.
3. The provisions of subdivision (B)(1) shall not apply to maintenance operations on any existing road surfaces, or to the construction of new roads in serpentine deposits, as long as no additional asbestos-containing serpentine material is applied to the road surface.
4. Emergency Road Repairs. The Air Pollution Control Officer may issue a temporary exemption from the requirements of subdivision (B)(1) to an applicant who demonstrates that a road repair is necessary due to a landslide, flood, or other emergency and that the use of material other than serpentine is not feasible for this repair. The Air Pollution Control Officer shall specify the time during which such exemption shall be effective, provided that no exemption shall remain in effect longer than six (6) months.
5. Bituminous and Concrete Materials. The provisions of subdivision (B) shall not apply to serpentine material that is an integral part of bituminous concrete, portland cement concrete, bituminous surface, or other similar cemented materials.
6. The provisions of subdivision (B)(1) shall not apply to landfill operations other than the surfacing of public-access roads dedicated to use by vehicular traffic.

Sec 99.1. GCAPCD CUTBACK AND EMULSIFIED ASPHALT.

A. General.

1. Purpose. To limit emissions of volatile organic compounds (VOCs) from the use of cutback and emulsified asphalt in paving, construction, or maintenance of parking lots, driveways, streets and highways.
2. Exemptions. The provisions of this rule shall not apply to the use of:
   a. Cutback and emulsified asphalt sold in the Sacramento Valley Air Basin (Basin) for shipment and use outside of the Basin, if cutback and emulsified asphalt is approved for use by the receiving district.
   b. The use of medium cure cutback asphalt as a penetrating prime coat until such time as the Air Pollution Control Officer determines that a suitable substitute material is available.
   c. Medium-cure cutback asphalt for road patching work when used by a city or county public works agency until such time as the Air Pollution Control Officer determines that a suitable substitute material is available.
   d. Medium-cure cutback asphalt at any elevation in the District from November 1st to May 1st each calendar year.

B. Definitions. For the purpose of this rule, the following definitions shall apply:

1. Asphalt means a brownish-black cementious material (solid, semi-solid, or liquid mixture) of which the main constituents are bitumens that occur naturally or are obtained by distillation from coal or petroleum.
2. Cutback Asphalt means paving-grade asphalt liquefied with petroleum distillate and as further defined by the American Society for Testing and Materials (ASTM) specifications as follows:
   Rapid-cure Type, ASTM D2028
   Medium-cure Type, ASTM D2027
   Slow-cure Type, ASTM D2026

3. Dust Palliative means any light application of liquefied asphalt (cutback or emulsified asphalt) for the purpose of controlling loose dust.
4. Emulsified Asphalt means a rapid-, medium-, or slow-setting grade as described under Section 94 of the January, 1981 State of California Department of Transportation Standard specifications.
5. Emergency Road Maintenance is road maintenance activities required for traffic safety considerations requiring immediate response and of a nature that the maintenance cannot be rescheduled.
6. Penetrating Prime Coat means any application to an absorptive surface to penetrate that surface, to bind the aggregate, and/or promote adhesion to new construction. Dust palliatives or tack coats shall not be included in this definition.
7. Road Oils shall be synonymous with slow-cure asphalt.
8. Tack Coat is any application of asphalt to an existing surface to provide a bond between new surfacing and existing surface and to eliminate slippage places where the new and existing surfaces meet.
9. Volatile Organic Compounds means any compound containing at least one atom of carbon, except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, 1,1,1-trichloroethane, methylene chloride, trichlorofluoromethane (CFC-11), dichlorofluoromethane (CFC-12), chlorodifluoromethane (HCFC-22), trifluoromethane (HFC-23), 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113), 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114), chloropentafluoroethane (CFC-115), 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,2,2-tetrafluoroethane (HFC-134), 1,1,1,2-tetrafluoroethane (HFC-134a), 1,1-dichloro-1-fluoroethane (HCFC-141b), 1-chloro-1,1-difluoroethane (HCFC-142b), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and the following four classes of perfluorocarbon (PFC) compounds:
   a. Cyclic, branched, or linear, completely fluorinated alkanes;
   b. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
   c. Cyclic, branched, or linear, completely flourinated tertiary amines with no unsaturations; and
   d. Saturated perfluorocarbons containing sulfur 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:
   a. The specific individual compounds (from the broad classes of perfluorocarbon compounds), and
   b. The amounts present in the product or process, and
   c. Provides the validated test method that can be used to quantify the specific compounds.

C. Requirements.

1. Cutback Asphalt. A person shall not manufacture, sell, offer for sale, use, or apply for paving, construction, or maintenance of parking lots, driveways, streets, or highways any:
   a. Rapid- or medium-cure cutback asphalt, or
   b. Slow-cure cutback asphalt material that contains more than 0.5 percent by volume VOC's that evaporate at 500° F (260° C) or less.
2. Emulsified Asphalt. A person shall not manufacture, sell, offer for sale, use, apply for paving, driveways, streets, or highways any asphalt material that contains more than 3.0 percent by volume VOC's that evaporate at 500° F (260° C) or less.

D. Test Methods.

1. Measurement of VOC content in content in cutback asphalts pursuant to Part 3.1 of this rule shall be conducted and reported in accordance with ASTM Test Method D402-76.
2. Measurement of VOC content in emulsified asphalts pursuant to Part 3.2 of this rule shall be conducted and reported in accordance with ASTM Test Method D244-89.
3. Measurement of exempt compound content in cutback and emulsified asphalts pursuant to Subsections 3.1 and 3.2 of this rule shall be conducted and reported in accordance with ASTM Method D4457-85.

E. Record-Keeping. Any person who manufactures, sells, offers for sale, uses, or applies any asphalt material subject to this rule shall maintain a current record of all asphalt materials in use and Material Safety Data Sheets (MSDSs) or manufacturer specifications for each asphalt material containing sufficient information to readily determine compliance with Part 3 of this rule, as applicable. These records shall be kept on site for at three (3) years and be made available to the district upon request.

Sec 99.2. GCAPCD FIREPLACE AND SOLID FUEL HEATING DEVICE USAGE.

A. Definitions:

1. EPA-certified wood heating device means any wood or other solid-fuel-burning appliance utilized for space or water heating or cooking that meets the performance and emission standards as set forth in Part 60, Title 40, Subpart AAA Code of Federal Regulations, Feb. 26, 1988.
   a. Phase I appliances must meet the emission requirements of no more than 5.5 grams per hour particulate-matter emission for catalytic and 8.5 grams per hour for non catalytic appliances.
   b. Phase II emission requirements are 4.1 and 7.5 grams per hour, respectively.
2. Fireplace means any permanently installed masonry or factory built device designed to be used with an air-to-fuel ratio greater than or equal to 35-to-1. Fireplaces installed with a dedicated natural gas connection as decorative units under the Uniform Building Code Section 3707 (n) are exempt from the requirements of this Rule.
3. Garbage means all solid, semi-solid, and liquid wastes generated from residential, commercial, and industrial sources. This definition excludes paper and cardboard, but includes trash, refuse, rubbish, industrial wastes, asphaltic products, manure, vegetable or animal solid and semi-solid wastes.
4. Pellet-Fueled Wood Heater means any wood heater that operates on pellet wood and is either EPA certified or is exempted under EPA requirements as set forth in Part 60, Title 40, Subpart AAA of Federal Regulations, 2-26-88.
5. Wood-Heating Device means any enclosed wood-burning appliance capable of and intended for space heating or domestic water heating. This term does not include fireplaces.

B. Requirements.

1. All wood-heating devices used for the first time in existing buildings and those used in all new residential and commercial building projects constructed after the date of adoption of this rule within the boundaries of the District shall be EPA-certified or certified and labeled in a permanent and accessible manner as set forth in Part 60, Title 40, Subpart AAA Code of Federal Regulations, February 26, 1988.
2. No person shall cause or allow any of the following materials to be burned in a fireplace or wood-heating device: garbage, chemically treated wood, plastic products, rubber products, waste petroleum products, paints and paint solvents, or coal.
3. No person shall sell, offer for sale, supply, install, or transfer a used wood heating device unless:

a. It is certified by the EPA, or Oregon Department of Environmental Quality, or other agencies acceptable to the APCO, or
b. It is a pellet-fueled wood heater, or
c. It has been rendered permanently inoperable.

4. The Air Pollution Control Officer (APCO) shall issue an advisory through local communications media to voluntarily curtail the use of uncertified solid fuel appliances whenever weather conditions are projected to cause ambient air quality concentrations of inhalable particulate matter (PM10) that exceed 60 micrograms per cubic meter.
5. After July 1, 1995, all fireplaces used in new construction projects within the boundaries of Glenn County shall conform to a maximum emission limit of 7.5 grams per hour by either:
   a. being initially and permanently equipped with an insert device which is EPA-certified to meet the above standard, or
   b. being certified and labeled in a permanent and accessible manner to meet the above emission limit by an EPA accredited laboratory, or other agencies acceptable to the APCO.

C. Enforcement.

1. Noncompliance with any part of this Rule shall be considered to be a violation of a District regulation and subject the violator to a civil penalty of up to one thousand dollars ($1,000) per day in which a violation occurs (Health and Safety Code Section 42402).
2. Any person who negligently emits an air contaminant in violation of this Rule's limitations concerning prohibited materials to be burned shall be liable for a civil penalty of up to ten thousand dollars ($10,000) per day in which a violation occurs (Health and Safety Code Section 42402.1).

D. Effective Date.

1. This Rule shall become effective upon the date of adoption by the Air Pollution Control Board of Glenn County.

Sec 100. GCAPCD INDUSTRIAL, INSTITUTIONAL, AND COMMERCIAL BOILERS, STEAM GENERATORS, AND PROCESS HEATERS OXIDES OF NITROGEN CONTROL MEASURE

A. Definitions.

For the purposes of this section, the following definitions shall apply.

1. Annual Capacity Factor means the ratio of the amount of fuel burned by a boiler in a calendar year to the amount of fuel it could have burned if it had operated at the rated heat input capacity for 100 percent of the time during the calendar year.
2. Boiler or Steam Generator means an individual piece of combustion equipment fired with liquid, gaseous, or solid fuel with the primary purpose of producing steam. Boiler or steam generator does not include water heaters, any waste heat recovery boiler that is used to recover sensible heat from the exhaust of a combustion turbine, nor does it include equipment associated with a chemical recovery cycle.
3. Btu means British thermal unit.
4. Gas-Fired means using natural gas, propane, or any other gaseous fuel for firing the boiler or steam generator.
5. Heat input means 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.
6. Higher Heating Value means the total heat liberated per mass of fuel burned (Btu per pound), when fuel and dry air at standard conditions (68 $^{\circ}$F and one atmosphere pressure) undergo complete combustion and all resultant products are brought to their

standard states at standard conditions. Higher heating value shall be determined by one of the following test methods: 1) ASTM D 2015-85 for solid fuels; 2) ASTM D 240-87 or ASTM D 2382-88 for liquid hydrocarbon fuels; or 3) ASTM D 1826-88 or ASTM D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.

7. Oxides of nitrogen emissions means the sum of nitric oxide (NO) and nitrogen dioxide (NO_2) in the flue gas, collectively expressed as nitrogen dioxide.
8. Process heater means any combustion equipment fired with liquid, gaseous, or solid fuel and which transfers heat from combustion gases to water or process streams. A process heater does not include any kiln, furnace, recovery furnace, or oven used for drying, baking, heat treating, cooking, calcining, vitrifying or chemical reduction.
9. Rated heat input capacity means the heat input capacity specified on the nameplate of the combustion unit. If the unit has been permanently altered or modified such that the maximum heat input is different than the input capacity specified on the nameplate and this alteration or modification has been approved in writing by the Air Pollution Control Officer (APCO), then the new maximum heat input shall be considered as the rated heat input capacity.
10. Reasonably Available Control Technology (RACT) means the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.
11. Unit means any boiler, steam generator or process heater as defined in this definition section.

B. Applicability.

This rule applies to all boilers, steam generators, and process heaters used in military, industrial, institutional, and commercial operations that exist within the boundaries of the Glenn County Air Pollution Control District on the date of adoption of this Rule.

C. Requirements.

1. No later than one year following District adoption of this Rule, all existing units with a rated heat input capacity greater than or equal to 5 million Btu per hour shall demonstrate final compliance with the following reasonably available control technology (RACT) emission limitations dependent upon the specific fuel fired in the unit and based upon a three-hour averaging period. All new units shall comply with the requirements of District Rule Article III, Section 51. - New Source Review.

EMISSION LIMITS FOR OXIDES OF NITROGEN (AS NO_2)

Gaseous (only) fuel firing	Gaseous & Non-gaseous fuel co-firing	Liquid or Solid fuel firing
0.084 lbs/MMBtu of heat input or 70 ppmv	Heat input weighted average of gaseous and non-gaseous fuel limits as calculated per **Section C.**1.a)	0.15 lbs/MMBtu of heat input or 115 ppmv

a. The weighted average shall be calculated as follows:

$$\text{Emission Limit} = \frac{(70 \text{ ppmv} * X)+(115 \text{ ppmv} * Y) \text{ ppm}}{X+Y}$$

$$\text{Or Emission Limit} = \frac{(0.084 * X) + (0.15 * Y)}{X+Y} \text{ \#/MMBTu Heat Input}$$

Where X = annual heat input from gaseous fuel
and Y = annual heat input from non-gaseous fuel

2. No later than one year following District adoption of this Rule, the owner or operator of any existing unit(s) with a rated heat input capacity less than 5 million Btu per hour shall submit for the approval of the Air Pollution Control Officer a list of all units operating within the District boundaries and a selection of one of the following four options to be added as a permit condition to the Permit to Operate for each such unit in order to achieve compliance with this rule:
   a. Operate in a manner that maintains stack gas oxygen concentrations at less than or equal to 3% by volume on a dry basis for any 15 consecutive minute averaging period; or
   b. Operate with a stack gas oxygen trim system set at 3% by volume oxygen. The operational tolerance of the setting shall be within the range of 2.85% to 3.15%; or
   c. Tune the unit at least once per year by a technician that is qualified to the satisfaction of the Air Pollution Control Officer to perform a tune-up in accordance with the procedure described in either Attachment 1 or Attachment 2; Note: The owner/operator of any unit(s) who specifies the annual tune-up option in the plan is required to submit an annual report verifying that the tune-up has been performed. The report shall contain any other information or documentation that the Air Pollution Control Officer determines to be necessary.) or
   d. Operate in compliance with the emission limits specified in Section C.1. of this rule.
3. Emissions from units subject to this rule shall not exceed a carbon monoxide concentration of 400 parts per million by volume when using only gaseous or a combination of gaseous and liquid fuels. Solid fuel-fired units shall not exceed carbon monoxide limits expressed in permit to operate conditions.
4. No person shall allow the discharge into the atmosphere from any emission control device installed and operated pursuant to the requirements of Section C. of this Rule, ammonia (NH_3) emissions in excess of 20 ppm by volume at dry stack conditions adjusted to 3% oxygen unless compliance with this requirement is deemed to be technically or economically infeasible by the APCO due to fuel type, boiler configuration, or any other design characteristic of the unit.

D. Exemptions.

1. The requirements of Section C. shall not apply to the units which are willing to accept a permit condition that restricts operation to an annual capacity factor of 15% or less.
2. To continue to qualify for the exemption provided in Section D.1. the owner or operator of any applicable unit(s) shall submit to the Air Pollution Control Officer annual fuel use data that demonstrates that the unit(s) operated at or below the allowable 15% annual capacity factor(s). For the purposes of this section, the annual capacity factor for multiple units may be calculated based on the total fuel input to multiple like units.
3. Following adoption of this rule, an exemption granted for any unit will become null and void if that unit operates for more than 1 calendar year at an annual capacity factor greater than 15%.
4. The requirements of Section C. shall not apply to units that the APCO has determined that it is not technically or economically feasible to comply with the RACT emission limitations.
5. The requirements of Section C. shall not apply to units with a rated heat input capacity less than one (1) million Btu per hour.

E. Compliance Determination.

1. An owner or operator of any unit(s) shall have the option of complying with either the pounds-per-million-Btu emission rates or parts-per-million-by-volume emission limits specified in Section C.1. of this Rule. All units covered under Sections C.1 and C.2 shall

be tested for compliance not less than once every 12 months, except that units complying with Section C.2.(c) shall be tuned not less than every 12 months.

2. All emission determinations shall be conducted at the maximum firing rate allowed by the district permit, and no compliance determination shall be established within two hours after a continuous period in which fuel flow to the unit is zero, or shut off, for 15 minutes or longer.
3. a. All ppmv emission limits for gaseous, liquid, or gaseous/liquid fuel firing specified in Section C. of this rule are referenced at dry stack-gas conditions and corrected to 3% by volume stack gas oxygen.

   Emission concentrations shall be corrected to 3% oxygen as follows:

$$[\text{ppm}]_{\text{corrected}} = \frac{20.95\% - 3.00\%}{20.95\% - [\%O_2]_{\text{measured}}} * [\text{ppm}]_{\text{measured}}$$

   b. All ppmv emission limits for solid fuel firing specified in Section C. of this rule are referenced at dry stack-gas conditions and corrected to 12% by volume stack gas CO_2.

   Emission concentrations shall be corrected to 12% CO_2 as follows:

$$[\text{ppm}]_{\text{corrected}} = \frac{12\%}{[CO_2]_{\text{measured}}} * [\text{ppm}]_{\text{measured}}$$

4. All emission concentrations and emission rates shall be calculated or obtained from continuous emission monitoring data obtained by utilizing the test methods specified in Section F. of this Rule.

F. Test Methods.

1. Compliance with the emission requirements in Section C.1. shall be determined using the following test methods:
   a. Oxides of Nitrogen - EPA Method 7E or ARB Method 100
   b. Carbon Monoxide - EPA Method 10 or ARB Method 100
   c. Stack Gas Oxygen - EPA Method 3A or ARB Method 100
   d. NOx Emission Rate (Heat Input Basis) - EPA Method 19
   e. If certification of the higher heating value (HHV) of the fuel is not provided by a third party fuel supplier, it shall be determined by the test methods specified in the definition of HHV found in Section A. of this rule.
2. For determination of the NH_3 concentrations in stack gases, Bay Area Air Quality Management District (BAAQMD) Source Test Procedure ST-1B, "Ammonia, Integrated Sampling" shall be utilized for stack sampling and EPA Method 350.3, "Ion Specific Electrode," shall be utilized as the analysis method. (Reference EPA 600/4-79-020.)
   * Alternate methods may not be used without prior approval of the Air Pollution Control Officer.

G. Recordkeeping Requirements.

1. Any persons subject to the provisions of Subsection C.1. of this rule shall install, no later than one year following District adoption of this rule, a non-resettable totalizing volumetric or mass-flow fuel meter in each fuel line for each applicable unit that fires gaseous and/or liquid fuel. The meter shall be used to demonstrate that each unit operates at or below the applicable emission limitation.
   Meters shall be accurate to (+ or -) one (1) percent, as certified by the manufacturer in writing. Meter readings shall be recorded at the end of each operating day in units of either cubic feet per day or gallons per day. At the end of each month, daily records shall be compiled into a monthly report. Both monthly reports and daily records shall be

maintained for a period of four (4) years and shall be made available for inspection by the Air Pollution Control Officer upon request.

2. Any person subject to the provisions of Subsection C.1. of this rule who fires a solid fuel in an applicable unit shall provide a means of calculating or verifying fuel input to the unit in lbs/hr that is acceptable to the Air Pollution Control Officer for purposes of documenting compliance with the specified emission limit.

Tuning Procedure[1]

Nothing in this Tuning Procedure shall be construed to require any act or omission that would result in unsafe conditions that 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.

1. Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operation, operate it at its average firing rate.
2. At this firing rate, record stack gas temperature, 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 firing rate selected. If the excess oxygen in the stack gas is at the lower end of the 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.
3. Increase combustion air flow to the unit until stack gas oxygen levels increase by one to two percent over the level measured in Step 2. As in Step 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 boiler operation stabilizes.
4. Decrease combustion air flow until the stack gas oxygen concentration is at the level measured in Step 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.
5. Continue to reduce combustion air flow stepwise, until one of these limits is reached:
   a. Unacceptable flame conditions -- such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability.
   b. Stack gas CO concentrations greater than 400 ppm.
   c. Smoke at the stack.
   d. Equipment-related limitations -- such as low windbox/unit pressure differential, built in air-flow limits, etc.
6. Develop an 0_2/CO curve (for gaseous fuels) or 0_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.
7. From the curves prepared in Step 6, find the stack gas oxygen levels where the CO emissions or smoke-spot number equal the following values:

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1. *This tuning procedure is based on a tune-up procedure developed by KVB, Inc. for EPA.*
2. *The smoke-spot number can be determined with the ASTM test method D-2156 or with the Bacharach methods. The Bacharach method is included in a tune-up kit that can be purchased from the Bacharach Company.*
3. *Typical minimum oxygen levels for boilers at high firing rates are:*
   1)For natural gas: 0.5 - 3%
   2)For liquid fuels: 2 - 4%

FUEL	MEASUREMENT	VALUE
Gaseous	CO emissions	400 ppm
#1 and #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 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 combustion unit manufacturer, burner adjustments can probably be made to improve fuel and air mix, thereby allowing operations with less air.

8. Add 0.5 to 2.0 percent to the minimum excess oxygen level found in Step 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.
9. If the load of the combustion unit varies significantly during normal operation, repeat Steps 1-8 for 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 best performance over the range of firing rates. If one firing rate predominates, settings should optimize conditions at that rate.
10. Verify that the new settings can accommodate the sudden 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 Step 5 result, reset the combustion controls to provide a slightly higher level of excess oxygen at the affect 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.

(Reference Figure 1 and Figure 2)

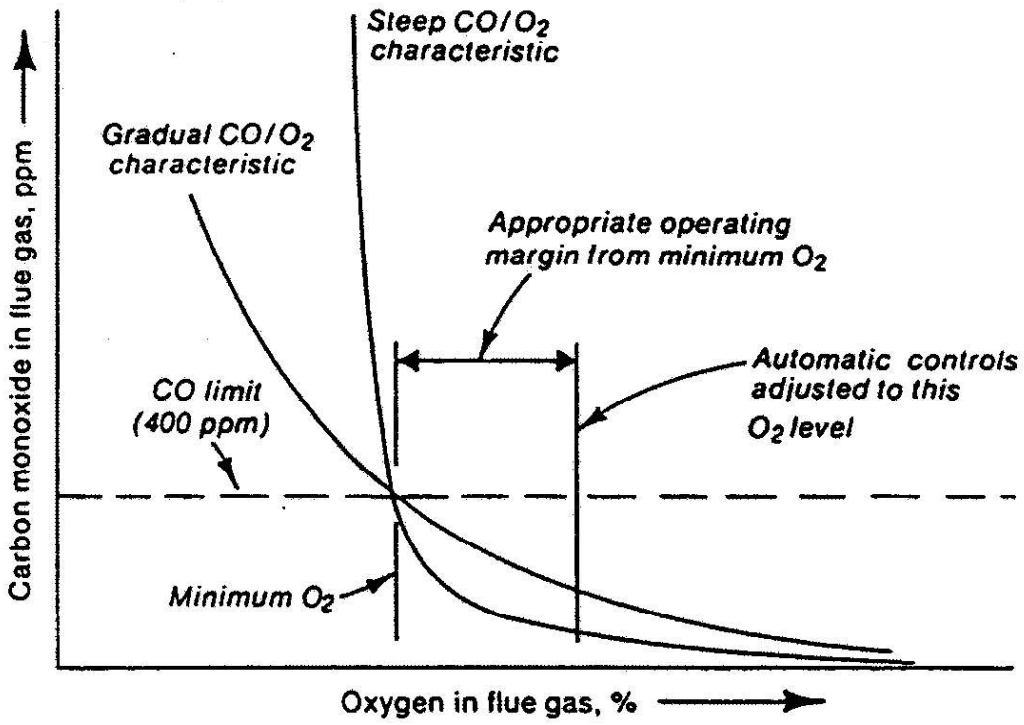

Figure 1 Oxygen/CO Characteristic Curve

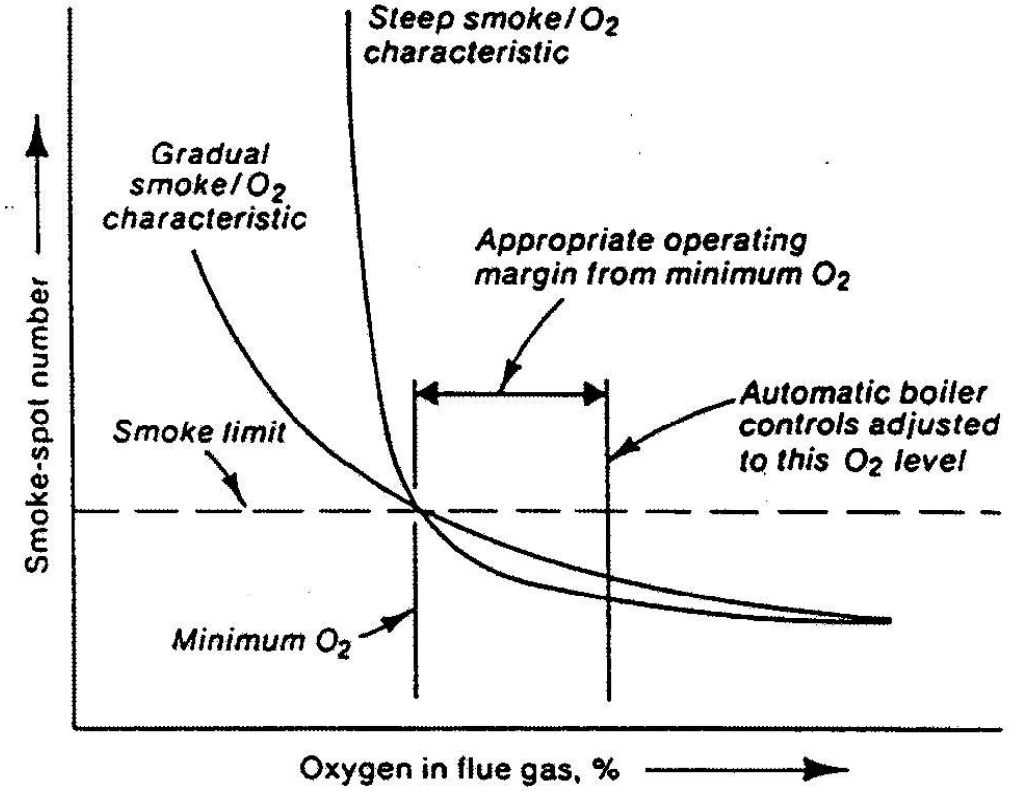

Figure 2 Oxygen/Smoke Characteristic Curve

Equipment Tuning Procedure for Natural Draft-Fired Equipment[2]

Nothing in this Equipment Tuning Procedure 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

1. Preliminary Analysis
   a. Verify that the boiler, steam generator or process heater (unit) is operating at the lowest pressure or temperature that will satisfy load demand. This pressure or temperature will be used as a basis for comparative combustion analysis before and after tune-up.
   b. Verify that the unit operates for the minimum number of hours and days necessary to perform the work required.
   c. Verify that the size of air supply openings is in compliance with applicable codes and regulations. Air supply openings must be fully open when the burner is firing and air flow must be unrestricted.
   d. Verify that the vent is in good condition, properly sized, and free from obstruction.
   e. Perform a combustion analysis (CO, 0_2, etc.) at both high and low fire, if possible. Record all data, as well as the following:
      1) Inlet fuel pressure at burner at high and low firing rates.
      2) Pressure above draft hood or barometric damper at high, medium, and low firing rates.
      3) Steam pressure, water temperature, or process fluid pressure or temperature entering and leaving the unit.
      4) Inlet fuel use rate if meter is available.
2. Checks and Corrections
   a. Clean all dirty burners or burner orifices. Verify that fuel filters and moisture traps are in place, clean, and operating properly. Confirm proper location and orientation of burner diffuser spuds, gas canes, etc. Replace or repair damaged or missing burner parts.
   b. Remove external and internal sediment and scale from heating surfaces.
   c. Verify that the necessary water or process fluid treatment is being used. Confirm flushing and/or blow-down schedule.
   d. Repair all leaks. In addition to the high-pressure lines, check the blow-off drain, safety valve, bypass lines and, if used, the feed pump.
3. Safety Checks
   a. Test primary and secondary low water level controls.
   b. Check operating and limit pressure and temperature controls.
   c. Check pilot safety shut-off operation.
   d. Check safety valve pressure setting and verify that the setting is consistent with unit load requirements.
4. Adjustments
   Perform the following checks and adjustments on a warm unit at high fire:
   a. Adjust unit to fire at the maximum inlet fuel use rate; record fuel manifold pressure
   b. Adjust draft and/or fuel pressure to obtain acceptable, clean combustion at both high, medium, and low firing rates. The carbon monoxide (CO) value should not exceed 400 parts per million (PPM) at 3 percent 0_2.

   Verify that unit light-offs are smooth and safe. Perform a reduced fuel pressure test at both high or low firing rates in accordance with the manufacturer's instructions.

c. Check and adjust the modulation controller. Verify proper, efficient, and clean combustion through the range of firing rates.

When optimum performance has been achieved, record all data.

5. Final Test

Perform a final combustion analysis on the warm unit at high, medium, and low firing rates. Record data obtained from combustion analysis, as well as the following:

a. Inlet fuel pressure at burner at high and low firing rates.
b. Pressure above draft hood or barometric damper at high, medium, and low firing rates.
c. Steam pressure, water temperature, or process fluid pressure or temperature entering and leaving the unit.
d. Inlet fuel use rate if meter is available

Sec 101. GCAPCD POLYESTER RESIN OPERATIONS.

A. Purpose. The purpose of this rule is to control Volatile Organic Compound emissions from polyester resin operations

B. Applicability. This rule is applicable to all commercial, industrial and military stationary sources performing polyester resin operations.

C. Exemption. Touch-Up And Repair

The provisions of Section E. shall not apply to touch-up and repair.

D. Definitions.

1. Airless Spray means a coatings spray application system using high fluid pressure to atomize the coating without compressed air.
2. Air-Assisted Airless Spray means a coating application system in which the coating fluid is supplied to the gun under fluid pressure and air is combined at the spray cap.
3. Catalyst means a substance added to the resin to initiate polymerization.
4. Cleaning Materials means materials used for cleaning, including but not limited to, hands, tools, molds, application equipment, and work areas.
5. Closed Mold System means a method of forming an object from polyester resins by placing the material in a confining mold cavity and applying pressure and/or heat.
6. Control System means an emission control device and its associated collection system.
7. Corrosion-Resistant Materials means polyester resin materials used to make products for corrosion resistant applications such as tooling, fuel, or chemical tanks and boat hulls.
8. Cross-Linking means the process of chemically bonding two or more polymer chains together.
9. Cure means to polymerize, i.e., to transform from a liquid to a solid or semi-solid state to achieve desired product physical properties, including hardness.
10. Electrostatic Spray means the spray application of coatings where an electrostatic potential is created between the part to be coated and the coating particles.
11. Fiberglass means a fiber similar in appearance to wool or cotton fiber but made from glass.
12. Fire Retardant Material means polyester resin materials used to make products that are resistant to flame or fire.
13. Gel Coat means a polyester resin surface coating that provides a cosmetic enhancement and improves resistance to degradation from exposure to the environment.
14. General Purpose Polyester Resins means materials that are not corrosion resistant, fire retardant, high strength, vapor suppressed, or gel coats.
15. Grams Of VOC Per Liter Of Material means the weight of VOC per volume of material as calculated by the following equation:

$$D = \frac{(W_s - W_w - W_{es})}{V_m}$$

where: D = Grams of VOC per Liter of Material
W_s = Mass of volatile materials in grams
W_w = Mass of water in grams
W_{es} = Mass of exempt compounds in grams
V_m = Volume of materials in liters.

16. High-Strength Materials means polyester resins which have casting tensile strength of 10,000 psi or more and which are used primarily for manufacturing of high performance boats and skis.
17. High Volume-Low Pressure means spray equipment used to apply coatings by means of a gun which operates between 0.1 and 10 psi air pressure at the air cap of the spray gun.
18. Inhibitor means a substance used to slow down or prevent a chemical reaction.
19. Low-VOC Emissions Resin Systems means polyester resin materials which contain vapor suppressants to reduce monomer evaporation loss.
20. Monomer means a comparatively volatile unsaturated compound such as styrene used to dissolve and subsequently copolymerize with less volatile unsaturated polyesters; for practical purposes, the volatile portion of a polyester resin liquid.
21. Polyester means a polymer containing repeating ester groups and multiple sites of unsaturation and which is soluble in styrene.
22. Polyester Resin Materials means materials including, but 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 resin operations.
23. Polyester Resin Operations means methods used for the production, rework, repair or touch-up of products by mixing, pouring, hand lay-up, impregnating, injecting, forming, winding, spraying, and/or curing unsaturated polyester resin materials.
24. Polymer means a chemical compound comprised of a large number of chemical units and which is formed by the chemical linking of monomers.
25. Pultrusion means a process where continuous roving strands are moved through a strand-tensioning device into a resin bath for impregnation and then passed through a die for curing.
26. Repair means that part of the fabrication process that requires the addition of polyester resin material to portions of a previously fabricated product in order to mend structural damage.
27. Resin means any of a class of organic polymers of natural or synthetic origin used in reinforced products to surround and hold fibers, and is solid or semi-solid in the cured state.
28. Specialty Resin means 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, caustic or acidic agents, or flame.
29. Touch-Up means that portion of the fabrication process that is necessary to cover minor imperfections.
30. Volatile Organic Compound (VOC) means any compound as defined in District Rule 99.1.B.9 Definitions.
31. Vapor Suppressant means a substance added to a resin to minimize the outward diffusion of monomer vapor into the atmosphere.
32. Waste Material means those materials that include, but are not limited to, scraps resulting from cutting and grinding operations, any paper or cloth used for cleaning operations, waste resins, and any spent cleaning materials.

E. Requirements.

For each process, a person operating a polyester resin operation shall comply with the material requirements or one of the applicable process requirements set forth below:

1. Material Requirements
   a. The use of polyester resin material with monomer content of no more than the following limits:

      Monomer Content in uncatalyzed Polyester Resin Materials as Applied (Weight Percent as Determined by South Coast AQMD Method 312)

Polyester Resin Materials	**%**
General Purpose Polyester Resin	35
Corrosion-Resistant	48
Fire Retardant	42
High Strength	48
Clear Gel Coat	50
Pigmented Gel Coat	45
Specialty Resin	50

2. Process Requirements
   a. The use of a resin containing a vapor suppressant, so that weight loss from VOC emissions does not exceed 60 grams per square meter of exposed surface area during resin polymerization.
   b. The weight loss of polyester materials shall be less than four (4) percent when closed mold systems is used.
   c. A pultrusion operation shall have covered wet-out baths. From exit of the bath to the die, all but 18 inches of the preform distance shall be enclosed to minimize air flow. The weight loss of polyester materials shall be less than (3) percent in a pultrusion operation.
   d. The use of a closed-mold system; or
   e. Only airless, air-assisted airless, high volume-low pressure, or electrostatic spray equipment shall be used for the application of polyester resin materials in spraying operations.
3. Storage and Disposal Requirements
   a. Closed containers shall be used for the storage of all uncured polyester resin materials, cleaning materials, and any unused VOC-containing materials except when being accessed for use.
   b. Self-closing containers shall be used in such a manner that effectively controls VOC emissions to the atmosphere for the disposal of all uncured polyester resin materials, cleaning materials, and any unused VOC-containing materials.
4. Cleaning Material Requirements:
   Where the use of cleaning materials containing more than 1.7 pounds of VOC per gallon of material as applied and as determined by Section I.5. of this rule or having an initial boiling point less than 190˚C, as determined by Section I.3. of this rule, exceeds four (4) gallons per day, a cleaning material reclamation system shall be used. Such a reclamation system shall operate with at least 80 percent efficiency. Solvent residues for on-site reclamation systems shall not contain more than 20 percent VOC by weight as determined by Section I.4. of this rule.

F. Control Equipment.

A person may install and operate an emission control system approved by the APCO which is designed and operated for the collection of fugitive emissions from polyester resin material, and which has a control device with an overall control and capture efficiency of 85 percent or more on a mass basis as determined by Sections H.1 and H.6 of this rule.

G. Compliance Dates.

1. Any person subject to the requirements of this Rule shall be in compliance with all provisions within twelve months from date of adoption.
2. Facilities operating prior to the date of adoption of this Rule which elect to install and operate an emission control system pursuant to the requirements of Section F. shall have the control system installed and operating within 18 months from date of adoption of this Rule.

H. Test Methods.

The analysis of cleaning materials, polyester resin materials, and control/collection efficiency shall be determined by the appropriate test methods as follows:

1. South Coast AQMD Method 309, "Static Volatile Emissions" shall be used to determine weight loss of volatile organic compound from vapor suppressed resins.
2. a. EPA Method 25A, "Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer".
   b. EPA Method 18, "Measurement of Gaseous Organic Compound Emissions by Gas Chromatography".
3. ASTM D1078-86, "Distillation Range of Volatile Organic Liquids".
4. California Air Resources Board Method 401, "Gravimetric Purge and Trap".
5. EPA Method 24, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings".
6. 40 CFR 52.741, Appendix B, "VOM Measurement Techniques for Capture Efficiency".

I. Records.

Any person subject to this rule shall comply with the following requirements:

1. A person shall maintain, or have available, a current list of polyester resins and cleaning materials in use which provides all of the data necessary to evaluate compliance, including the following information:
   a. Polyester resin, catalyst, and cleaning materials used;
   b. The weight percent of monomer in each of the polyester resin materials, and the grams of VOC per liter for the cleaning materials.
   c. For approved vapor suppressed resins, the weight loss (grams per square meter) during resin polymerization, the monomer percentage, and the gel time for each resin.
   d. The amount of each of the polyester resin materials and cleaning materials used during each day of operations.
   e. The volume of polyester resin materials and cleaning materials used for touch-up and repair during each day of operation.
   f. Records of hours of operation and key operating parameters for any emissions control system.
2. All records required by this rule shall be retained and made available for inspection by the Air Pollution Control Officer for the previous 24 month period.

Sec 102. GCAPCD VOLATILE ORGANIC WASTE DISPOSAL CONTROL

A. Purpose.

To reduce volatile organic waste emissions during the generation, storage, transfer, treatment, recycling or disposal of volatile organic wastes.

B. Applicability.

This rule applies to any person who generates, stores, transfers, treats, recovers, recycles or disposes of volatile organic wastes.

C. Exemptions.

1. Household Wastes - Wastes generated by household users shall be exempt from the requirements of this rule.
2. Exempt Wastes - Organic agricultural chemicals (pesticides, insecticides, herbicides, and fertilizers) used to grow and harvest crops or raise fowls, animals, or bees in

order to make a profit, provide a livelihood or to conduct agricultural research or instruction by an educational institution are exempt from the requirements of this rule.

D. Definitions.

1. Dispose means to abandon, deposit, or otherwise discard any volatile organic waste, contained or non-contained, into or on any land or water so that such waste or any constituent of it may be emitted to the atmosphere.
2. Generator means any person whose act or process produces volatile organic waste.
3. Incompatible Volatile Organic Wastes means volatile organic wastes which are unsuitable for mixing under controlled conditions because the mixing could render some or all of the volatile organic wastes unsuitable for recycling or for application of other resource recovery process.
4. Organic Compound means any compound of carbon except:
   a. Carbonates
   b. Metallic carbides
   c. Carbon monoxide
   d. Carbon dioxide
   e. Carbonic acid
   f. Methane
   g. Perchloroethylene
   h. carbon tetrachloride
5. Leak means the dripping of liquid volatile organic compounds in excess of three drops per minute or, a reading as methane on a portable hydrocarbon detection instrument of 10,000 ppm or greater above background when measured within one centimeter of the source using EPA Reference Method 21 - Determination of VOC Compound Leaks or, the appearance of a visible mist.
6. Resource Recovery Process means any method, technique, or process which transforms a volatile organic waste into a usable material (such as a fuel supplement or recyclable solvent).
7. Storage means the containment of volatile organic waste prior to treatment, recovery, transfer, or disposal.
8. Treatment means any method, technique, or process designed to reduce the organic compound content of any volatile organic waste.
9. Volatile Organic Waste means any waste which contains volatile organic compounds in excess of one percent by weight as determined by ARB Method 401 (Gravimetric Purge and Trap method) or by an equivalent method approved by the Air Pollution Control Officer, the California Air Resources Board, and the U.S. EPA.

E. Requirements.

1. Condition of Containers - All containers holding volatile organic waste shall be maintained in a leak-free condition.
2. Compatibility of Waste With Container - The owner or operator must use a container made of or lined with materials which will not react with the volatile organic waste to be stored so that the ability of the container to contain the waste is not impaired.
3. Management of Containers - A container holding volatile organic waste must always be closed during storage, except when it is necessary to add or remove waste. Each storage container shall be labeled with the contents identified and the dates noted on when waste solvent was added.
4. Inspections - The owner or operator shall inspect containers, at least weekly, looking for leaks and for deterioration caused by corrosion or other factors.
5. Special Requirements for Ignitable or Reactive Wastes - Containers holding ignitable or reactive waste must be located within the property boundary at least 15 meters (50 feet) from the facility's property line.
6. Special Requirements for Incompatible Wastes

a. Incompatible wastes must not be placed in the same container. The treatment, storage, and disposal of ignitable or reactive waste, and the co-mingling of wastes, or wastes and materials, must be conducted so it does not:
    1) Generate extreme heat, pressure, explosion, or violent reaction;
    2) Produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health;
    3) Produce flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
    4) Damage the structural integrity of the device or facility containing the waste; or
    5) Through other means threaten human health or the environment.

7. Transfer - Persons transferring liquid volatile organic wastes into any container having a capacity larger than 500 gallons shall utilize submerged filling or bottom loading, or an equivalent method as approved by the air pollution control officer.
8. Disposal - A person shall not dispose of any volatile organic waste unless the disposal of such waste has been approved by the State of California Regional Water Quality Control Board and the County Director of Environmental Health. All hazardous volatile organic waste as defined in Title 22 of the *California Code of Regulations* shall be disposed of in a Class I landfill or treated, stored, or handled in a manner acceptable to the State of California Department of Toxic Substance Control.
9. Treatment - Any person operating a facility for the treatment of volatile organic waste shall reduce the volatile organic compound (VOC) content of the waste by no less than 99 percent by such treatment. The Air Pollution Control Officer may establish requirements to ensure that emissions from the treatment process do not endanger public health. ARB Method 401 shall be used to quantify VOC content of treated and untreated waste.
10. Resource Recovery - Any person operating a process for the recovery of resources from any volatile organic waste shall recover or reduce at least 80 percent of the volatile organic compound (VOC) content of the waste during such recovery process. ARB Method 401 shall be used to quantify VOC content of the waste.
11. Record Keeping - Any person who generates, stores, transfers, treats, recovers, recycles, or disposes of volatile organic wastes shall maintain records for a minimum of the most recent two (2) calendar years for inspection by the Air Pollution Control Officer documenting the following information:
    a. Amount of solvent sent to waste;
    b. Amount of solvent sent to resource recovery; and
    c. Amount of solvent sent to treatment facility.

Sec 103. GCAPCD ORGANIC SOLVENT CLEANING AND DEGREASING OPERATIONS

A. Definitions.

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

1. Air-Vapor Interface means the top of the solvent-vapor layer, and the air touching this layer.
2. Batch-loaded means material placed in a nonconveyorized container for cleaning.
3. Cold Cleaner means any cleaner using solvent which, if heated, is maintained below the initial boiling point temperature. The cleaners include, but are not limited to, remote reservoirs, spray sinks and batch-loaded dip tanks.
4. Condenser (or primary condenser) means a device, such as cooling coils, used to condense (liquefy) solvent vapor.
5. Condenser Flow Switch means a safety switch connected to a thermostat which shuts off the sump heater if the condenser coolant is either not circulating or exceeds its designed operating temperature.
6. Control Device means a device for reducing emissions of VOC to the atmosphere.

7. Conveyorized Solvent Cleaner means any conveyorized cold or vapor solvent cleaner, including but not limited to gyro, vibra, monorail, cross-rod, mesh, belt and strip cleaners. Strip cleaners clean material by drawing the strip itself through the unit for cleaning prior to coating or other fabrication processes.
8. Emulsion means a suspension of small droplets of one liquid in a second liquid.
9. Evaporation means to change into a vapor, normally from a liquid state.
10. Evaporative Surface Area
    a. Cold Cleaner:
        1) The surface area of the top of the solvent.
        2) The surface area of the solvent sink or work area for a remote reservoir.
    b. Vapor Solvent Cleaner: The surface area of the top of the solvent vapor-air interface.
    c. Conveyorized Solvent Cleaner:
        1) Cold Cleaner: The surface area of the top of the solvent.
        2) Vapor Solvent Cleaner: The surface area of the top of the solvent vapor-air interface.
11. Freeboard Height:
    a. Cold Cleaner: The vertical distance from the top of the solvent, or the solvent drain of a remote reservoir cold cleaner, to the top of the cold cleaner.
    b. Batch-loaded Vapor Solvent Cleaner: The vertical distance from the top of the solvent vapor-air interface to the top of the solvent cleaner.
    c. Conveyorized Solvent Cleaner:
        1) For non-boiling solvent, the vertical distance from the top of the solvent to the bottom of the lowest opening in the solvent cleaner where vapors can escape.
        2) For boiling solvent, the vertical distance from the top of the solvent vapor-air interface to the bottom of the lowest opening in the solvent cleaner where vapors can escape.
12. Freeboard Ratio means the freeboard height divided by the smaller of the inside length or the inside width of the solvent cleaner evaporative area.
13. Initial Boiling Point means the boiling point of a solvent as defined by ASTM D-1078-7B.
14. Leak means three (3) or more drops of liquid solvent per minute.
15. Lip Exhaust means a system which collects solvent vapors escaping from the top of a cleaner and directs them away from personnel using the cleaner.
16. Low Volatility Solvent means a solvent with an initial boiling point which is greater than 120°C (248°F) and with a temperature as used, at least 100°C (180°F) below the initial boiling point.
17. Make-up Solvent means that solvent added to the solvent cleaning operation to replace solvent lost through evaporation or other means.
18. Refrigerated Freeboard Chiller means 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.
19. Remote Reservoir means a cold cleaner with a tank which is completely enclosed except for a solvent return opening no larger than 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.
20. Solvent means compounds which are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents or for other similar uses.
21. Spray Safety Switch means a manually reset switch which shuts off the spray pump if the vapor level drops more than 10 cm (4 inches).
22. Ultrasonic means enhancement of the cleaning process by agitation of liquid solvents with high frequency sound wave vibrations.

23. Vapor Level Control Thermostat means a manually reset safety switch which turns off the sump heater if the thermostat senses the temperature rising above the designed operating level at the air-vapor interface.
24. Vapor Solvent Cleaner means any solvent cleaner that cleans through the condensation of hot solvent vapor on colder workloads.
25. Volatile Organic Compound means any compound containing at least one atom of carbon, except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, 1,1,1-trichloroethane, methylene chloride, Tetrachloroethylene, carbon tetrachloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (HCFC-22), trifluoromethane (HFC-23), trichlorotrifluoroethane CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,2,2-tetrafluoroethane (HFC-134), tetrafluoroethane (HFC-134a), dichlorofluoroethane (HCFC-141b), chlorodifluoroethane (HCFC-142b), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and the following four classes of perfluorocarbon (PFC) compounds:
    a. Cyclic, branched, or linear, completely fluorinated alkanes;
    b. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
    c. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
    d. Saturated sulfur containing perfluorocarbons with sulfur bonds only to carbon and fluorine.
26. Volatile Solvent means any solvent that is not a low volatility solvent.
27. Waste Solvent Residue means material which may contain dirt, oil, metal particles, and/or other waste products concentrated after heat distillation of the waste solvent either in the solvent cleaner itself or after distillation in a separate still.
28. Wipe Cleaning means that 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.
29. Workload means the objects put in a cleaner for the purpose of removing oil, grease, soil, coating, dirt or other undesirable matter from the surface of the objects.
30. Workload Area:
    a. The plane geometric surface area of the top of the submerged parts basket, or
    b. The combined plane geometric surface area(s) displaced by the submerged workload, if no basket is used.

B. Applicability.

Except as provided in Section E.- Exemptions, this rule shall apply to all volatile organic compound solvent cleaning and degreasing operations.

C. Requirements.

1. Equipment Requirements
    a. All cleaners shall be equipped with the following:
        1) An apparatus or cover(s) which reduces solvent evaporation, except as provided in Section C.1.b.3).
        2) A permanent, conspicuous label summarizing the applicable operating requirements contained in Section C.3.
        3) A device for draining cleaned parts which permits the drained solvent or drag-out to be returned to the cleaner solvent tank.
    b. Remote Reservoir Cold Cleaners shall be equipped with all of the following:
        1) A sink or work area which is sloped sufficiently towards the drain to prevent pooling of solvent.

2) A single drain hole, not larger than 100 square centimeters (15.5 square inches) in area, for the solvent to flow from the sink into the enclosed reservoir.
3) Except for cleaners using low volatility solvents, a drain plug or a cover for placement over the top of the sink, when the equipment is not in use.
4) A freeboard height not less than 6 inches.

c. Cold Cleaners:
1) Freeboard Requirements:
(i) Cold cleaners using only low volatility solvents which are not agitated, shall operate with a freeboard height not less than 6 inches.
(ii) Cold cleaners (including remote reservoir cold cleaners) using solvents which are agitated, heated above 50° C (120°F) or volatile solvents, shall operate with a freeboard ratio equal to or greater than 0.75.
(iii) A water cover may be used as an acceptable control method to meet the freeboard requirements, if the solvent is insoluble in water and has a specific gravity greater than 1.
2) Cover requirements - For cold cleaners using volatile solvents, a cover that is a sliding, rolling or guillotine (bi-parting) type which is designed to easily open and close.
3) A permanent, conspicuous mark locating the maximum allowable solvent level conforming to the applicable freeboard requirements.

d. Batch-loaded Vapor Cleaners shall be equipped with the following:
1) A cover that is a sliding, rolling or guillotine (bi-parting) type which is designed to easily open and close without disturbing the vapor zone.
2) A vapor level control thermostat.
3) A condenser flow switch.
4) A spray safety switch.
5) A freeboard ratio greater than or equal to 0.75.
6) A primary condenser.
7) In addition to the above, 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 ($^{\circ}$F) at the coldest point on the vertical axis in the center of the air-vapor interface shall be no greater than 30 percent of the initial boiling point ($^{\circ}$F) of the solvent used or no greater than 40°F. If the chiller operates below the freezing temperature of water, it shall be equipped with an automatic defrost.

e. Conveyorized Cold Cleaners shall be equipped with the following:
1) A rotating basket or other method, to prevent cleaned parts from carrying out solvent liquid.
2) Minimized entrance and exit openings which silhouette the work loads such that the average clearance between material and the edges of the cleaner openings is less than 10 centimeters (4 inches) or less than 10% of the opening width.
3) A freeboard ratio greater than or equal to 0.75 which is physically verifiable.

f. Conveyorized Vapor Cleaners shall be equipped with the following:
1) An enclosed drying tunnel or other method, such as a rotating basket, sufficient to prevent cleaned parts from carrying out solvent liquid.
2) Minimized entrance and exit openings which silhouette the work loads such that the average clearance between material and the edges of the cleaner openings is less than 10 centimeters (4 inches) or less than 10% of the opening width.

3) A primary condenser.
4) A vapor level control thermostat.
5) A condenser flow switch.
6) A spray safety switch.
7) A freeboard ratio greater than or equal to 0.75 which is physically verifiable, or a refrigerated freeboard chiller for which the chilled air blanket temperature (°F) at the coldest point on the vertical axis in the center of the air-vapor interface shall be no greater than 30 percent of the initial boiling point (°F) of the solvent used or no greater than 40°F. If the chiller operates below the freezing temperature of water, it shall be equipped with an automatic defrost.

2. Alternative Control Requirements
Alternatively, a system to collect emissions which are vented to a control device may be used to satisfy the requirements of C.1.c.1), C.1.d.5) and 7., C.1.e.3) and C.1.f.7) provided that the overall efficiency (the collection efficiency multiplied by the control efficiency) of the total system shall not be less than 85 percent by weight in reducing total non-methane hydrocarbons as determined by EPA Method 25. The collection system shall have a ventilation rate not greater than 20 cubic meters per minute per square meter over the total area of the solvent cleaner openings unless the rate must be changed to meet Federal and State Occupational Safety and Health Administration requirements. The system must be approved in writing by the Air Pollution Control Officer.
3. Operating Requirements
a. All Cleaners
1) The solvent cleaning equipment and emission control device shall be operated and maintained in proper working order.
2) Cleaners shall not be operated when leaking.
3) All solvent, including waste solvent and waste solvent residues, shall be stored in closed containers at all times. The containers shall have a label indicating the name of the solvent/material they contain.
4) Waste solvent and residues shall be disposed of by one of the following methods:
(i) A commercial waste solvent reclamation service licensed by the State of California.
(ii) At a facility that is federally or state licensed to treat, store or dispose of such waste.
(iii) Recycling in conformance with Section 25143.2 of the California Health and Safety Code.
5) Solvent cleaners, except remote reservoir cold cleaners using low volatility solvent, shall be covered except to process work or to perform maintenance.
6) Solvent carry-out shall be minimized by the following methods:
(i) Rack workload for drainage.
(ii) Limit the vertical speed of a powered hoist, if one is used, to not more than 3.3 meters per minute (11 ft/min).
(iii) Retain the workload below the air-vapor interface until condensation ceases, as applicable.
(iv) For manual operation, tip out any pools of solvent remaining on the cleaned parts before removing them from the cleaner, and
(v) Do not remove parts from the solvent cleaner until visually dry and all dripping ceases. This requirement does not apply to emulsion cleaner workload that is rinsed with water within the cleaner immediately after cleaning.

7) The cleaning of porous or absorbent materials such as cloth, leather, wood or rope is prohibited.
8) Solvent agitation shall be achieved using pump recirculation, a mixer, or ultrasonics. Air agitation shall not be allowed.
9) Solvent spray shall only be a continuous fluid stream. An atomized or shower type spray shall not be used. In conveyorized cleaners, a shower type spray may be allowed provided that the spray is conducted in a totally confined space that is separated from the environment.
10) The solvent spray system shall not be used in a manner such that liquid solvent splashes outside the container.
11) For those cleaners equipped with water separators, no solvent shall be visually detectable in the water exiting the water separator.
12) Wipe cleaning materials containing solvent shall be kept in closed containers at all times, except during use.
13) A cleaner shall not be located where drafts are directed across the cleaner.
14) Drain cleaned material, within the freeboard area, so that the drained solvent is returned to the container.

b. Batch-loaded and Conveyorized Vapor Cleaners. In addition to the requirements in Section C.3.a), the operating requirements below shall apply:
1) The following sequence shall be used for start-up and shut-down:
(i) When starting the cleaner, the cooling system shall be turned on before, or simultaneously with, the sump heater.
(ii) When shutting down the cleaner, the sump heater shall be turned off before, or simultaneously with, the cooling system.
2) The workload area shall not occupy more than half the evaporative surface area of the solvent cleaner.
3) The spray must be kept below the top of the air-vapor interface.

D. Prohibition.

After the date of adoption, a lip exhaust system shall not be added to any cleaner, unless it is vented to a control device, as described in Section C.2.

E. Exemptions.

1. Solvents Containing Less Than 2 percent VOC. Solvent cleaning operations using solvent (including emulsions) containing no more than 2 percent of volatile organic compounds (wt) as determined by EPA Method 24 shall not be subject to the requirements of this determination.
2. Cold Cleaners with less than 929 square centimeters (1 square foot) of liquid surface area are exempt from the equipment requirements in Section C.1. of this Rule, except for the requirements that the cleaners shall be covered when work is not being processed.

F. Compliance Schedule.

Any person subject to any of the requirements of this Rule, shall comply with the following increments of progress:

1. By (30 days from date of adoption), be in full compliance with the operating requirements of this Rule.
2. By (one year after date of rule adoption), be in full compliance with the equipment requirements of this Rule.

G. Test Methods.

1. Initial Boiling Point of Solvent. The initial boiling point of the solvent shall be determined by ASTM D-1078-93.
2. Capture Efficiency. Capture efficiency shall be determined by the appropriate method described in 40 CFR 52.741, Appendix B.

3. Control Efficiency. EPA Method 25 shall be used to determine control efficiency, in combination with the appropriate method in the reference mentioned in Section G.2.
4. Volumetric Flow rate. Volumetric Flow rate shall be determined by EPA Methods 2, 2A, 2C and 2D.
5. Exempt Compounds. Determination of exempt compounds, shall be performed in accordance with ASTM D-4457-85 (Solvents and Coatings) and be consistent with the provisions set forth in the Federal Register (FR, Vol. 56, No. 52, March 18, 1991).
6. Volatile Organic Compounds. For the purposes of this determination, the content of VOCs in solvents shall be determined by the appropriate procedures contained in EPA Method 24. Perfluorocarbon compounds shall 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 amount present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

H. Administrative Requirements.

Solvent Records. The following records shall be retained for the previous 24-month period and be available at the time of a district inspection:

1. Each time waste solvent or waste solvent residue is removed from the facility for disposal.
2. On a quarterly or shorter basis, record the facility-wide total volume of make-up solvent used for all cleaners.
3. Mix ratios of solvent compounds.
4. VOC content of solvents.
5. Maintenance records on solvent cleaning and/or degreasing operation.

Sec 104. GCAPCD MUNICIPAL SOLID WASTE LANDFILLS

A. Purpose. The purpose of this rule is to limit non-methane organic compound (NMOC) emissions from municipal solid waste (MSW) landfills by implementing the provisions of Title 40, Code of Federal regulations, Part 60, Subpart Cc- Emission Guidelines and Compliance Times for MSW Landfills.

B. Applicability. This rule applies to all MSW landfills meeting the following conditions:

1. Construction, reconstruction or modification was commenced before May 30, 1991; and
2. The MSW landfill has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.

C. Definitions. Terms used but not defined in this rule have the meaning given them in 40 CFR Part 60.751 (Definitions) except:

1. Administrator, for the purposes of this rule, means Air Pollution Control Officer (APCO) of the Glenn County Air Pollution Control District, except that the APCO shall not be empowered to approve:
   a. Alternative or equivalent test methods, alternative standards; or
   b. Alternative work practices unless included in the site-specific design plan as provided in 40 CFR Section 60.752 (b)(2)(i).
2. Design plan or plan means the site-specific design plan for the gas collection and control system submitted under section E.3 of this rule.
3. Modification is defined for landfills as "increase in the permitted volume design capacity of the landfill by either horizontal or vertical expansion based on its permitted design capacity as of May 30, 1991". Increased emissions from landfills are based on the amount and character of the waste placed in the landfill. Therefore, modification is defined in terms of permitted design capacity, rather than physical or operational changes to equipment or production methods.

D. Effective Date. The effective date of this rule shall be 30 days after the adoption of this rule.

E. Standards.

1. Each owner or operator of a MSW landfill that has a design capacity equal to or greater than 2.5 million megagrams or 2.5 million cubic meters, and an NMOC emission rate of 50 megagrams per year or more, as calculated pursuant to 40 CFR 60.754 (Test Methods and Procedures) shall install a collection and control system meeting the conditions provided in 40 CFR 60.752 (b)(2)(ii) and (iii).
2. The owner or operator of each MSW landfill shall submit an initial design capacity report and amended design capacity report as specified in 40 CFR 60.752 (Standards for Air Emissions from MSW Landfills). Any density conversions shall be documented and submitted with the report.
3. The owner or operator of a MSW landfill subject to part E.1. of this rule shall submit a site-specific collection and control system design plan to the APCO as provided under 40 CFR 60.752 (b)(2)(i). The design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, record keeping or reporting provisions of 40 CFR 60.753 through 60.758. The APCO shall review and either approve or disapprove the plan, or request that additional information be submitted. The design plan shall either conform with specifications for active collection systems in 40 CFR 60.759 or include a demonstration to the APCO's satisfaction of the sufficiency of the alternative provisions to 40 CFR 60.759. The design plan may include alternatives as specified in 40 CFR. 752(b)(2)(i)(B).
4. Each MSW landfill required to install a gas collection and control system under this section shall meet the operational standards in 40 CFR 60.753; the test methods and procedures in 40 CFR 60.754; the compliance provisions in 40 CFR 60.755; and the monitoring provisions in 40 CFR 60.756, except that the APCO may approve alternatives in the design plan as provided in Section E.3 of this rule.

F. Record Keeping and Reporting Requirements. The owner or operator of each MSW landfill shall meet the record keeping and reporting requirements of 40 CFR 60.757 and 40 CFR 60.758, as applicable, except that the APCO may approve alternative record keeping and reporting provisions as provided in Section E.3 of this rule. Any records or reports required to be submitted pursuant to 40 CFR 60.757 or 40 CFR 60.758 shall be submitted to the APCO.

G. Compliance Schedule.

1. The design capacity and the NMOC emissions reports required pursuant to 40 CFR 60.752 and 40 CFR 60.754 shall be submitted within ninety (90) days of the effective date of this rule.
2. The site-specific collection and control system design plan required under section E.3 of this rule shall be submitted within one (1) year after determining that the MSW landfill has a NMOC emission rate greater than or equal to fifty (50) megagrams per year.
3. The planning, awarding of contracts, and installation of the collection and control equipment required pursuant to section E.1 of this rule shall be accomplished within thirty (30) months after the effective date of this rule or within thirty (30) months after meeting the condition in section E.1 of this rule.
4. The initial performance test of the collection and control system equipment shall be accomplished within six (6) months of the control system startup.

Sec. 105. GCAPCD VEHICLE AND MOBILE EQUIPMENT COATING OPERATIONS

A. Definitions.

1. Active Solvent Losses means the active solvent losses are the emissions during all steps of a spray gun equipment cleaning operation and are expressed in units of grams of solvent loss per cleaning cycle.
2. Antiglare/Safety Coating means a coating which does not reflect light.
3. Camouflage Coating means a coating applied on motor vehicles to conceal such vehicles from detection.
4. Catalyst means a substance whose presence initiates the reaction between chemical compounds.
5. Color Match means the ability of a repair coating to blend into an existing coating so that color difference is not visible.
6. Coating means a liquid, liquefiable or mastic composition which is converted to a solid protective, decorative, or functional adherent film after application as a thin layer.
7. Electrophoretic Dip means a coating application method where the coating is applied by dipping the component into a coating bath and an electrical potential difference exists between the component and the bath.
8. Electrostatic Application means a sufficient charging of atomized paint droplets to cause deposition principally by electrostatic attraction. This application shall be operated at a minimum of 60 KV power.
9. Exempt Organic Compounds means any compound identified as exempt under the definition of "Volatile Organic Compounds".
10. Extreme Performance Coating means any coating used on the surface of a vehicle, mobile equipment or their parts or components which is exposed to extreme environmental conditions such as high temperatures, corrosive or erosional environments, during the vehicle's principal use.
11. Four-stage Coating System means a topcoat system composed of a ground coat portion, a pigmented basecoat portion, a semi-transparent midcoat portion, and two transparent clearcoat portions. Four-stage coating systems' VOC content shall be calculated according to the following formula:

$$\text{VOC T4-stage} = \frac{\text{VOCgc} + \text{VOCbc} + \text{VOCmc} + 2\ \text{VOCcc}}{5}$$

Where:

VOC T4-stage = the average of the VOC content as applied in the ground coat (gc), basecoat (bc), midcoat (mc), and clearcoat (cc) system.

VOCgc = the VOC content as applied of any given groundcoat.

VOCbc = the VOC content as applied in the base coat.

VOCmc = the VOC content as applied of any given midcoat.

2 VOCcc = two times the VOC content as applied of any given clearcoat.

12. Grams of VOC per Liter of Coating Less Water and Less Exempt Organic Compounds means the weight of VOC per combined volume of VOC and coating solids and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Coating Less Water and Less Exempt Organic Compounds} = \frac{Ws - Ww - Wes}{Vm - Vw - Ves}$$

Where:

Ws = Weight of volatile compounds (grams)

Ww = Weight of water (grams)

Wes = Weight of exempt organic compounds (grams)

Vm = Volume of material (liters)

Vw = Volume of water (liters)

Ves = Volume of exempt organic compounds (liters)

13. Grams of VOC per Liter of Material means the weight of VOC per volume of material and can be calculated by the following equation:

$$\text{Grams of VOC per Liter per Liter of Material} = \frac{Ws - Ww - Wes}{Vm}$$

Where Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)

14. Gun Washer means an electrically or pneumatically operated system that is designed to clean spray application equipment while enclosed. A gun washer may also be considered a gun cleaning system that consists of spraying solvent into an enclosed container using a snug fitting.
15. Hand Application Methods means the application of coatings by non mechanical hand-held equipment including but not limited to paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags, and sponges.
16. High-Volume, Low-pressure Application (HVLP) means spray equipment which uses a high volume of air delivered at pressures between 0.1 and 10 psig and which operates at a maximum fluid delivery pressure of 50 psig.
17. Low emission spray gun cleaner means any properly used spray equipment cleanup device which has passive solvent losses of no more than 0.6 grams per hour and has active solvent losses of no more than 15 grams per operating cycle as defined by the test method in Subsection E.6.
18. Metallic/Iridescent Topcoat means any topcoat which contains more than 5 g/l (.042 lb/gal) of iridescent particles, composed of metal as metallic particles or silicon as mica particles, as applied, where such particles are visible in the dried film.
19. Mobile Equipment means any equipment which may be drawn or is capable of being driven on a roadway, including, but not limited to, truck bodies, truck trailers, camper shells, mobile cranes, bulldozers, concrete mixers, street cleaners, golf carts, all terrain vehicles, implements of husbandry, and hauling equipment used inside and around airports, docks, depots, and industrial and commercial plants, but excluding utility bodies.
20. Operating Cycle means an operating cycle consists of all steps carried out during a cleaning operation.
21. Passive Solvent Losses means the passive solvent losses are the emissions from spray gun cleaning equipment when the equipment sits idle between cleaning cycles and are a result of natural evaporation from the equipment.
22. Precoat means any coating which is applied to bare metal primarily to deactivate the metal surface for corrosion resistance to a subsequent water-based primer.
23. Prep Station means any spraying area that meets the requirements for a "Limited Spraying Area" from Section 45.207 of the Uniform Fire Code and that prevents the escape to the atmosphere of overspray particulate matter using properly maintained filters and positive mechanical ventilation.
24. Pretreatment Wash Primer means any coating which contains a minimum of 0.5% acid by weight, is necessary to provide surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.
25. Primer means any coating applied prior to the application of a topcoat for the purpose of corrosion resistance and adhesion of the top coat.
26. Primer Sealer means any coating applied prior to the application of a topcoat for the purpose of corrosion resistance, adhesion of the topcoat, color uniformity, and to promote the ability of an undercoat to resist penetration by the topcoat.

27. Primer Surfacer means any coating applied prior to the application of a topcoat for the purpose of corrosion resistance, adhesion of the topcoat, and which promotes a uniform surface by filling in surface imperfections.
28. Reactive Organic Compound (ROC) for the purposes of this rule, the term "reactive organic compounds" (ROC's) are assumed to be the same as these compounds defined under the "volatile organic compound" (VOC) definition (See VOC definition).
29. Reducer means any volatile liquid used to reduce the viscosity of the coating. This liquid may be solvents, diluents , or mixtures of both.
30. Specialty Coatings means coatings which are necessary due to unusual and uncommon job performance requirements. These coatings include, but are not limited to, weld-thru primers, adhesion promoters, uniform finish blenders, elastomeric materials, gloss flatteners, bright metal trim repair, and antiglare/safety coatings.
31. Spray Booth means any power ventilated structure of varying dimensions and construction provided to enclose or accommodate a spraying operation and which meets the Uniform Fire Code. A spray booth shall confine and limit, by dry or wet filtration, the escape to the atmosphere of overspray particulate matter.
32. Three-Stage Coating System means a topcoat system composed of a pigmented basecoat portion, a semi-transparent midcoat portion, and two transparent clearcoat portions. Three-stage coating systems' VOC content shall be calculated according to the following formula:

$$\text{VOC T3-stage} = \frac{\text{VOCbc} + \text{VOCmc} + 2\,\text{VOCcc}}{4}$$

Where:
VOC T3-stage = the average of the VOC content as applied in the basecoat (bc), midcoat (mc), and clearcoat (cc) system.
VOCbc = the VOC content as applied in the basecoat
VOCmc = the VOC content as applied of any given midcoat.
2 VOCcc = two times the VOC content as applied of any given clearcoat.

33. Topcoat means any coating applied over a primer or an original OEM finish for the purpose of protection or appearance.
34. Transfer Efficiency means the ratio of the weight of coating solids which adhere to the object being coated to the weight amount of coating solids used in the application process, expressed as a percentage.
35. Two-stage Coating System means a topcoat consisting of a pigmented basecoat and a transparent clearcoat. Two-stage coating systems' VOC content shall be calculated according to the following formula:

$$\text{VOC T2-stage} = \frac{\text{VOCbc} + 2\text{VOCcc}}{3}$$

Where:
VOC T2-stage = the average of the VOC content as applied in the basecoat (bc) and clearcoat (cc) system.
VOCbc = the VOC content as applied in the basecoat
VOCcc = the VOC content as applied of any given clearcoat.

36. Undercoat means any pretreatment wash primer, precoat, primer, primer surfacer, or primer sealer.

37. Utility Body means a special purpose compartment or unit that will be bolted, welded, or affixed onto an existing cab and chassis. The compartment may serve as storage for equipment of parts.
38. Vehicle means a vehicle is any of the following: passenger cars, large/heavy duty truck cabs and chassis, light and medium duty trucks and vans, motorcycles, public transit buses, mobile equipment, or military tanks or other tracked military vehicles.
39. Volatile Organic Compounds (VOC) for the purposes of this rule, the term VOC shall be the following: (For the purposes of implementing District Rule 102 and Rule 103 the term ROC is assumed to be the same as those compounds defined under the VOC definition):
    Any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate, which participates in atmospheric photochemical reactions. This includes any such organic compounds other than the following, which have been determined to have negligible photochemical reactivity by the USEPA:
    methane, methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12) 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); 1,2-dichloro-1,1,2,2 tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); chlorodifluoromethane (HCFC-22); 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123); 1,1-dichloro-1-fluoroethane (HCFC-141b); 1-chloro-1,1-difluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetraflouroethane (HCFC-124); trifluoromethane (HFC-23); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1,2-tetrafluoroethane (HFC-134a); pentafluoroethane (HFC-125); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); cyclic, branched or linear completely methylated siloxanes;
    The following classes of perfluorocarbons:
    (1) Cyclic, branched, or linear, completely fluorinated alkanes;
    (2) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
    (3) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations;
    (4) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds to carbon and fluorine;
    Perfluorocarbon and siloxane compounds shall be assumed to be absent from a product or process unless the manufacturer or operator specifies which specific individual compounds from these broad classes are present and identifies a test method approved by the District, California Air Resources Board, and the U.S. Environmental Protection Agency for quantifying the specific compounds.
    The following low-reactive organic compounds which have been exempted by the U.S. EPA:
    acetone
    ethane
    parachlorobenzotrifluoride
40. Water-Based Temporary Transit Coating means any water-based coating that is intended to protect new motor vehicle finishes from certain forms of damage such as iron dust, soot, acid rain, and other airborne pollutants during transit and is removed prior to sale of the vehicle.
41. Weld-Thru Primer means any primer applied from an aerosol can, 16 ounces or less, to bare steel prior to welding that steel area. The purpose of the weld-thru primer is to inhibit corrosion in the weld area.

B. Applicability. The provisions of this rule apply to any person who supplies, sells, offers for sale, applies or specifies the use of coatings for vehicles, mobile equipment, and their parts or components.

The following provisions of this rule, except Subsection C.9., Spray Booths and Prep Stations, shall become effective July 1, 1999. Subsection C.9. shall become effective July 1, 2000.

C. Requirements.

1. After the date expressed below, no person shall manufacture, solicit, require for use, specify, sell, or coat any vehicle, mobile equipment, or their parts or equipment, as defined in this Rule, using any coating with a Volatile Organic Compound (VOC) content in excess of the following limits, expressed as grams of VOC per liter of coating applied (lbs/gal), excluding water and exempt organic compounds:

Limits

Grams of VOC per Liter of Coating (lbs/gal), Less Water and Less Exempt Organic Compounds

	July 1, 1997		July 1, 1998	
	Color Match Required	No Color Match Required	Color Match Required	No Color Match Required
Pretreatment Wash Primer	780 (6.5)	780 (6.5)	780 (6.5)	780 (6.5)
Precoat	780 (6.5)	780 (6.5)	780 (6.5)	780 (6.5)
Primer/Primer Surfacer	575 (4.8)	575 (4.8)	340 (2.8)	340 (2.8)
Primer Sealer	550 (4.6)	550 (4.6)	340 (3.5)	340 (3.5)
Single-Stage/Two-Stage Topcoats	600 (5.0)	420 (3.5)	600 (5.0)	420 (3.5)
Topcoats of More Than 2 Stages	625 (5.2)	420 (3.5)	600 (5.0)	420 (3.5)
Specialty Coating	840 (7.0)	840 (7.0)	840 (7.0)	840 (7.0)
Extreme Performance (*)	----------	750 (6.2)	----------	750 (6.2)
Camouflage (*)	----------	420 (3.5)	----------	420 (3.5)

(*)Coating for "No Color Match Required" only

2. Coatings Containing 1,1,1-Trichloroethane: No person shall apply any coating to any vehicle, mobile equipment, or their parts or components, if that coating contains 1,1,1-trichloroethane.

3. Extreme Performance Coating Petition: Any person seeking to apply an extreme performance coating as defined in this Rule to a vehicle, mobile equipment, or their parts or components shall comply with the following requirements:
   a. A petition shall be submitted to the Air Pollution Control Officer (APCO) stating the performance requirements, volume of coating and VOC level that is attainable.
   b. If the APCO grants written approval, then that approval shall be valid for one year. If applicable, such petition shall be resubmitted on an annual basis.
   c. If the APCO grants written approval, such approval shall contain volume and VOC limit conditions.

4. Add-on Control Equipment Option:
   a. A person may comply with the provisions of Subsection C.1., Coating Limits, by using air pollution control equipment provided that:
      (1) The combined control and capture efficiency shall reduce VOC emissions from an emission device by at least 85 percent, by weight; and
      (2) The control system must be designed and operated for the maximum collection of fugitive emissions according to the EPA's "Guideline for Developing Capture Efficiency Protocols"; and

(3) Written approval in the form of an Authority to Construct and a Permit to Operate for such equipment is received from the Air Pollution Control Officer (APCO)

b. A person may comply with the provisions of Subsection C.5. (transfer efficiency) by using add-on control equipment provided the combined control and capture efficiency of VOC is at least 92 percent, by weight.

5. Transfer Efficiency: No person shall apply any coating to any vehicle or mobile equipment or their parts and components unless one of the following methods is properly used:
   a. Hand application methods
   b. Electrophoretic dip coating
   c. Electrostatic application
   d. High-volume, Low-Pressure (HVLP) application
   e. Any other coating application method which has been demonstrated to be capable of achieving at least 65 percent transfer efficiency.
6. Compliance Statement Requirement: The manufacturer of coatings subject to this Rule shall include a designation of the VOC content as supplied, including coating components, expressed in grams per liter or pounds per gallon, excluding water and exempt organic compounds, on labels or data sheets. This designation shall include a statement of manufacturer's recommendation regarding thinning, reducing, or mixing with any other VOC containing materials. This statement shall include the VOC on an as-applied basis, excluding water and exempt organic compounds, based on the manufacturer's recommendations.
7. Surface Preparation and Cleanup Solvent: The requirements of this Subsection shall apply to any person using organic solvent for surface preparation and cleanup.
   a. Closed containers shall be used for the storage or disposal of solvent-containing cloth or paper used for surface preparation and cleanup. Containers shall be nonabsorbent.
   b. No person shall use organic compounds for spray equipment cleanup unless an enclosed gun washer or "low emission spray gun cleaner" as required by this Rule is properly used for cleaning.
   c. No person shall use VOC-containing materials which have a VOC content of more than 72 grams per liter (0.60 lbs/gal) of material for substrate surface preparation prior to coating or for clean-up practices. This limit shall not apply to surface preparation material applied from a hand-held spray container. The VOC limit for VOC-containing material applied from hand-held spray containers shall not exceed 780 g/l (6.5 lbs/gal).
8. Storage of VOC-Containing Materials: All VOC containing materials, including but not limited to, fresh or spent solvent, coatings and reducers, shall be kept in closed containers when not in use.
9. Spray Booth and Prep Stations: Effective July 1, 2000 no person shall apply any coating to any complete (entire) vehicle or mobile equipment, unless that application is performed within a properly maintained and operated Spray Booth. All spraying of parts or components of a vehicle or mobile equipment shall be done in a properly maintained and operated Prep Station or Spray Booth.

D. Exemptions.

1. The sales prohibition in Subsection C.1. and transfer efficiencies in Subsection C.5. shall not apply to the sale of any coating supplied in a non aerosol container with a capacity of 16 fluid ounces or less, and shall not apply to any coating supplied in a hand-held, non refillable aerosol container.
2. The sales prohibition in Subsection C.1. shall not apply to the sale of coatings where the emissions to the atmosphere from the application of those coatings are controlled

by a District approved VOC add-on control device that meets the requirements of Subsection C.4. of this Rule.

3. Any application of logos, letters, numbers and graphics to a painted surface, with or without a template, shall be exempt from this rule.
4. Any coating operation of a vehicle or mobile equipment by a resident of a one or two family dwelling shall be except from this rule provided:
   a. The resident is the registered owner of the vehicle or equipment being painted;
   b. The coating operation is not being conducted as a business;
   c. The coating operation is limited to two vehicles per year;
   d. The coating operation does not cause a public nuisance.
5. With prior written approval of the APCO and on a limited term basis, the requirements of Subsection C.9., Spray Booths and Prep Station, shall not apply to the coating of vehicle(s) which due to shape or size, cannot reasonably be contained in any available substitute spray booth.
6. The requirements of Subsection C.9., Spray Booths and Prep Station, shall not apply to:
   a. Any repair, touch-up, or spot priming operation which does not exceed a total of nine (9) square feet per vehicle. All operations shall be conducted in a controlled area such that a public nuisance is not caused to surrounding receptors.
   b. Any weld-thru primer.

E. Test Methods.

1. Coating VOC content shall be determined using EPA Method 24. The exempt organic compound content of coatings or solvents shall be determined using ASTM Method D4457-85. Compliance with the prohibition of sale shall be determined by measuring the VOC content of each and every component of a coating or coating system which has been reduced using the manufacturer's recommended type and maximum amount of reducer.
2. The measurement of acid content of pretreatment wash primers shall be done in accordance with ASTM Method D 1613-85 (modified).
3. The measurement of the metal and silicon content of metallic/iridescent coatings shall be determined by South Coast AQMD Method No. 318, "Determination of Weight Percent of Elemental Metal in Coatings by X-Ray Diffraction
4. The collection and capture efficiency of organic emissions as specified in Subsections C.5. shall be measured as follows:
   a. Capture efficiency shall be determined by the EPA Guidelines for Developing Capture Efficiency Protocols from the Federal Register Part 55 FR 26865, June 29, 1990.
   b. Measurement of vapor flow through pipes shall be determined by EPA Method 2A.
   c. Measurement of organic vapor concentration shall be determined by EPA Method 25A. The calculation of control device efficiency shall be determined only during periods of continuous coating operations and shall be averaged over the duration of the coating operation not to exceed 24 hours.
5. Transfer Efficiency shall be determined using a method which shall be modeled after the test method described in the EPA document (EPA/600/2-88/-26b) "Development of Proposed Standard Test Method for Spray Painting Transfer Efficiency."
6. The active and passive solvent losses from spray gun cleaning systems shall be determined using South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems". The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm Hg at 20 degrees C. The minimum test temperature shall be 15 degrees C.

F. Monitoring and Recordkeeping Requirements.

1. Any person subject to this rule shall:
   a. Maintain and make available to District personnel, a current list of in-house coatings (including specialty coatings) that provides all of the coating data necessary to evaluate compliance, including the following information, as applicable:
      (1) Coating, category, catalyst and reducer used.
      (2) Mix ratio of components used.
      (3) VOC content of coating as applied (less water and less exempt organic compounds).
   b. Maintain records which show on a daily basis the following information:
      (1) Coating identification and mix ratio of components used in each coating or quantity of each component used.
      (2) Quantity of each coating (including each specialty coating) applied. This quantity need not include toners that are added for color matching after preparation of the initial weighed color batch.
      (3) Whether a color match was required.
2. Any person subject to the requirements of this rule shall have the manufacturer's specification sheets of solvents used for substrate surface cleaning and application equipment cleanup available for review and shall maintain records which show on a monthly basis the following for each solvent:
   a. Identification of each solvent and its use.
   b. VOC content of solvent, in grams per liter.
   c. Volume of solvent used. If purchase records are used to determine the amount of solvents used, then records and manifests of the amounts of solvents disposed of or sent to a recycler must also be maintained.
3. All records shall be retained for a minimum of two years from the date of each entry and shall be made available to District personnel upon request.

G. Increments of Progress

Any person required to install any equipment in order to comply with this Rule shall submit to the APCO a complete application for an Authority to Construct no later than July 1, 1999 and shall demonstrate compliance no later than July 1, 2000.

Sec 106. GCAPCD REGULATION FOR STATIONARY COMPRESSION IGNITION (CI) ENGINES

The District Regulation (REGULATION) for Stationary Compression Ignition (CI) Engines is set forth in this Regulation and is intended to mirror the majority of Airborne Toxic Regulation for Stationary Compression Ignition Engines set forth in sections 93115 through 93115.15, title 17, California Code of Regulations.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

A. REGULATION for Stationary CI Engines – Purpose.

The purpose of this District Regulation (REGULATION) is to reduce diesel particulate matter (PM) and criteria pollutant emissions from stationary diesel-fueled compression ignition (CI) engines.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

B. REGULATION for Stationary CI Engines – Applicability.

(a) Except as provided in section C., this REGULATION applies to any person who either sells a stationary CI engine, offers a stationary CI engine for sale, leases a stationary CI engine, or purchases a stationary CI engine for use in California, unless such engine is:
   (1) a portable CI engine not used in “Agricultural Operations”.

(2) a CI engine used to provide motive power,
(3) an auxiliary CI engine used on a marine vessel, or
(4) an agricultural wind machine as defined in section D.

(b) Except as provided in sections C. and I., this REGULATION applies to any person who owns or operates a stationary CI engine in California with a rated brake horsepower greater than 50 (>50 bhp).

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

C. REGULATION for Stationary CI Engines – Exemptions.

(a) The in-use stationary diesel agricultural emission standard and other requirements of section H.(b) do not apply to agricultural emergency standby generator set engines equipped with nonresettable hour meters with a minimum display capability of 9,999 hours, low-use agricultural engines, or remotely-located agricultural engines provided the owners or operators of such engines comply with the registration requirements of section H.(c) and (d) and the applicable recordkeeping and reporting requirements of section J.

(b) The requirements specified in sections F., G., and J.(a) do not apply to new or in-use stationary diesel-fueled CI engines used in agricultural operations.

(c) The requirements specified in section I. do not apply to single cylinder cetane test engines used exclusively to determine the cetane number of diesel fuels in accordance with American Society for Testing and Materials (ASTM) Standard D 613-03b, "Standard Test Method for Cetane Number of Diesel Fuel Oil," as modified on June 10, 2003, which is incorporated herein by reference.

(d) The requirements specified in sections F.(b)(3) and G.(b)(1) do not apply to in-use stationary diesel-fueled CI engines used in emergency standby or prime applications that, prior to January 1, 2005, were required in writing by the district to meet and comply with either minimum technology requirements or performance standards implemented by the district from the "Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines," October 2000, which is incorporated herein by reference.

(e) The requirements specified in section F.(b)(3) do not apply to permitted in-use stationary emergency standby diesel-fueled CI engines that will be removed from service or replaced prior to January 1, 2009, in accordance with an approved Office of Statewide Health Planning Development (OSHPD) Compliance Plan that has been approved prior to January 1, 2009, except that this exemption does not apply to replacement engines for the engines that are removed from service under the OSHPD plan.

(f) The requirements in sections E. and G. do not apply to any stationary diesel-fueled CI engine used solely for the training and testing of United States Department of Defense (U.S. DoD) students or personnel of any U.S. military branch in the operation, maintenance, repair and rebuilding of engines when such training engines are required to be configured and designed similarly to counterpart engines used by the U.S. DoD, U.S. Military services or North Atlantic Treaty Organization (NATO) forces in combat, combat support, combat service support, tactical or relief operations used on land or at sea.

(g) The requirements specified in sections E. through H. do not apply to stationary diesel-fueled CI engines used solely on San Nicolas or San Clemente Islands. The Ventura County Air Pollution Control District Air Pollution Control Officer (APCO) and the South Coast Air Quality Management District APCO shall review the land use plans for the island in their jurisdiction at least once every five (5) years and withdraw this exemption if the land use plans are changed to allow use by the general public of the islands.

(h) The requirements specified in sections F. and G. do not apply to stationary diesel-fueled engines used solely on outer continental shelf (OCS) platforms located within 25 miles of California's seaward boundary.

(i) *Exemption for Emergency Engines at Nuclear Facilities.* The requirements in section F.(b)(3) do not apply to any in-use stationary diesel-fueled CI engines for which all of the following criteria are met:

(1) the engine is an emergency standby engine;
(2) the engine is subject to the requirements of the U.S. Nuclear Regulatory Commission;
(3) the engine is used solely for the safe shutdown and maintenance of a nuclear facility when normal power service fails or is lost; and
(4) the engine undergoes maintenance and testing operations for no more than 200 hours cumulatively per calendar year.

(j) *Request for Exemption for Low-Use Prime Engines Outside of School Boundaries.* The district APCO may approve a Request for Exemption from the provisions of section G.(b)(1) for any in-use stationary diesel-fueled CI engine located beyond school boundaries, provided the approval is in writing, and the writing specifies all of the following conditions to be met by the owner or operator:

(1) the engine is a prime engine;
(2) the engine is located more than 500 feet from a school at all times;
(3) the engine operates no more than 20 hours cumulatively per year. The district APCO may use a different number of hours for applying this exemption if the diesel-fueled CI engine is used solely to start a combustion gas turbine engine, provided the number of hours used for this exemption is justified by the district, on a case-by-case basis, with consideration of factors including, at a minimum, the operational requirements of a facility using a combustiongas turbine engine and the impacts of the emissions from the engine at any receptor location.

(k) The requirements in sections F.(b)(3), G.(b)(1), and H.(b)(1) through (3) do not apply to in-use dual-fueled diesel pilot CI engines that use an alternative fuel or an alternative diesel fuel.

(l) The requirements in sections E., F.(a)(3), F.(b)(3), G.(a)(1), G.(b)(1), H.(a)(1), H.(b)(1) through (3), and I. do not apply to dual-fueled diesel pilot CI engines that use diesel fuel and digester gas or landfill gas.

(m) The requirements in sections F.(b)(3), F.(c)(2), G.(b)(1), and H.(b)(1) through (3) do not apply to in-use stationary diesel-fueled CI engines that have selective catalytic reduction systems.

(n) The requirements of section F.(b)(3) do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.

(o) The requirements of sections E., F.(a)(3), F.(b)(3), G.(a), and G.(b) do not apply to any stationary diesel-fueled CI engine used to power equipment that is owned by the National Aeronautics and Space Administration (NASA) and used solely at manned-space flight facilities including launch, tracking, and landing sites, provided the District APCO approves this exemption in writing. This exemption only applies to diesel engines that power equipment which is maintained in the same configuration as similar equipment at all manned space flight facilities.

(p) *Request for Delay in Implementation for Remotely Located In-Use Prime Engines.* Prior to January 1, 2011, the district APCO may approve a Request for Delay in Implementation from the provisions of G.(b)(1) until January 1, 2011, for any in-use stationary diesel-fueled CI engine, provided the approval is in writing, and the writing specifies all the following conditions to be met by the owner or operator:

(1) the engine is a prime engine, and

(2) the engine is located more than one mile from any receptor location, and
(3) the impacts of the emissions from the engine at any receptor location result in:
(A) a prioritization score of less than 1.0; and
(B) a maximum cancer risk of less than 1 in a million; and
(C) a maximum Hazard Index Value of less than 0.1.

(q) *Request for Delay in Implementation of Fuel Requirements.* Prior to January 1, 2006, the district may approve a Request for Delay in implementation from the provisions of E. until a date as determined by the district, for any new or in-use stationary diesel-fueled CI engine, provided the approval is in writing, and the writing specifies the following information:

(1) the engine is a new stationary CI engine or an in-use stationary diesel-fueled CI engine, and
(2) the engine's fuel consumption rate, and
(3) the identification of the fuel in the fuel tank at the time of approval, and
(4) the specification of the fuel in the fuel tank at the time of approval; and
(5) the amount of fuel in the fuel tank at the time of approval; and
(6) the anticipated number of hours per year the engine is planned to be operated; and
(7) the date when compliance with the fuel use requirements specified in section E. is required.

(r) The operational restrictions in sections F.(a)(1) and F.(b)(2) for engines located at or near school grounds do not apply to engines located at or near school grounds that also serve as the students' place of residence, e.g. boarding schools.

(s) The District may exempt any stock engine from the new stationary diesel-fueled engine emission standards in sections F.(a), G.(a), H.(a), and I. provided the seller and the owner or operator demonstrate to the District's satisfaction that the following conditions are met:

(1) *Seller:* Any stationary diesel-fueled engine greater than 50 bhp shall meet the following standards and conditions:
(A) The stationary diesel-fueled engine emission standards in sections F.(b), G.(b), or H.(b), or
(B) The Off-Road CI Engine Certification Standards (title 13, CCR, section 2423) immediately preceding the transition to new standards for an off-road CI engine of the same model year and maximum rated power, and
(C) The engine was delivered to California no more than twelve months immediately preceding the transition to new standards for an off-road CI engine of the same model year and maximum rated power, and
(D) The engine was sold no later than six months after the effective date of the new standards for an off-road CI engine of the same model year and maximum rated power,

(2) *Owner/operator:*
(A) The date of acquisition of the stock engine is no later than six months from the date an emission standard applicable to new engines becomes more stringent than the emission standard to which the stock engine is certified.
(B) The date the District determines the application is complete for an Authority to Construct permit is no later than six months after the date of acquisition of the stock engine.

(t) The requirements of section F.(b)(3) do not apply to any stationary diesel-fueled emergency standby engine primarily used by the United States Department of Defense located at Command Destruct (CT) sites until December 31, 2009. Each stationary diesel-fueled emergency standby engine at a CT site

will be allowed a maximum of 100 total annual hours of operation for maintenance and testing.

(u) Upon the prior written approval of the APCO, the requirements of this REGULATION do not apply to stationary CI engines used exclusively:

(1) as engine test cells and test stands for testing burners, CI engines, or CI engine components, e.g., turbochargers;

(2) for operation or performance testing of fuels, fuel additives, or emission control devices at research and development facilities; or

(3) for maintenance, repair, or rebuild training at educational facilities.

(v) If the Executive Officer or District finds, based on verifiable information from the engine manufacturer, distributor, or dealer, that current model year engines meeting the current emission standards are not available or not available in sufficient numbers or in a sufficient range of makes, models, and horsepower ratings, then the Executive Officer or the District may allow the sale, purchase, or installation of a new stock engine meeting the emission standards from the previous model year to meet the new stationary diesel-fueled engine emission standards pursuant to title 13 of the California Code of Regulations or 40 CFR part 89.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

D. REGULATION for Stationary CI Engines – Definitions.

(a) For purposes of this REGULATION, the following definitions apply:

(1) "Agricultural Operations" means the growing and harvesting of crops or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. Agricultural operations do not include activities involving the processing or distribution of crops or fowl.

(2) "Agricultural Wind Machine" means a stationary CI engine-powered fan used exclusively in agricultural operations to provide protection to crops during cold weather by mixing warmer atmospheric air with the colder air surrounding a crop.

(3) "Air Pollution Control Officer (APCO)" means the person appointed pursuant to section 40750 of the Health and Safety Code, or his or her designated representative.

(4) "Alternative Fuel" means natural gas, propane, ethanol, or methanol.

(5) "Alternative Diesel Fuel" means any fuel used in a CI engine that is not commonly or commercially known, sold, or represented by the supplier as diesel fuel No. 1-D or No. 2-D, pursuant to the specifications in ASTM D 975-81, "Standard Specification for Diesel Fuel Oils," as modified in May 1982, which is incorporated herein by reference, or an alternative fuel, and does not require engine or fuel system modifications for the engine to operate, although minor modifications (e.g., recalibration of the engine fuel control) may enhance performance. Examples of alternative diesel fuels include, but are not limited to, biodiesel and biodiesel blends that do not meet the definition of CARB diesel fuel; Fischer-Tropsch fuels; emulsions of water in diesel fuel; and fuels with a fuel additive, unless:

(A) the additive is supplied to the engine fuel by an on-board dosing mechanism, or

(B) the additive is directly mixed into the base fuel inside the fuel tank of the engine, or

(C) the additive and base fuel are not mixed until engine fueling commences, and no more additive plus base fuel combination is mixed than required for a single fueling of a single engine.

(6) "Approach Light System with Sequenced Flasher Lights in Category 1 and Category 2 Configurations (ALSF-1 and ALSF-2)" means high intensity approach lighting systems with sequenced flashers used at airports to illuminate specified runways during category II or III weather conditions, where category II means a decision height of 100 feet and runway visual

range of 1,200 feet, and category III means no decision height or decision height below 100 feet and runway visual range of 700 feet.
(7) "Baseline" or "Baseline Emissions" means the emissions level of a diesel-fueled engine using CARB diesel fuel as configured upon initial installation or by January 1, 2003, whichever is later.
(8) "California Air Resources Board (CARB) Diesel Fuel" means any diesel fuel that meets the specifications of vehicular diesel fuel, as defined in title 13, CCR, sections 2281 and 2282.
(9) "Cancer Risk" means the characterization of the probability of developing cancer from exposure to environmental chemical hazards, in accordance with the methodologies specified in "The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments," Office of Environmental Health Hazard Assessment, August 2003, which is incorporated herein by reference.
(10) "Carbon Monoxide (CO)" is a colorless, odorless gas resulting from the incomplete combustion of hydrocarbon fuels.
(11) "Certified Engine" means a CI engine that is certified to meet the Tier 1, Tier 2, Tier 3, or Tier 4 Off-Road CI Certification Standards as specified in title 13, California Code of Regulations, section 2423.
(12) "Combustion Gas Turbine Engine" means an internal combustion gas or liquid-fueled device consisting of compressor, combustor, and power turbine used to power an electrical generator.
(13) "Compression Ignition (CI) Engine" means an internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a compression ignition engine.
(14) "Control Area" means any electrical region in California that regulates its power generation in order to balance electrical loads and maintain planned interchange schedules with other control areas.
(15) "Cumulatively" means the aggregation of hours or days of engine use, and any portion of an hour or day of engine use, toward a specified time limit(s).
(16) "Date of Acquisition or Submittal" means
(A) For each District-approved permit or district registration for stationary sources, the date the application for the district permit or the application for engine registration was submitted to the District. Alternatively, upon District approval, the date of purchase as defined by the date shown on the front of the cashed check, the date of the financial transaction, or the date on the engine purchasing agreement, whichever is earliest.
(B) For an engine subject to neither a district permit program nor a district registration program for stationary sources, the date of purchase as defined by the date shown on the front of the cashed check, the date of the financial transaction, or the date on the engine purchasing agreement, whichever is earliest.
(17) "Date of Initial Installation" means one of the following, whichever is earlier:
(A) the date on which a new stationary diesel-fueled engine is placed at a location in order to be operated for the first time since delivery from the manufacturer or distributor, or,
(B) for the purposes of a Tier 1- or Tier 2-certified stationary diesel agricultural engine complying with section H.(b)(3) emission standards, one year from January 1 of the model year of such engine.
(18) "Demand Response Program (DRP)" means a program for reducing electrical demand using an Interruptible Service Contract (ISC) or Rolling Blackout Reduction Program (RBRP).
(19) "Diesel Fuel" means any fuel that is commonly or commercially known, sold, or represented by the supplier as diesel fuel, including any mixture of primarily liquid hydrocarbons – organic compounds consisting exclusively of the elements carbon and

hydrogen – that is sold or represented by the supplier as suitable for use in an internal combustion, compression-ignition engine.
(20) "Diesel-fueled" means fueled by diesel fuel, CARB diesel fuel, or jet fuel, in whole or part.
(21) "Diesel Particulate Filter (DPF)" means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.
(22) "Diesel Particulate Matter (PM)" means the particles found in the exhaust of diesel-fueled CI engines as determined in accordance with the test methods identified in section N.
(23) "Digester Gas" is any gas derived from anaerobic decomposition of organic matter.
(24) "Direct-Drive Emergency Standby Fire Pump Engines" means engines directly coupled to pumps exclusively used in water-based fire protection systems.
(25) "District" has the same meaning as defined in the California Health and Safety Code, Section 39025.
(26) "DRP Engine" means an engine that is enrolled in a DRP.
(27) "Dual-fuel Diesel Pilot Engine" means a dual-fueled engine that uses diesel fuel as a pilot ignition source at an annual average ratio of less than 5 parts diesel fuel to 100 parts total fuel on an energy equivalent basis.
(28) "Dual-fuel Engine" means any CI engine that is engineered and designed to operate on a combination of alternative fuels, such as compressed natural gas (CNG) or liquefied petroleum gas (LPG) and diesel fuel or an alternative diesel fuel. These engines have two separate fuel systems, which inject both fuels simultaneously into the engine combustion chamber.
(29) "Emergency Standby Engine" means a stationary engine that meets the criteria specified in (A) and (B) and any combination of (C) or (D) or (E) or (F) below:

(A) is installed for the primary purpose of providing electrical power or mechanical work during an emergency use and is not the source of primary power at the facility; and
(B) is operated to provide electrical power or mechanical work during an emergency use; and
(C) is operated under limited circumstances for maintenance and testing, emissions testing, or initial start-up testing, as specified in sections F.(a),(b), and (c); or
(D) is operated under limited circumstances in response to an impending outage, as specified in sections F.(a),(b), and (c); or
(E) is operated under limited circumstances under a DRP as specified in section F.(c).
(F) is operated under limited circumstances during a Governor declared (via Executive Order) statewide drought emergency.

(30) "Emergency Use" means providing electrical power or mechanical work during any of the following events and subject to the following conditions:

(A) the failure or loss of all or part of normal electrical power service or normal natural gas supply to the facility:
1. which is caused by any reason other than the enforcement of a contractual obligation the owner or operator has with a third party or any other party; and
2. which is demonstrated by the owner or operator to the district APCO's satisfaction to have been beyond the reasonable control of the owner or operator;
(B) the failure of a facility's internal power distribution system:

1. which is caused by any reason other than the enforcement of a contractual obligation the owner or operator has with a third party or any other party; and

2. which is demonstrated by the owner or operator to the district APCO's satisfaction to have been beyond the reasonable control of the owner or operator;

(C) the pumping of water or sewage to prevent or mitigate a flood or sewage overflow;

(D) the pumping of water for fire suppression or protection;

(E) the powering of ALSF-1 and ALSF-2 airport runway lights under category II or III weather conditions;

(F) the pumping of water to maintain pressure in the water distribution system for the following reasons:

1. a pipe break that substantially reduces water pressure; or

2. high demand on the water supply system due to high use of water for fire suppression; or

3. the breakdown of electric-powered pumping equipment at sewage treatment facilities or water delivery facilities; or

(G) the day-of-launch system checks and launch tracking performed (in parallel with grid power) by the United States Department of Defense at Command Destruct sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch.

(H) the pumping of groundwater for Agricultural Operations during Governor declared ` (via Executive Order) statewide drought emergencies.

(31) "Emission Control Strategy" means any device, system, or strategy employed with a diesel-fueled CI engine that is intended to reduce emissions including, but not limited to, particulate filters, diesel oxidation catalysts, selective catalytic reduction systems, fuel additives used in combination with particulate filters, alternative diesel fuels, and any combination of the above.

(32) "End User" means any person who purchases or leases a stationary diesel-fueled engine for operation in California. Persons purchasing engines for the sole purpose of resale are not considered "end users."

(33) "Enrolled" means either of the following, whichever applies:

(A) the ISC is in effect during the specified time period for an engine in an ISC; or

(B) the date the engine is entered into the RBRP.

(34) "Executive Officer" means the executive officer of the Air Resources Board, or his or her designated representative.

(35) "Facility" means one or more contiguous properties, in actual physical contact or separated solely by a public roadway or other public right-of-way, under common ownership on which engines operate.

(36) "Fuel Additive" means any substance designed to be added to fuel or fuel systems or other engine-related engine systems such that it is present in-cylinder during combustion and has any of the following effects: decreased emissions, improved fuel economy, increased performance of the engine; or assists diesel emission control strategies in decreasing emissions, or improving fuel economy or increasing performance of the engine.

(37) "Generator Set" means a CI engine coupled to a generator that is used as a source of electricity.

(38) "Hazard Index" means the sum of individual acute or chronic hazard quotients for each substance affecting a particular toxicological endpoint, as determined in accordance with the requirements of "The Air Toxics Hot Spots Program Guidance Manual for Preparation of

Health Risk Assessments," Office of Environmental Health Hazard Assessment, August 2003, which is incorporated herein by reference.
(39) "HC" means the sum of all hydrocarbon air pollutants.
(40) "Health Facility" has the same meaning as defined in Section 1250 of the California Health and Safety Code.
(41) "In-Use" means a CI engine that is not a "new" CI engine.
(42) "Initial Start-up Testing" means operating the engine or supported equipment to ensure their proper performance either:
(A) for the first time after installation of a stationary diesel-fueled CI engine at a facility, or
(B) for the first time after installation of emission control equipment on an in-use stationary diesel-fueled CI engine.
(43) "Interruptible Service Contract (ISC)" means a contractual arrangement in which a utility distribution company provides lower energy costs to a nonresidential electrical customer in exchange for the ability to reduce or interrupt the customer's electrical service during a Stage 2 or Stage 3 alert, or during a transmission emergency.
(44) "Jet Fuel" means fuel meeting any of the following specifications:
(A) ASTM D 1655-02, "Standard Specification for Aviation Turbine Fuels," which is incorporated herein by reference. Jet fuels meeting this specification include Jet A, Jet A-1, and Jet B;
(B) Military Detail (MIL-DTL) 5624T, "Turbine Fuels, Aviation, Grades Jet Propellant (JP) JP-4, JP-5, and JP-5/JP8 ST," dated September 18, 1998, which is incorporated herein by reference; and
(C) Military Test (MIL-T) 83133E, "Turbine Fuels, Aviation, Kerosene Types, North Atlantic Treaty Organization (NATO) F-34 (JP-8), NATO F-35, and JP-8+100," dated April 1, 1999, which is incorporated herein by reference.
(45) "Landfill Gas" means any gas derived through any biological process from the decomposition of waste buried within a waste disposal site.
(46) "Location" means any single site at a facility.
(47) "Low-Use Agricultural Engine" means a diesel-fueled engine used exclusively in agricultural operations for limited hours on a cumulative basis in accordance with the requirements of this definition, including, but not limited to, engines used for frost protection, and spraying operations. The owners or operators of a low-use engine request and accept a total operating hours limitation as determined by a site specific health risk analysis, as determined by the methodologies specified in the Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, Office of Environmental Health Hazard Assessment, August 2003, and remove the low-use engine from service in accordance with the dates listed in Table 1 below.

TABLE 1: LOW-USE ENGINE EXEMPTION FOR GREATER THAN 50 BHP IN-USE STATIONARY DIESEL-FUELED ENGINES USED IN AGRICULTURAL OPERATIONS
(see Section 106 D.(47))

Engine Certification	*Replacement by December 31 of*
Non-Certified	2020
Tier 1	2025
Tier 2	2025

(48) "Maintenance and Testing" means operating an emergency standby CI engine to:
(A) evaluate the ability of the engine or its supported equipment to perform during an emergency. "Supported Equipment" includes, but is not limited to, generators, pumps, transformers, switchgear, and breakers; or

(B) facilitate the training of personnel on emergency activities; or

(C) provide electric power for the facility when the utility distribution company takes its power distribution equipment offline to service that equipment for any reason that does not qualify as an emergency use; or

(D) provide additional hours of operation to perform testing on an engine that has experienced a breakdown or failure during maintenance. Upon air district approval, these additional hours of operation will not be counted in the maximum allowable annual hours of operation for the emergency standby CI engine that provided the electrical power.

(49) "Maximum Rated Power" means the maximum brake kilowatt output of an engine as determined from any of the following, whichever is the greatest:

(A) the manufacturer's sales and service literature,

(B) the nameplate of the unit, or

(C) if applicable, as shown in the application for certification of the engine.

(50) "Model Year" means the stationary CI engine manufacturer's annual production period, which includes January 1st of a calendar year, or if the manufacturer has no annual production period, the calendar year.

(51) "New" or "New CI Engine" means the following:

(A) a stationary CI engine installed at a facility after January 1, 2005, including an engine relocated from an off-site location after January 1, 2005, except the following shall be deemed in-use engines:

1. a replacement stationary CI engine that is installed to temporarily replace an in-use engine while the in-use engine is undergoing maintenance and testing, provided the replacement engine emits no more than the in-use engine, and the replacement engine is not used more than 180 days cumulatively in any 12-month rolling period;

2. an engine for which a district-approved application for a district permit or engine registration for stationary sources was submitted to the District prior to January 1, 2005, even though the engine was installed after January 1, 2005;

3. an engine that is one of four or more engines owned by an owner or operator and is relocated prior to January 1, 2008, to an offsite location that is owned by the same owner or operator;

4. an engine, or replacement for an engine, used in agricultural operations that is relocated within the same facility or to another facility under the same owner or operator for use in agricultural operations, unless the engine is sited where an engine is not currently located and has not been previously located.

5. an engine installed at a facility prior to January 1, 2005, and relocated within the same facility after January 1, 2005.

6. a model year 2004 or 2005 engine purchased prior to January 1, 2005, for use in California. The date of purchase is defined by the date shown on the front of the cashed check, the date of the financial transaction, or the date on the engine purchasing agreement, whichever is earliest.

7. a greater than 50 bhp Tier 1- or Tier 2-certified stationary diesel agricultural engine installed after January 1, 2005, shall be considered a new engine subject to the requirements of section H.(a) until 12 years after the date of initial installation, at which time, it shall be considered an in-use engine subject to the requirements of section H.(b)(3).

(B) a stationary CI engine that has been reconstructed after January 1, 2005, shall be deemed a new engine unless the sum of the costs of all individual reconstructions of

that engine after January 1, 2005, is less than 50% of the lowest-available purchase price, determined at the time of the most recent reconstruction, of a complete, comparably-equipped new engine (within ± 10% of the reconstructed engine's brake horsepower rating).For purposes of this definition, the cost of reconstruction and the cost of a comparable new engine shall not include the cost of equipment and devices required to meet the requirements of this REGULATION.

(52) "Nitrogen Oxides (NOx)" means compounds of nitric oxide (NO), nitrogen dioxide ($N0_2$), and other oxides of nitrogen, which are typically created during combustion processes and are major contributors to smog formation and acid deposition.

(53) "Noncertified Engine" means a CI engine that is not certified to Off-Road CI Certification Standards as specified in title 13, California Code of Regulations, section 2423.

(54) "Non-Methane Hydrocarbons (NMHC)" means the sum of all hydrocarbon air pollutants except methane.

(55) "Outer Continental Shelf (OCS)" shall have the meaning provided by section 2 of the Outer Continental Shelf Lands Act (43 U.S.C. Section 1331 et seq.).

(56) "Owner or Operator" means any person subject to the requirements of this REGULATION, including but not limited to:

(A) an individual, trust, firm, joint stock company, business concern, partnership, limited liability company, association, or corporation including but not limited to, a government corporation; and

(B) any city, county, district, commission, the state or any department, agency, or political subdivision thereof, any interstate body, and the federal government or any department or agency thereof to the extent permitted by law.

(57) "Particulate Matter (PM)" means the particles found in the exhaust of CI engines, which may agglomerate and adsorb other species to form structures of complex physical and chemical properties.

(58) "Portable CI Engine" means a compression ignition (CI) engine designed and capable of being carried or moved from one location to another, except as provided in section D.(a)(73). Indicators of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. The provisions of this definition notwithstanding, an engine with indicators of portability that remains at the same facility location for more than 12 consecutive rolling months or 365 rolling days, whichever occurs first, not including time spent in a storage facility, shall be deemed a stationary engine.

(59) "Prime CI Engine" means a stationary CI engine that is not an emergency standby CI engine.

(60) "Prioritization Score" means the numeric value used to rank facilities in order of their potential to pose significant risk to human receptors. Prioritization scores are calculated per the process described in the "CAPCOA Districts 'Hot Spots' Program Facility Prioritization Guidelines," California Air Pollution Control Officer's Association (CAPCOA), July 1990, which is incorporated herein by reference.

(61) "Rated Brake Horsepower (bhp)" means:

(A) for in-use engines, the maximum brake horsepower output of an engine as determined from any of the following, whichever reflects the engine's configuration as of January 1, 2005:

1. the manufacturer's sales and service literature;
2. the nameplate of the engine; or
3. if applicable, as shown in the application for certification of the engine;

(B) for new engines, the maximum brake horsepower output of an engine as determined from any of the following, whichever reflects the engine's configuration upon the engine's initial installation at the facility:

1. the manufacturer's sales and service literature;
2. the nameplate of the engine; or

3. if applicable, as shown in the application for certification of the engine.

(62) "Receptor location" means any location outside the boundaries of a facility where a person may experience exposure to diesel exhaust due to the operation of a stationary diesel-fueled CI engine. Receptor locations include, but are not limited to, residences, businesses, hospitals, daycare centers, and schools.

(63) "Reconstruction" means the rebuilding of the engine or the replacement of engine parts, including pollution control devices, but excluding operating fluids; lubricants; and other consumables such as air filters, fuel filters, and glow plugs that are subject to regular replacement.

(64) "Remotely-Located Agricultural Engine" means a stationary diesel-fueled CI engine used in agriculture that is:

(A) located in a federal ambient air quality area that is designated as unclassifiable or attainment for all PM and ozone national ambient air quality standards (title 40, Code of Federal Regulations, section 81.305); and

(B) located more than one-half mile from any residential area, school, or hospital.

(65) "Residential Area" means three or more permanent residences (i.e., homes) located anywhere outside the facility's property.

(66) "Rolling Blackout Reduction Program (RBRP)" means a contractual arrangement, implemented by the San Diego Gas and Electric Company (SDG&E) in San Diego County, in which SDG&E pays a nonresidential electrical customer, in accordance with the most current RBRP Schedule, in exchange for the customer using its diesel-fueled engines to reduce its electrical demand upon request by SDG&E during either a Stage 3 alert or a transmission emergency.

(67) "Rotating Outage" means a controlled, involuntary curtailment of electrical power service to consumers as ordered by the Utility Distribution Company.

(68) "School" or "School Grounds" means any public or private school used for purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in a private home(s). "School" or "School Grounds" includes any building or structure, playground, athletic field, or other areas of school property but does not include unimproved school property.

(69) "Selective Catalytic Reduction (SCR) System" means an emission control system that reduces NOx emissions through the catalytic reduction of NOx in diesel exhaust by injecting nitrogen-containing compounds into the exhaust stream, such as ammonia or urea.

(70) "Seller" means any person who sells, leases, or offers for sale any stationary diesel-fueled engine directly to end users.

(71) "Stage 2 Alert" means an official forecast or declaration by the California Independent System Operator that the operating reserves of electrical power will fall or have fallen below 5 percent.

(72) "Stage 3 Alert" means an official forecast or declaration by the California Independent System Operator that the operating reserves of electrical power will fall or have fallen below 1.5 percent.

(73) "Stationary CI Engine" means a CI engine that is designed to stay in one location, or remains in one location. A CI engine is stationary if any of the following are true:

(A) the engine or its replacement is attached to a foundation, or if not so attached, resides at the same location for more than 12 consecutive months. Any engine such as backup or standby engines, that replaces an engine at a location and is intended to perform the same or similar function as the engine(s) being replaced, shall be included in calculating the consecutive time period. The cumulative time of all engine(s), including the time between the removal of the original engine(s) and installation of the replacement engine(s), will be counted toward the consecutive time period; or

(B) the engine remains or will reside at a location for less than 12 consecutive months if the engine is located at a seasonal source and operates during the full annual operating period of the seasonal source, where a seasonal source is a stationary source that remains in a single location on a permanent basis (at least two years) and that operates at that single location at least three months each year; or

(C) the engine is moved from one location to another in an attempt to circumvent the 12 month residence time requirement. The period during which the engine is maintained at a storage facility shall be excluded from the residency time determination.

(74) "Stationary Source" means any building, structure, facility, or installation that emits any pollutant directly or as fugitive emissions. Building, structure, facility, or installation include all pollutant emitting activities which:

(A) are under the same ownership or operation, or which are owned or operated by entities which are under common control; and

(B) belong to the same industrial grouping either by virtue of falling within the same two-digit standard industrial code or by virtue of being part of a common industrial process, manufacturing process, or connected process involving a common raw material; and

(C) are located on one or more contiguous or adjacent properties.

(75) "Stock Engine" means a certified CI engine that has never been placed in service and is part of a supply of engines offered for sale, rent, or lease by a person or firm who offers for sale, rent, or lease engines and related equipment for profit.

(76) "Transmission Constrained Area" means the specific location that is subject to localized operating reserve deficiencies due to the failure of the normal electrical power distribution system.

(77) "Transmission Emergency" means an official forecast or declaration by the California Independent System Operator that the available electrical power transmission capacity to a transmission constrained area is insufficient and may result in an uncontrolled local grid collapse in the transmission constrained area.

(78) "Utility Distribution Company" means one of several organizations that control energy transmission and distribution in California. Utility Distribution Companies include, but are not limited to, the Pacific Gas and Electric Company, the San Diego Gas and Electric Company, Southern California Edison, Los Angeles Department of Water and Power, the Imperial Irrigation District, and the Sacramento Municipal Utility District.

(79) "Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines (Verification Procedure)" means the ARB regulatory procedure codified in title 13, CCR, sections 2700-2710, which is incorporated herein by reference, that engine manufacturers, sellers, owners, or operators may use to verify the reductions of diesel PM or NOx from in-use diesel engines using a particular emission control strategy.

(80) "Verified Diesel Emission Control Strategy" means an emission control strategy, designed primarily for the reduction of diesel PM emissions, which has been verified pursuant to the "Verification Procedure."

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

E. REGULATION for Stationary CI Engines – Fuel and Fuel Additive Requirements for New and In-Use Stationary CI Engines That Have a Rated Brake Horsepower of Greater than 50 (>50 bhp)

(a) As of January 1, 2006, except as provided for in sections C. and E.(c), no owner or operator of a new stationary CI engine or an in-use prime stationary diesel-fueled CI engine shall fuel the engine with any fuel unless the fuel is one of the following:

(1) CARB Diesel Fuel; or

(2) an alternative diesel fuel that is:
(A) biodiesel;
(B) a biodiesel blend that does not meet the definition of CARB Diesel Fuel;
(C) a Fischer-Tropsch fuel; or
(D) an emulsion of water in diesel fuel; or
(3) any alternative diesel fuel that is not identified in section E.(a)(2) above and meets the requirements of the Verification Procedure; or
(4) an alternative fuel; or
(5) CARB Diesel Fuel used with fuel additives that meets the requirements of the Verification Procedure; or
(6) any combination of E.(a)(1) through (5) above.

(b) As of January 1, 2006, except as provided for in section C., no owner or operator of an in-use emergency standby stationary diesel-fueled CI engine shall add to the engine or any fuel tank directly attached to the engine any fuel unless the fuel is one of the following:
(1) CARB Diesel Fuel; or
(2) an alternative diesel fuel that is:
(A) biodiesel;
(B) a biodiesel blend that does not meet the definition of CARB Diesel Fuel;
(C) a Fischer-Tropsch fuel; or
(D) an emulsion of water in diesel fuel; or
(3) any alternative diesel fuel that is not identified in section E.(b)(2) above and meets the requirements of the Verification Procedure; or
(4) an alternative fuel; or
(5) CARB Diesel Fuel used with fuel additives that meets the requirements of the Verification Procedure; or
(6) any combination of E.(b)(1) through (5) above.

(c) Upon the effective date of the amendments to add in-use stationary diesel-fueled agricultural engine requirements to the REGULATION, no owner or operator of an in-use stationary diesel-fueled CI engine used in agricultural operations shall fuel the engine with any fuel unless the fuel is one of the following:
(1) CARB Diesel Fuel; or
(2) an alternative diesel fuel that is:
(A) biodiesel;
(B) a biodiesel blend that does not meet the definition of CARB Diesel Fuel;
(C) a Fischer-Tropsch fuel; or
(D) an emulsion of water in diesel fuel; or
(3) any alternative diesel fuel that is not identified in section E.(c)(2) above and meets the requirements of the Verification Procedure; or
(4) an alternative fuel; or
(5) CARB Diesel Fuel used with fuel additives that meets the requirements of the Verification Procedure; or
(6) any combination of E.(c)(1) through (5) above.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

F. REGULATION for Stationary CI Engines – Emergency Standby Diesel-Fueled CI Engine (>50 bhp) Operating Requirements and Emission Standards.

(a) New Emergency Standby Diesel-Fueled CI Engine (>50 bhp) Operating Requirements and Emission Standards.

(1) *At-School and Near-School Provisions.* No owner or operator shall operate a new stationary emergency standby diesel-fueled CI engine for non-emergency use, including maintenance and testing, during the following periods:

(A) whenever there is a school sponsored activity, if the engine is located on school grounds, and

(B) between 7:30 a.m. and 3:30 p.m. on days when school is in session, if the engine is located within 500 feet of school grounds. Section F.(a)(1) does not apply if the engine emits no more than 0.01 g/bhp-hr of diesel PM.

(2) No owner or operator shall operate any new stationary emergency standby diesel-fueled CI engine (>50 bhp) in response to the notification of an impending rotating outage, unless all the following criteria are met:

(A) the engine's permit to operate allows operation of the engine in anticipation of a rotating outage, or the District has established a policy or program that authorizes operation of the engine in anticipation of a rotating outage; and

(B) the Utility Distribution Company has ordered rotating outages in the control area where the engine is located, or has indicated it expects to issue such an order at a specified time; and

(C) the engine is located in a specific location that is subject to the rotating outage; and

(D) the engine is operated no more than 30 minutes prior to the time when the Utility Distribution Company officially forecasts a rotating outage in the control area; and

(E) the engine operation is terminated immediately after the Utility Distribution Company advises that a rotating outage is no longer imminent or in effect.

(3) *New Engines*: As of January 1, 2005, except as provided in section C., no person shall sell, offer for sale, purchase, or lease for use in California any new stationary emergency standby diesel-fueled CI engine that has a rated brake horsepower greater than 50 unless it meets the following applicable emission standards, and no person shall operate any new stationary emergency standby diesel-fueled CI engine that has a rated brake horsepower greater than 50, unless it meets all of the following applicable operating requirements and emission standards specified in F.(a)(3) (which are summarized in Table 2):

(A) *Diesel PM Standard and Hours of Operating Requirements.*

1. *General Requirements*: New stationary emergency standby diesel-fueled engines (>50 bhp) shall:

a. emit diesel PM at a rate less than or equal to 0.15 g/bhp-hr; or

b. meet the diesel PM standard, as specified in the Off-Road Compression Ignition Engine Standards for off-road engines with the same maximum rated power (title 13 CCR, section 2423), in effect on the date of acquisition or submittal, as defined in section D. whichever is more stringent; and

c. not operate more than 50 hours per year for maintenance and testing purposes, except as provided in F.(a)(3)(A)2. This subsection does not limit engine operation for emergency use and for emission testing to show compliance with F.(a)(3).

2. The District may allow a new emergency standby diesel-fueled CI engine (> 50 hp) to operate up to 100 hours per year for maintenance and testing purposes on a site-specific basis, provided the diesel PM emission rate is less than or equal to 0.01 g/bhp-hr.

Table 2: Summary of the Emission Standards and Operating Requirements for New Stationary Emergency Standby Diesel-Fueled CI Engines > 50 BHP (See section F.(a)(3))

Diesel PM				*Other Pollutants*
Diesel PM Standards (g/bhp-hr)	*Maximum Allowable Annual Hours of Operation for Engines Meeting Diesel PM Standards*			*HC, NOx, NMHC+NOx, and CO Standards (g/bhp-hr)*
	Emergency Use	*Non-Emergency Use*		
		Emission Testing to show compliance[2]	*Maintenance & Testing (hours/year)*	
≤0.15[1]	Not Limited by REGULATION[3]	Not Limited by REGULATION[3]	50	Off-Road CI Engine Certification Standards for an off-road engine of the model year and horsepower rating of the engine installed to meet the applicable PM standard, or Tier 1 standards.[4]
≤0.01[1]	Not Limited by REGULATION[3]	Not Limited by REGULATION[3]	51 to 100 (Upon approval by the District)	

1. Or off-road certification standard (title 13 CCR section 2423) for an off-road engine with the same maximum rated power, whichever is more stringent.
2. Emission testing limited to testing to show compliance with section F.(a)(3).
3. May be subject to emission or operational restrictions as defined in current applicable district Regulations, regulations, or policies.
4. The option to comply with the Tier 1 standards is available only if no off-road engine certification standards have been established for an off-road engine of the same model year and maximum rated power as the new stationary emergency standby diesel-fueled CI engine.

(B) *HC, NOx, NMHC + NOx, and CO standards*: New stationary emergency standby diesel-fueled CI engines (> 50 bhp) must meet the standards for off-road engines of the same model year and maximum rated power as specified in the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423). If no standards have been established for an off-road engine of the same model year and maximum rated power as the new stationary emergency standby diesel-fueled CI engine, then the new stationary emergency standby diesel-fueled CI engine shall meet the Tier 1 standards in title 13, CCR, section 2423 for an off-road engine of the same maximum rated power, irrespective of

the new stationary emergency standby diesel-fueled CI engine's model year.

(C) The District:

1. may establish more stringent diesel PM, NMHC+NOx, HC, NOx, and CO emission rate standards; and
2. may establish more stringent limits on hours of maintenance and testing on a site-specific basis; and
3. shall determine an appropriate limit on the number of hours of operation for demonstrating compliance with other District Regulations and initial start-up testing.

(4) *New Direct-Drive Emergency Standby Fire Pump Engines*: Except as provided in section C., no person shall sell, offer for sale, purchase, or lease for use in California any new direct-drive emergency standby diesel-fueled fire-pump engine that has a rated brake horsepower greater than 50 unless it meets either the emission standards of section F.(a)(3) or the emission standards defined in section F.(a)(4), and no person shall operate any new stationary emergency standby diesel-fueled CI engine that has a rated brake horsepower greater than 50, unless it meets all of the applicable operating requirements and emission standards specified in either F.(a)(3) or F.(a)(4).

(A) *Standards and Hours of Operating Requirements.*

1. *General Requirements*: New direct-drive emergency standby diesel-fueled fire-pump engines (>50 bhp) shall, upon District approval of installation:
   a. meet the Tier 2 emission standards specified in the Off-Road Compression Ignition Engine Standards for off-road engines with the same maximum rated power (title 13 CCR, section 2423) until 3 years after the date the Tier 3 standards are applicable for off-road engines with the same maximum rated power. At that time, new direct-drive emergency standby diesel-fueled fire-pump engines (>50 bhp) are required to meet the Tier 3 emission standards, until 3 years after the date the Tier 4 standards are applicable for off-road engines with the same maximum rated power. At that time, new direct-drive emergency standby diesel-fueled fire-pump engines (>50 bhp) are required to meet the Tier 4 emission standards; and
   b. not operate more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference. This subsection does not limit engine operation for emergency use and for emission testing to show compliance with F.(a)(4).

(B) The District:

1. may establish more stringent diesel PM, NMHC+NOx, HC, NOx, and CO emission rate standards; and
2. may establish more stringent limits on hours of maintenance and testing on a site-specific basis; and
3. shall determine an appropriate limit on the number of hours of operation for demonstrating compliance with other District Regulations and initial start-up testing.

(b) In-Use Emergency Standby Diesel-Fueled CI Engine (> 50 bhp) Operating Requirements and Emission Standards.

(1) No owner or operator shall operate any in-use stationary emergency standby diesel-fueled CI engine in response to the notification of an impending rotating outage unless all the following criteria are met:

(A) the engine's permit to operate allows operation of the engine in anticipation of a rotating outage, or the District has established a policy or program that authorizes operation of the engine in anticipation of a rotating outage; and

(B) the Utility Distribution Company has ordered rotating outages in the control area where the engine is located, or has indicated it expects to issue such an order at a certain time; and

(C) the engine is located in a specific location that is subject to the rotating outage; and

(D) the engine is operated no more than 30 minutes prior to the time when the Utility Distribution Company officially forecasts a rotating outage in the control area; and

(E) the engine operation is terminated immediately after the Utility Distribution Company advises that a rotating outage is no longer imminent or in effect.

(2) *At-School and Near-School Provisions*. No owner or operator shall operate an in-use stationary emergency standby diesel-fueled CI engine for non-emergency use, including maintenance and testing, during the following periods:

(A) whenever there is a school sponsored activity, if the engine is located on school grounds, and

(B) between 7:30 a.m. and 3:30 p.m. on days when school is in session, if the engine is located within 500 feet of school grounds.

Section F.(b)(2) does not apply if the engine emits no more than 0.01 g/bhp-hr of diesel PM.

(3) Except as provided in section C., no owner or operator shall operate an in-use stationary emergency standby diesel-fueled CI engine (> 50 hp) in California unless it meets, in accordance with the applicable compliance schedules specified in sections K and L, the following requirements (which are summarized in Table 3):

Table 3: Summary of the Emission Standards and Operating Requirements for In-Use Stationary Emergency Standby Diesel-Fueled CI Engines > 50 BHP
(See section F.(b)(3))

Diesel PM				*Other Pollutants*
Diesel PM Standards (g/bhp-hr)	*Maximum Allowable Annual Hours of Operation for Engines Meeting Diesel PM Standards*			*HC, NOx, NMHC+NOx, and CO Standards (g/bhp-hr)*
	Emergency Use	*Non-Emergency Use*		
		Emission Testing to show compliance[1]	*Maintenance & Testing (hours/year)*	
>0.40[2]	Not Limited by REGULATION[2]	Not Limited by REGULATION[2]	20	Not limited by REGULATION[2]
>0.15 and ≤0.40	Not Limited by REGULATION[2]	Not Limited by REGULATION[2]	21 to 30	For engines with emission control strategies not verified through the verification procedure: Off-Road CI Engine Certification Standards for an off-road engine of the model year and maximum rated power of the engine installed to meet the applicable PM standard, or Tier 1 standards.[3] OR Both (i) and (ii) must be met: (i) No increase in HC or NOx above 10% from baseline levels OR No increase in NMHC+NOx emissions above baseline levels (ii) No increase in CO above 10% from baseline levels
>0.01 and ≤0.15	Not Limited by REGULATION[2]	Not Limited by REGULATION[2]	31 to 50 (Upon approval by the District)	
≤0.01	Not Limited by REGULATION[2]	Not Limited by REGULATION[2]	51 to 100 (Upon approval by the District)	

1. Emission testing limited to testing to show compliance with section F.(b)(3).
2. May be subject to emission or operational restrictions as defined in current applicable district Regulations, regulations, or policies.
3. The option to comply with the Tier 1 standards is available only if no off-road engine certification standards have been established for an off-road engine of the same model year and maximum rated power as the new stationary emergency standby diesel-fueled CI engine.

(A) *Diesel PM Standard and Hours of Operation Limitations.*

1. *General Requirements:*

a. No owner or operator shall operate an in-use stationary emergency standby diesel-fueled CI engine (>50 bhp) that emits diesel PM at a rate greater than 0.40 g/bhp-hr more than 20 hours per year for maintenance and testing purposes. The District may approve up to 20 additional hours per year for the maintenance and testing of such in-use emergency standby diesel-fueled CI engines operated at health facilities. This subsection does not limit engine operation for emergency use and for emission testing to show compliance with F.(b)(3).

b. No owner or operator shall operate an in-use stationary emergency standby diesel-fueled CI engine (>50 bhp) that emits diesel PM at a rate less than or equal to 0.40 g/bhp-hr more than 30 hours per year for maintenance and testing purposes, except as provided in F.(b)(3)(A)2. This subsection does not limit engine operation for emergency use and for emission testing to show compliance with F.(b)(3).

2. The District may allow in-use stationary emergency standby diesel-fueled CI engines (> 50 bhp) to operate more than 30 hours per year for maintenance and testing purposes on a site-specific basis, provided the following limits are met:

a. Up to 40 annual hours of operation are allowed for maintenance and testing purposes at a health facility if the diesel PM emission rate is greater than 0.15 g/bhp-hr but less than or equal to 0.40 g/bhp-hr.

b. Up to 50 annual hours of operation are allowed for maintenance and testing purposes if the diesel PM emission rate is less than or equal to 0.15 g/bhp-hr.

c. Up to 100 annual hours of operation are allowed for maintenance and testing purposes if the diesel PM emission rate is less than or equal to 0.01 g/bhp-hr.

(B) *Additional Standards:*

Owners or operators that choose to meet the diesel PM standards defined in section F.(b)(3)(A) with emission control strategies that are not verified through the Verification Procedure shall either:

1. Meet the applicable HC, NOx, NMHC+NOx, and CO standards for off-road engines of the same model year and maximum rated power as specified in the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423). If no standards have been established for an off-road engine of the same model year and maximum rated power as the in-use stationary emergency standby diesel-fueled CI engine, then the in-use stationary emergency standby diesel-fueled CI engine shall meet the Tier 1 standards in title 13, CCR, section 2423 for an off-road engine of the same maximum rated power, irrespective of the in-use stationary emergency standby diesel-fueled CI engine's model year; Or

2. Not increase CO emission rates by more than 10% above baseline; and

Not increase HC or NOx emission rates by more than 10% above baseline; or

Not increase the sum of NMHC and NOx emission rates above baseline.

(C) The District:

1. may establish more stringent diesel PM, NMHC+NOx, HC, NOx, and CO emission rate standards; and
2. may establish more stringent limits on hours of maintenance and testing on a site-specific basis; and
3. shall determine an appropriate limit on the number of hours of operation for demonstrating compliance with other District Regulations and initial start-up testing.

(c) ***Operating Requirements and Emission Standards for New and In-Use Emergency Standby Stationary Diesel-Fueled CI Engines that Have a Rated Brake Horsepower of Greater than 50 (>50 bhp) Used in Demand Response Programs (DRP Engines).***

(1) *New Emergency Standby Diesel-Fueled CI DRP Engines (>50 bhp) Operating Requirements and Emission Standards.*

(A) *At-School and Near-School Provisions.* No owner or operator shall operate a new stationary emergency standby diesel-fueled CI DRP engine for non-emergency use, including maintenance and testing, during the following periods:

1. whenever there is a school sponsored activity, if the engine is located on school grounds; and
2. between 7:30 a.m. and 3:30 p.m. on days when school is in session, if the engine is located within 500 feet of school grounds. Section F.(c)(1)(A) does not apply if the engine emits no more than 0.01 g/bhp-hr of diesel PM.

(B) No owner or operator shall operate any new stationary emergency standby diesel-fueled CI DRP engine (>50 bhp) in response to the notification of an impending rotating outage, unless the engine is operating pursuant to a DRP, or all of the following criteria are met:

1. the engine's permit to operate allows operation of the engine in anticipation of a rotating outage, or the District has established a policy or program that authorizes operation of the engine in anticipation of a rotating outage; and
2. the Utility Distribution Company has ordered rotating outages in the control area where the engine is located, or has indicated it expects to issue such an order at a specified time; and
3. the engine is in a specific location that is subject to the rotating outage in the control area; and
4. the engine is operated no more than 30 minutes prior to the time when the Utility Distribution Company officially forecasts a rotating outage in the control area; and
5. the engine operation is terminated immediately after the Utility Distribution Company advises that a rotating outage is no longer imminent or in effect.

(C) Except as provided in section C., no owner or operator shall operate any new stationary emergency standby diesel-fueled CI DRP engine (>50 bhp),

unless it meets all of the following applicable operating requirements and emission standards:

1. *Diesel PM Standard and Hours of Operating Requirements.*
   a. New DRP Engines enrolled in the RBRP on or after January 1, 2005, and prior to January 1, 2008, shall:
      (i.) meet the requirements specified in F.(a)(3) and
      (ii.) not operate more than 75 hours per year for RBRP operation.
   b. New DRP Engines enrolled in the RBRP on or after January 1, 2008, shall:
      (i.) meet the more stringent diesel PM standard of either 0.01 g/bhp-hr of diesel PM; or
      (ii.) the current model year diesel PM standard as specified in the Off-Road Compression Ignition Engine Standards for off-road engines with the same maximum rated power (title 13, CCR, section 2423) in effect on the date of RBRP enrollment; and
      (iii.) comply with the limitations on the hours of operation for maintenance and testing as specified in F.(a)(3)(A)2.;
      and
      (iv.) not operate more than 75 hours per year for RBRP operation.
   c. New DRP Engines enrolled in an ISC on or after January 1, 2005, shall:
      (i.) meet the more stringent diesel PM standard of either 0.01 g/bhp-hr diesel PM; or
      (ii.) the current model year diesel PM standard as specified in the Off-Road Compression Ignition Engine Standards for off-road engines with the same maximum rated power (title 13, CCR, section 2423) in effect on the date of ISC enrollment; and
      (iii.) comply with the limitations on the hours of operation for maintenance and testing as specified in F.(a)(3)(A)2.; and
      (iv.) not operate more than 150 hours per year for ISC operation.
2. *HC, NOx, NMHC + NOx, and CO standards:* No owner or operator shall operate any new stationary emergency standby diesel-fueled CI DRP engine (>50 bhp), unless it meets the standards for off-road engines of the same model year and maximum rated power as specified in the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423). If no standards have been established for an off-road engine of the same model year and maximum rated power as the new stationary emergency standby diesel-fueled CI DRP engine, then the new stationary emergency standby diesel-fueled CI DRP engine shall meet the Tier 1 standards in title 13, CCR, section 2423 for an off-road engine of the same maximum rated power, irrespective of the new stationary emergency standby diesel-fueled CI DRP engine's model year.

3. A District:
   a. may establish more stringent diesel PM, NMHC+NOx, HC, NOx, and CO emission rate standards; and
   b. may establish more stringent maintenance and testing hour of operation standards on a site-specific basis; and
   c. shall determine an appropriate limit on the number of hours of operation for demonstrating compliance with other District Regulations and initial start-up testing.

(2) *In-Use Emergency Standby Diesel-Fueled CI DRP Engine (> 50 bhp) Operating Requirements and Emission Standards.*

(A) *At-School and Near-School Provisions.* No owner or operator shall operate an in-use stationary emergency standby diesel-fueled CI engine for non-emergency use, including maintenance and testing during the following periods:
1. whenever there is a school sponsored activity, if the engine is located on school grounds; and
2. between 7:30 a.m. and 3:30 p.m. on days when school is in session, if the engine is located within 500 feet of school grounds. Section F.(c)(2)(A) does not apply if the engine emits no more than 0.01 g/bhp-hr of diesel PM.

(B) No owner or operator shall operate any in-use stationary emergency standby diesel-fueled CI DRP engine (>50 bhp) in response to the notification of an impending rotating outage, unless the engine is operating pursuant to a DRP, or all of the following criteria are met:
1. the engine's permit to operate allows operation of the engine in anticipation of a rotating outage, or the District has established a policy or program that authorizes operation of the engine in anticipation of a rotating outage; and
2. the Utility Distribution Company has ordered rotating outages in the control area where the engine is located, or has indicated it expects to issue such an order at a certain time; and
3. the engine is in a specific location that is subject to the rotating outage in the control area; and
4. the engine is operated no more than 30 minutes prior to the time when the Utility Distribution Company officially forecasts a rotating outage in the control area; and
5. the engine operation is terminated immediately after the Utility Distribution Company advises that a rotating outage is no longer imminent or in effect.

(C) Except as provided in section C., no owner or operator shall operate any in-use stationary emergency standby diesel-fueled CI DRP engine (> 50 hp) unless it meets all of the following applicable operating requirements and emission standards:
1. *Diesel PM Standard and Hours of Operation Requirements.*
   a. In-Use DRP Engines enrolled in the RBRP prior to January 1, 2005, shall:
      (i.) meet the diesel PM standards and hour of operation limitations specified in F.(b)(3)(A) and (B); and
      (ii.) not operate more than 75 hours per year for RBRP operation.
   b. In-Use DRP Engines enrolled in the RBRP on or after January 1, 2005, and prior to January 1, 2008, shall:

(i.) meet a diesel PM standard of 0.15 g/bhp-hr diesel PM; and
(ii.) meet the requirements specified in F.(b)(3)(A) for maintenance and testing hours of operation; and
(iii.) not operate more than 75 hours per year for RBRP operation.

c. In-Use DRP Engines enrolled in the RBRP on or after January 1, 2008, shall:
(i.) meet a diesel PM standard of 0.01 g/bhp-hr diesel PM; and
(ii.) meet the requirements specified in F.(b)(3)(A) for maintenance and testing hours of operation; and
(iii.) not operate more than 75 hours per year for RBRP operation.

d. In-Use DRP Engines enrolled in an ISC prior to January 1, 2005, shall as of January 1, 2006:
(i.) meet a diesel PM standard of 0.15 g/bhp-hr diesel PM; and
(ii.) meet the requirements specified in F.(b)(3)(A) for maintenance and testing hours of operation; and
(iii.) not operate more than 150 hours per year for ISC operation.

e. In-Use DRP Engines enrolled in an ISC on or after January 1, 2005, and prior to January 1, 2008, shall:
(i.) meet a diesel PM standard of 0.15 g/bhp-hr diesel PM; and
(ii.) meet the requirements specified in F.(b)(3)(A) for maintenance and testing hours of operation; and
(iii.) not operate more than 150 hours per year for ISC operation.

f. In-Use DRP Engines enrolled in an ISC on or after January 1, 2008, shall:
(i.) meet a diesel PM standard of 0.01 g/bhp-hr diesel PM; and
(ii.) meet the requirements specified in F.(b)(3)(A) for maintenance and testing hours of operation; and
(iii.) not operate more than 150 hours per year for ISC operation.

2. *Additional Standards.*

Owners or operators that choose to meet the diesel PM standards and hour of operation limits defined in section F.(c)(2)(C) with emission control strategies that are not verified through the Verification Procedure shall either:

a. Meet the applicable HC, NOx, NMHC+NOx, and CO standards for off-road engines of the same model year and maximum rated power as specified in the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423). If no standards have been established for an off-road engine of the same model year and maximum rated power as the in-use stationary emergency standby diesel-fueled CI DRP engine, then the in-use stationary emergency standby diesel-fueled CI DRP engine shall meet the Tier 1 standards in title 13, CCR, section

2423 for an off-road engine of the same maximum rated power, irrespective of the in-use stationary emergency standby diesel-fueled CI DRP engine's model year; or

b. Not increase CO emission rates by more than 10% above baseline; and not increase HC or NOx emission rates by more than 10% above baseline, or not increase the sum of NMHC and NOx emission rates above baseline.

3. A District:
   a. may establish more stringent diesel PM, NMHC+NOx, HC, NOx, and CO emission rate standards; and
   b. may establish more stringent limits on hours of maintenance and testing on a site-specific basis; and
   c. shall determine an appropriate limit on the number of hours of operation for demonstrating compliance with other District Regulations and initial start-up testing.

(3) *Other Requirements Specific to RBRP Engines and the San Diego. Gas and Electric Company (SDG&E).*
   (A) The sum total electrical generation (also known as the "total load reduction capacity") from all diesel-fueled engines dispatched in the RBRP shall not exceed 80.0 megawatts (MW) at any time.
   (B) RBRP Engines shall be dispatched by SDG&E into service in accordance with a district-approved dispatch protocol as specified in section J.(h)(2).

(4) *Requirements Applicable to DRP Engines after a DRP is Terminated* After a DRP is terminated by either the Utility Distribution Company or the engine owner or operator, the DRP engine shall remain subject to the requirements of subsection F.(c) as if the DRP were still in effect.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

G. REGULATION for Stationary CI Engines – Stationary Prime Diesel-Fueled CI Engine (>50 bhp) Emission Standards.

(a) New Stationary Prime Diesel-Fueled CI Engine (>50 bhp) Emission Standards. As of January 1, 2005, except as provided in section C., no person shall sell, purchase, or lease for use in California a new stationary prime diesel-fueled CI engine that has a rated brake horsepower greater than 50 unless it meets the following applicable emission standards, and no owner or operator shall operate any new stationary prime diesel-fueled CI engine that has a rated brake horsepower greater than 50 unless it meets all of the following emission standards and operational requirements (which are summarized in Table 4):

Table 4: Summary of the Emission Standards for New Stationary Prime Diesel-Fueled CI Engines >50 BHP (See section G.(a)(1))

Diesel PM Standards (g/bhp-hr)	*HC, NOx, NMHC+NOx, and CO Standards (g/bhp-hr)*
Meet the more stringent of: ≤0.01[1]	Off-Road CI Engine Certification Standard for an off-road engine of the model year and maximum rated

OR Off-Road CI Engine Certification Standard for an off-road engine of the same maximum rated power	power of the engine installed to meet the applicable PM standard, or Tier 1 standards.[1,2]

1. May be subject to additional emission limitations as specified in current district Regulations, regulations, or policies governing distributed generation.
2. The option to comply with the Tier 1 standards is available only if no off-road engine certification standards have been established for an off-road engine of the same model year and maximum rated power as the new stationary prime diesel-fueled CI engine.

(1) *Diesel PM Standard:* All new stationary prime diesel-fueled CI engines (> 50 bhp) shall emit diesel PM at a rate that is less than or equal to 0.01 grams diesel PM per brake-horsepower-hour (g/bhp-hr) or shall meet the diesel PM standard, as specified in the Off-Road Compression Ignition Engine Standards for off-road engines with the same maximum rated power (title 13, CCR, section 2423), in effect on the date of acquisition or submittal, as defined in section D., whichever is more stringent.

(2) *HC, NOx, NMHC+NOx, and CO Standards:* All new stationary prime diesel-fueled CI engines (> 50 bhp) shall meet the standards for off-road engines of the same model year and maximum rated power as specified in the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423). If no limits have been established for an off-road engine of the same model year and maximum rated power as the new stationary prime diesel-fueled CI engine, then the new stationary prime diesel-fueled CI engine shall meet the Tier 1 standards in title 13, CCR, section 2423, for an off-road engine of the same maximum rated power, irrespective of the new stationary prime diesel-fueled CI engine's model year;

(3) New stationary prime diesel-fueled CI engines that are used to provide electricity near the place of use (also known as "distributed generation") may be subject to additional emission limitations as specified in current district Regulations, policies, or regulations governing distributed generation;

(4) The District may establish more stringent diesel PM, NMHC+NOx, HC, NOx, and CO emission rate limits on a site-specific basis.

(b) In-Use Stationary Prime Diesel-Fueled CI Engine (>50 bhp) Emission Standards.

Except as provided in section C., no owner or operator shall operate an in-use stationary prime diesel-fueled CI engines (> 50 bhp) in California unless it meets the following requirements (which are summarized in Table 5):

Table 5: Summary of the Emission Standards for In-Use Stationary Prime Diesel-Fueled CI Engines > 50 BHP
(See section G.(b)(1))

Diesel PM		*Other Pollutants*
Diesel PM Standards (g/bhp-hr)		*HC, NOx, NMHC+NOx, and CO Standards (g/bhp-hr)*
Applicability	*Standard*	
	85% reduction from baseline levels	For engines with emission control strategies not verified

All off-road certified in-use prime engines	(Option 1) OR 0.01 g/bhp-hr (Option 2)	through the verification procedure: Off-Road CI Engine Certification Standards for an off-road engine of the model
Only in-use prime engines NOT certified in accordance with the Off-Road Compression Ignition Standards	85% reduction from baseline levels (Option 1) OR 0.01 g/bhp-hr (Option 2) OR [30% reduction from baseline levels AND 0.01 g/bhp-hr by no later than July 1, 2011] (Option 3)	year and maximum rated power of the engine installed to meet the applicable PM standard, or Tier 1 standards.[1] OR Both (i) and (ii) must be met: (i) No increase in HC or NOx emissions above 10% from baseline levels OR No increase in NMHC+NOx emissions above baseline levels (ii) No increase in CO above 10% from baseline levels

1. The option to comply with the Tier 1 standards is available only if no off-road engine certification standards have been established for an off-road engine of the same model year and maximum rated power as the new stationary emergency standby diesel-fueled CI engine.

(1) *Diesel PM Standards:* All in-use stationary prime diesel-fueled CI engines (> 50 bhp) certified in accordance with the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423) shall comply with either option 1 or option 2 below. All engines not certified in accordance with the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423) shall comply with option 1, option 2, or option 3 below:

(A) Option 1: Reduce the diesel PM emission rate by at least 85 percent, by weight, from the baseline level, in accordance with the appropriate compliance schedule specified in sections K and L;

(B) Option 2: Emit diesel PM at a rate less than or equal to 0.01 g/bhp-hr in accordance with the appropriate compliance schedule as specified in sections K and L;

(C) Option 3: Reduce the diesel PM emission rate by at least 30% from the baseline level, by no later than January 1, 2006, and emit diesel PM at a rate of 0.01 g/bhp-hr or less by no later than July 1, 2011.

(2) *Additional Standards:*
Owners or operators that choose to meet the diesel PM limits defined in section G.(b) with emission control strategies that are not verified through the Verification Procedure shall either:

(A) Meet the applicable HC, NOx, NMHC+NOx, and CO standards for off-road engines of the same model year and maximum rated power as specified in the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423). If no standards have been established for an off-road engine of the same model year and maximum rated power as the in-use stationary prime diesel-fueled CI engine, then the in-use stationary prime diesel-fueled CI engine shall meet the Tier 1 standards in title 13, CCR, section 2423 for an off-road engine of the same maximum rated power, irrespective of the new stationary emergency standby diesel-fueled CI engine's model year; or

(B) Not increase CO emission rates by more than 10% above baseline; and
Not increase HC or NOx emission rates by more than 10% above baseline, or
Not increase the sum of NMHC and NOx emission rates above baseline.

(3) The District may establish more stringent diesel PM, NMHC+NOx, HC, NOx, and CO emission rate standards.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

H. REGULATION for Stationary CI Engines – Emission Standards for Stationary Diesel-Fueled CI Engines (>50 bhp) Used in Agricultural Operations.

(a) Emission Standards for New Stationary Diesel-Fueled CI Engines (>50 bhp) Used in Agricultural Operations.

(1) As of January 1, 2005, except as provided in sections C., H.(a)(1)(A)5., and H.(a)(2), no person shall sell, purchase, or lease for use in California any new stationary diesel-fueled engine to be used in agricultural operations that has a rated brake horsepower greater than 50, or operate any new stationary diesel-fueled engine to be used in agricultural operations that has a rated brake horsepower greater than 50, unless the engine meets all of the following emission performance standards (which are summarized in Table 6.):

Table 6: Summary of the Emission Standards for New Stationary Diesel-Fueled CI Engines > 50 BHP Used in Agricultural Operations (See section H.(a))		
Horsepower Range (hp)	*Diesel PM*	*Other Pollutants*
	Diesel PM Standards (g/bhp-hr)	*HC, NOx, NMHC+NOx, and CO Standards (g/bhp-hr)*
All Applications Greater Than 50 But Less Than 100, Other Than Generator Sets	Less Than or Equal to 0.30[1] OR Off-Road CI Engine Certification Standard for an off-road engine of the same maximum rated power, whichever is more stringent	Off-Road CI Engine Certification Standard for an off-road engine of the model year and maximum rated power of the engine installed to meet the applicable PM standard, or Tier 1 standards.[1]
All Applications Greater Than or Equal to 100 But Less Than 175, Other Than Generator Sets	Less Than or Equal to 0.22[1] OR Off-Road CI Engine Certification Standard for an off-road engine of the same maximum rated power, whichever is more stringent	
All Applications Greater Than or Equal to 175, Other Than Generator Sets	Less than or Equal to 0.15[1] OR Off-Road Engine Certification Standard for an off-road engine of the same maximum rated power, whichever is more stringent	
Generator Set Engines Greater Than 50	Less Than or Equal to 0.15[1] OR Off-Road CI Engine Certification Standard for an off-road engine of the same maximum rated power, whichever is more stringent.	

1. Prior to January 1, 2008, these limits shall not apply to engines sold from one agricultural operation to another and funded under State or federal incentive funding programs, as specified in H.(a)(2).

(A) *Diesel PM Standard:*

1. New agricultural stationary diesel-fueled CI engines, used in all agricultural operations except generator set applications with a maximum rated horsepower greater than 50 but less than 100 shall

emit no more than 0.30 g/bhp-hr diesel particulate matter (PM) limit or shall meet the standards, as specified in the Off-Road Compression Ignition Engine Standards for off-road engines of the same maximum rated power (title 13, CCR, section 2423), in effect on the date of acquisition or submittal, as defined in section D., whichever is more stringent; and

2. New agricultural stationary diesel-fueled CI engines, used in all agricultural operations except generator set applications with a maximum rated horsepower greater than or equal to 100 but less than 175 shall emit no more than 0.22 g/bhp-hr diesel particulate matter (PM) limit or shall meet the standards, as specified in the Off-road Compression Ignition Engine Standards for off-road engines of the same maximum rated power (title 13, CCR, section 2423), in effect on the date of acquisition or submittal, as defined in section D. whichever is more stringent; and
3. New agricultural stationary diesel-fueled CI engines, used in all agricultural operations except generator set applications with a maximum rated horsepower greater than or equal to 175 shall emit no more than 0.15 g/bhp-hr diesel PM or shall meet the standards, as specified in the Off-Road Compression Ignition Engine Standards for off-road engines of the same maximum rated power (title 13, CCR, section 2423), in effect on the date of acquisition or submittal, as defined in section D., whichever is more stringent;and
4. New agricultural stationary diesel-fueled CI engines, used in generator set applications with a maximum rated horsepower greater than 50, shall emit no more than 0.15 g/bhp-hr diesel PM, or shall meet the standards, as specified in the Off-Road Compression Ignition Engine Standards for off-road engines of the same maximum rated power (title 13, CCR, section 2423), in effect on the date of acquisition or submittal, as defined in section D., whichever is more stringent;
5. On a site-specific basis, a District may extend compliance with sections H.(a)(1)(A)1. through 4. up to four years provided:
    a. The District determines that an engine meeting sections H.(A)1. through 4. would exceed the District's threshold for significant risk pursuant to H&SC section 44391 (AB 2588 "Hot Spots" Program), and
    b. No later than four years after the applicable initial compliance date for sections H.(a)(1)(A)1. through 4., one of the following is installed:
        (i.) an electric motor;
        (ii.) an engine greater than 50 bhp but less than 75 bhp that does not exceed 0.02 g/bhp-hr PM; or
        (iii.) an engine greater than 75 bhp that does not exceed 0.01 g/bhp-hr diesel PM.

(B) *NMHC, NOx, and CO Standards:* New agricultural stationary diesel-fueled CI engines shall meet the HC, NOx, (or NMHC+NOx, if applicable) and CO standards for off-road engines of the same model year and maximum rated power, as specified in the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423). If no limits have been established for an off-road engine of the same model year and maximum rated power as the new agricultural stationary diesel-fueled CI engine, then the new agricultural

stationary diesel-fueled CI engine shall meet the Tier 1 standards in title 13, CCR, section 2423, for an off-road engine of the same maximum rated power, irrespective of the new agricultural diesel-fueled CI engine's model year.

(2) Prior to January 1, 2008, the requirements of section H.(a)(1) shall not apply to any stationary diesel-fueled CI engine that:

(A) is used in agricultural operations; and

(B) was funded under a State or federal incentive funding program; and

(C) was sold for use in another agricultural operation, provided the stationary diesel-fueled CI engine complies with Tier II Off-Road Compression Ignition Standards for off-road engines of the same maximum rated power (title 13, CCR, section 2423).

For purposes of this subsection, State or federal incentive funding programs include, but are not limited to, California's Carl Moyer Program, as set forth in title 17, Part 5, Chapter 9 of the California Health and Safety Code, and the U.S. Department of Agriculture's Environmental Quality Incentives Program (EQIP), as set forth in title 7, Chapter XIV, Part 1466 of the Code of Federal Regulations.

(b) Emission Standards for In-Use Stationary Diesel-Fueled CI Engines (>50 bhp) Used in Agricultural Operations.

(1) Except as provided in sections C. and H.(b)(5) through (7), no owner or operator shall operate an in-use stationary diesel-fueled CI engine greater than 50 bhp in an agricultural operation in California unless it meets the requirements in sections H.(b)(2) through (4) (which are summarized in Tables 7 and 8):

Table 7: Emission Standards
Noncertified Greater than 50 BHP In-Use Stationary
Diesel-Fueled Engines Used in Agricultural Operations
See sections H.(b)(2) and (4)

Horsepower Range (hp)	*Application*	*Compliance On or After December 31*	*Diesel PM Not to Exceed (g/bhp-hr)*	*HC, NOx, NMHC+NOx, and CO Not to Exceed (g/bhp-hr)*
Greater Than 50 But Less Than 75	Generator Sets	2015	0.02	Off-Road CI Engine Certification Standards for an off-road engine of the model year and maximum rated power of the engine installed to meet the applicable PM
	All Other Applications	2011	0.30	
Greater Than or Equal to 75 But Less Than 100	Generator Sets	2015	0.01	
	All Other Applications	2011	0.30	
Greater Than or Equal to 100 But Less Than 175	Generator Sets	2015	0.01	
	All Other Applications	2010	0.22	

Greater Than or Equal to 175 But Less Than or Equal to 750	All Applications	2010	0.15	standard.[1]
Greater Than 750	All Applications	2014	0.075	

1. If no limits have been established for an off-road engine of the same model year and maximum rated power, then the in-use stationary diesel-fueled engine used in an agricultural operation shall not exceed Tier 1 standards in title 13, CCR, section 2423 for an off-road engine of the same maximum rated power irrespective of model year.

Table 8: Emission Standards
Tier 1- and Tier 2-Certified Greater than 50 BHP In-Use Stationary Diesel-Fueled Engines Used in Agricultural Operations
See sections H.(b)(3) and (4)

Horsepower Range (hp)	*Compliance On or After December 31*	*Diesel PM Not to Exceed (g/bhp-hr)*	*HC, NOx, NMHC+NOx, and CO Not to Exceed (g/bhp-hr)*
Greater Than 50 But Less Than 75	2015 or 12 years after the date of initial installation, whichever is later	0.02	Off-Road CI Engine Certification Standards for an off-road engine of the model year and maximum rated power of the engine installed to meet the applicable PM standard.[1]
Greater Than or Equal to 75 But Less Than 175	2015 or 12 years after the date of initial installation, whichever is later	0.01	
Greater Than or Equal to 175 But Less Than or Equal to 750	2014 or 12 years after the date of initial installation, whichever is later	0.01	
Greater Than 750	2014 or 12 years after the date of initial installation, whichever is later	0.075	

1. If no limits have been established for an off-road engine of the same model year and maximum rated power, then the in-use stationary diesel-fueled engine used in an agricultural operation shall not exceed Tier 1 standards in title 13, CCR, section 2423 for an off-road engine of the same maximum rated power irrespective of model year.

(2) *Diesel PM Standards for Noncertified In-use Stationary Diesel-fueled CI Engines Used in Agricultural Operations (except as provided in section C.):*

(A) On or after December 31, 2015, no owner or operator shall operate any greater than 50 but less than 75 bhp noncertified stationary diesel-fueled

generator set engine used in an agricultural operation unless such generator set engine's diesel PM emissions do not exceed 0.02 g/bhp-hr.

(B) On or after December 31, 2015, no owner or operator shall operate any greater than or equal to 75 but less than 175 bhp noncertified stationary diesel-fueled generator set engine used in an agricultural operation unless such generator set engine's diesel PM emissions do not exceed 0.01 g/bhp-hr.

(C) On or after December 31, 2011, no owner or operator shall operate any greater than 50 but less than 75 bhp noncertified stationary diesel-fueled engine (other than a generator set engine) used in an agricultural operation unless such engine's diesel PM emissions do not exceed 0.30 g/bhp-hr.

(D) On or after December 31, 2011, no owner or operator shall operate any greater than or equal to 75 but less than 100 bhp noncertified stationary diesel-fueled engine (other than a generator set engine) used in an agricultural operation unless such engine's diesel PM emissions do not exceed 0.30 g/bhp-hr.

(E) On or after December 31, 2010, no owner or operator shall operate any greater than or equal to 100 but less than 175 bhp noncertified stationary diesel-fueled engine (other than a generator set engine) used in an agricultural operation unless such engine's diesel PM emissions do not exceed 0.22 g/bhp-hr.

(F) On or after December 31, 2010, no owner or operator shall operate any greater than or equal to 175 through 750 bhp noncertified stationary diesel-fueled engine used in an agricultural operation unless such engine's diesel PM emissions do not exceed 0.15 g/bhp-hr.

(G) On or after December 31, 2014, no owner or operator shall operate any greater than 750 bhp noncertified stationary diesel-fueled engine used in an agricultural operation unless such engine's diesel PM emissions do not exceed 0.075 g/bhp-hr.

(3) *Diesel PM Standards for Tier 1- and Tier 2-Certified In-use Stationary Diesel-fueled Engines Used in Agricultural Operations (except as provided in section C.):*

(A) On or after December 31, 2015, or 12 years after the date of initial installation, whichever is later, no owner or operator shall operate any greater than 50 but less than 75 bhp Tier 1- or Tier 2-certified stationary diesel-fueled engine used in an agricultural operation unless such engine's diesel PM emissions do not exceed 0.02 g/bhp-hr.

(B) On or after December 31, 2015, or 12 years after the date of initial installation, whichever is later, no owner or operator shall operate any greater than or equal to 75 but less than 175 bhp Tier 1- or Tier 2-certified stationary diesel-fueled engine used in an agricultural operation unless such engine's diesel PM emissions do not exceed 0.01 g/bhp-hr.

(C) On or after December 31, 2014, or 12 years after the date of initial installation, whichever is later, no owner or operator shall operate any greater than or equal to 175 through 750 bhp Tier 1- or Tier 2-certified stationary diesel-fueled engine used in an agricultural operation unless such engine's diesel PM emissions do not exceed 0.01 g/bhp-hr.

(D) On or after December 31, 2014 or 12 years after the date of initial installation, whichever is later, no owner or operator shall operate any greater than 750 bhp Tier 1- or Tier 2-certified stationary diesel-fueled

engine used in an agricultural operation unless such engine's diesel PM emissions do not exceed 0.075 g/bhp-hr.

(4) *HC, NOx, NMHC+NOx, and CO Standards:* An agricultural engine shall not exceed the HC, NOx (or NMHC+NOx, if applicable) and CO standards for off-road engines of the same model year and maximum rated power, as specified in the Off-Road CI Engine Standards (title 13, CCR, section 2423). If no limits have been established for an off-road engine of the same model year and maximum rated power, then the in-use stationary diesel-fueled engine used in an agricultural operation shall not exceed Tier 1 standards in title 13, CCR, section 2423 for an off-road engine of the same maximum rated power irrespective of model year.

(5) The Executive Officer may extend the compliance dates in sections H.(b)(1) through (4) up to one year, provided that verifiable information shows new engine packages for stationary diesel engine applications are not available in sufficient numbers or in a sufficient range of makes, models, and sizes to replace in-use stationary diesel agricultural engines.

(6) On a site-specific basis, a District may extend compliance dates in sections H.(b)(1), (2), and (4) up to four years provided:

(A) A District determines that an engine meeting section H.(b)(2) would exceed a District's threshold for significant risk pursuant to H&SC section 44391 (AB 2588 "Hot Spots" Program),and

(B) No later than four years after the applicable initial compliance date for section H.(b)(2), one of the following is installed:

1. an electric motor;
2. an engine greater than 50 bhp but less than 75 bhp that does not exceed 0.02 g/bhp-hr PM; or
3. an engine greater than 75 bhp that does not exceed 0.01 g/bhp-hr diesel PM.

(7) A District may:

(A) Allow an owner or operator up to two additional years to comply with sections H.(b)(1) through (4), provided at least 60 days prior to the applicable compliance date or dates, the owner or operator submits to the District Air Pollution Control Officer documentation demonstrating that an affected engine or engines shall be replaced withan electric motor or electric motors within two years. Documentation for each engine replaced shall include identification of the engine, the purchasing agreement for the electric motor, and a copy of an agreement with a utility distribution company to provide electricity if electricity is not already available for electric motor operation.

(B) Establish more stringent diesel PM, NMHC+NOx, HC, NOx, and CO emission limits, emission limit compliance dates, or other requirements.

(c) ***Registration Requirements for Greater than 50 bhp Stationary Diesel-Fueled CI Agricultural Engines.***

(1) *Registration Submittal.* Except as provided in section B(a), the owner or operator of a greater than 50 bhp stationary diesel-fueled CI agricultural engine or engines shall submit the registration information specified in section (c)(2) below to the District according to the following schedule:

(A) For each in-use stationary diesel-fueled CI agricultural engine, no later than March 1, 2008;

(B) For each new stationary diesel-fueled CI agricultural engine installed on or after March 1, 2008, no later than 90 days after the date of initial installation; and

(C) For each new stationary diesel-fueled CI agricultural engine installed on or after January 1, 2005, but before March 1, 2008, within 90 days after initial installation or the effective date of amendments adding section H.(c) to the REGULATION, whichever is later.

(2) *Registration Information.*

(A) At minimum, the owner or operator shall submit the following information for each greater than 50 bhp stationary diesel-fueled CI agricultural engine:

1. Date of registration application submittal;
2. Name, title (as applicable), and signature of person submitting the registration application;
3. Name, address, mailing address (if differs from address), and telephone number of the engine owner and of the operator, if the owner is not also the operator;
4. Date of installation or anticipated installation;
5. Year of manufacture or approximate age, if unable to determine year of manufacture;
6. Make;
7. Model;
8. Serial number;
9. Maximum rated brake horsepower;
10. Certification status with respect to Off-Road CI Engine Certification Standards (title 13, CCR, section 2423) (if available)
11. Estimated annual average operating hours;
12. Fuels Used;
13. Estimated annual average gallons of each fuel used, if alternative diesel fuels are used;
14. Location including, but not limited to, one of the following: latitude and longitude, universal trans meridian (UTM) coordinates, global positioning satellite data (GPS), address, town and nearest cross streets, parcel or plot number/designation, or other description that clearly identifies the location of the engine; and
15. For an engine located within one-quarter mile of (1,320 feet) of a residential area**,** school, or hospital:
    a. Distance (in meters or feet) from engine to residential area, school, or hospital;
    b. Direction from engine to residential area, school, or hospital;
    c. Location of engine and residential area**,** school, or hospital including one or more of the following for each: latitude and longitude, universal trans meridian (UTM) coordinates, global positioning satellite data (GPS), address, town and nearest cross streets.

(B) Any additional information required to evaluate the section C.(a) exemption of an agricultural emergency standby generator set engine or a remotely-located agricultural engine from the requirements of section H.(b).

(3) The owner or operator of a stationary diesel-fueled CI agricultural engine registered under section H.(c)(1) shall notify the District in writing no later than 14 days after any change of owner or operator, change in location, installation or

commencement of an emissions control strategy, or replacement with an electric motor or noncompression ignition engine.

(4) A District may provide stationary diesel-fueled CI agricultural engine owners and operators with alternatives to section H.(c)(1) through (3) requirements, provided the Executive Officer finds such alternatives to be equivalent to sections H.(c)(1) through (3).

(5) Upon written request by the Executive Officer, an APCO shall provide to the Executive Officer a written report of information gathered under sections H.(c)(1) through (4).

(d) ***Fee Requirements for Greater than 50 bhp Stationary Diesel-Fueled CI Agricultural Engine Owners or Operators.***

The owner or operator of a greater than 50 bhp stationary diesel-fueled CI agricultural engine or engines shall pay any fees assessed by the District for the purpose of recovering the District's cost of implementing and enforcing section H. requirements, including section H.(c) requirements.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

I. REGULATION for Stationary CI Engines – Emission Standards for New Stationary Diesel-Fueled Engines, Less Than or Equal to 50 Brake Horsepower (<50 bhp).

As of January 1, 2005, except as provided in section C., no person shall sell, offer for sale, or lease for use in California any stationary diesel-fueled CI engine that has a rated brake horsepower less than or equal to 50, unless the engine meets the current Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423) for PM, NMHC+NOx, and CO for diesel off-road engines of the same maximum rated power. (These requirements are summarized in Table 9.)

Table 9: Summary of the Emission Standards for Stationary Diesel-Fueled CI Engines ≤ 50 BHP (See section I.)
Diesel PM Standards, NMHC+NOx, and CO Standards (g/bhp-hr)
Current Off-Road CI Engine Certification Standard for an off-road engine of the same maximum rated power

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

J. REGULATION for Stationary CI Engines – Recordkeeping, Reporting, and Monitoring Requirements.

(a) ***Reporting Requirements for Owners or Operators of New and In-Use Stationary CI Engines, Including Non-Diesel-Fueled CI Engines, Having a Rated Horsepower Greater than 50 (> 50 bhp).***

(1) Except as provided in section C. and section J.(a)(5) below, prior to the installation of any new stationary CI engine (> 50 bhp) at a facility, each owner or operator shall provide the information identified in section J.(a)(3) to the District APCO.

(2) Except as provided in section C. and section J.(a)(5) below, no later than July 1, 2005, each owner or operator of an in-use stationary CI engine (>50 bhp) shall provide the information specified in section J.(a)(3) to the District APCO.

(3) Each owner or operator shall submit to the District APCO the following information for each new and in-use stationary CI engine (>50 bhp) in accordance with the requirements of sections J.(a)(1) and (2) above:

(A) Owner/Operator Contact Information
    1. Company name
    2. Contact name, phone number, address, e-mail address
    3. Address of engine(s)
(B) Engine Information
    1. Make,
    2. Model,
    3. Engine Family,
    4. Serial number,
    5. Year of manufacture (if unable to determine, approximate age),
    6. Rated Brake Horsepower Rating,
    7. Exhaust stack height from ground,
    8. Engine Emission Factors and supporting data for PM, NOx and NMHC separately or NMHC+NOx, and CO, (if available) from manufacturers data, source tests, or other sources (specify),
    9. Diameter of stack outlet,
    10. Direction of outlet (horizontal or vertical),
    11. End of stack (open or capped),
    12. Control equipment (if applicable)
        a. Turbocharger,
        b. Aftercooler,
        c. Injection Timing Retard,
        d. Catalyst,
        e. Diesel Particulate Filter,
        f. Other;
(C) Fuel(s) Used
    1. CARB Diesel,
    2. Jet fuel,
    3. Diesel,
    4. Alternative diesel fuel (specify),
    5. Alternative fuel (specify),
    6. Combination (Dual fuel) (specify),
    7. Other (specify);
(D) Operation Information, including:
    1. Describe general use of engine,
    2. Typical load (percent of maximum bhp rating),
    3. Typical annual hours of operation,
    4. If seasonal, months of year operated and typical hours per month operated,
    5. Fuel usage rate (if available);
(E) Receptor Information, including:
    1. Nearest receptor description (receptor type),
    2. Distance to nearest receptor (feet or meters),
    3. Distance to nearest school grounds;
(F) A statement whether the engine is included in an existing AB 2588 emission inventory.

(4) Except as provided in section C., no later than180 days prior to the earliest applicable compliance date specified in sections K or L, each owner or operator of an in-use stationary diesel-fueled CI engine greater than 50 brake horsepower (> 50 bhp) shall provide the following additional information to the District APCO: an identification of the control strategy for each stationary diesel-fueled CI engine that when

implemented will result in compliance with sections F. and G. If applicable, the information should include the Executive Order number issued by the Executive Officer for a Diesel Emission Control Strategy that has been approved by the Executive Officer through the Verification Procedure.

(5) An APCO may exempt the owner or operator from providing all or part of the information identified in sections J.(a)(3) or (4) if there is a current record of the information in the owner or operator's permit to operate, permit application, District registration program, or other District records.

(6) Upon written request by the Executive Officer, an APCO shall provide to the Executive Officer a written report of all information identified in sections J.(a)(3) and (4).

(b) ***Reporting Requirements for Sellers of Stationary Diesel-Fueled CI Engines Having a Rated Brake Horsepower Less Than or Equal to 50 (< 50 bhp).***

(1) Except as provided in section C., no later than January 31, 2006 and by January 31st of each year thereafter, all sellers of stationary diesel fueled CI engines sold for use in California that have a rated brake horsepower less than or equal to 50 shall provide the following information for the previous calendar year to the Executive Officer of the Air Resources Board:

(A) Contact Information

1. Sellers Company Name (if applicable);
2. Contact name, phone number, e-mail address;

(B) Engine Sales Information (for each engine sold for use in California in the previous calendar year)

1. Make,
2. Model,
3. Model year (if known),
4. Rated brake horsepower,
5. Number of engines sold,
6. Certification executive order number (if applicable),
7. Engine family number (if known),
8. Emission control strategy (if applicable).

(c) ***Demonstration of Compliance with Emission Limits.***

(1) Prior to the installation of a new stationary diesel-fueled CI engine at a facility, the owner or operator of the new stationary diesel-fueled CI engine(s) subject to the requirements of section F.(a)(3), F.(a)(4), F.(c)(1)(C), and G.(a)(1) shall provide emission data to the District APCO in accordance with the requirements of section M for purposes of demonstrating compliance.

(2) By no later than the earliest applicable compliance date specified in sections K or L, the owner or operator of an in-use stationary diesel-fueled CI engine(s) subject to the requirements of section F.(b)(3), F.(c)(2)(C), or G.(b)(1) shall provide emissions and/or operational data to the District APCO in accordance with the requirements of section M for purposes of demonstrating compliance.

(d) ***Notification of Loss of Exemption.***

(1) Owners or operators of in-use stationary diesel-fueled CI engines, who are operating under an exemption specified in sections C. or H.(a)(2) from all or part of the requirements of subsections F., G., or H. shall notify the District APCO within five days after they become aware that the exemption no longer applies and shall demonstrate compliance with the applicable requirements of:

(A) section F. or G., no later than 180 days after the date the exemption no longer applies; or

(B) section H., no later than 18 months after the date the exemption no longer applies or no later than 18 months after the emission standard compliance date set forth in section H., whichever is later.

(2) A District APCO shall notify owners or operators of in-use stationary diesel-fueled CI engines, operating under an exemption specified in section C.(g) from the requirements of section E. and sections F., G., or H., when the exemption no longer applies and the owner or operator shall demonstrate compliance with the applicable requirements of:

(A) section E., F., or G., no later than 180 days after notification by the District APCO; or

(B) section H., no later than 18 months after notification by the District APCO or no later than 18 months after the emission standard compliance date set forth in section H., whichever is later.

(3) An owner or operator of an in-use stationary diesel-fueled CI engine(s) subject to the requirements of sections F., G., or H. shall provide emissions data to the District APCO in accordance with the requirements of section M for purposes of demonstrating compliance pursuant to section J.(d)(1) or (2).

(e) ***Monitoring Equipment.***

(1) A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed upon engine installation, or by no later than January 1, 2005, on all engines subject to all or part of the requirements of sections F., G., or H.(a) unless the District determines on a case-by-case basis that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history.

(2) All DPFs installed pursuant to the requirements in sections must, upon engine Installation or by no later than January 1, 2005, be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

(3) The District APCO may require the owner or operator to install and maintain additional monitoring equipment for the particular emission control strategy(ies) used to meet the requirements of sections F., G., or H.(a).

(f) ***Reporting Provisions for Exempted Agricultural Emergency, Prime, and Nonagricultural Emergency Engines.***

An owner or operator of an agricultural emergency standby generator set engine subject to section C.(a) or an engine subject to sections C.(d) or C.(j) shall keep records of the number of hours the engines are operated on a monthly basis. Such records shall be retained for a minimum of 36 months from the date of entry. Record entries made within 24 months of the most recent entry shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request. Record entries made from 25 to 36 months from the most recent entry shall be made available to District staff within 5 working days from the district's request.

(g) ***Reporting Requirements for Emergency Standby Engines.***

(1) Starting January 1, 2005, each owner or operator of an emergency standby diesel-fueled CI engine shall keep records and prepare a monthly summary that shall list and document the nature of use for each of the following:

(A) emergency use hours of operation;

(B) maintenance and testing hours of operation;

(C) hours of operation for emission testing to show compliance with sections F.(a)(3) and F.(b)(3);

(D) initial start-up testing hours;

(E) if applicable, hours of operation to comply with the requirements of NFPA 25;
(F) hours of operation for all uses other than those specified in sections J.(g)(1)(A) through (D) above; and
(G) the fuel used.
1. For engines operated exclusively on CARB Diesel Fuel, the owner or operator shall document the use of CARB Diesel Fuel through the retention of fuel purchase records indicating that the only fuel purchased for supply to an emergency standby engine was CARB Diesel Fuel; or
2. For engines operated on any fuel other than CARB Diesel Fuel, fuel records demonstrating that the only fuel purchased and added to an emergency standby engine or engines, or to any fuel tank directly attached to an emergency standby engine or engines, meets the requirements of section E.(b).

(2) Records shall be retained for a minimum of 36 months. Records for the prior 24 months shall be retained on-site, either at a central location or at the engine's location, or at an offsite central location within California, and shall be made immediately available to the District staff upon request. Records for the prior 25 to 36 months shall be made available to District staff within 5 working days from request.

(h) ***Reporting Requirements for the San Diego Gas and Electric Company Regarding the RBRP.***

(1) The San Diego Gas and Electric Company shall provide to the San Diego County Air Pollution Control District the following information, by January 31, 2005, to the extent the District does not already have the information:
(A) For each diesel-fueled engine enrolled in the RBRP:
1. Owner's Company Name (if applicable);
2. Contact name, phone number, e-mail address;
3. Load reduction capacity of engine, which is the rated brake horsepower expressed in megawatts (megawatts); and
4. Diesel PM emission rate of the engine (g/bhp-hr);
(B) The San Diego Gas and Electric Company shall update the information as necessary to reflect the current inventory of RBRP engines and provide the updated information to the SDAPCD upon request.

(2) The San Diego Gas and Electric Company shall provide the San Diego County Air Pollution Control District with an environmental dispatch protocol for the RBRP that meets all of the following requirements:
(A) The protocol shall require the San Diego Gas and Electric Company to dispatch engines in an order that protects public health, with consideration given to factors including, but not limited to, diesel PM emission rate, location, and other factors to be determined by the District; and
(B) The protocol shall require the San Diego Gas and Electric Company to identify and report to the District the specific engines called for dispatch within 1 day of the dispatch; and
(C) The protocol shall require the San Diego Gas and Electric Company to report the following information to the District, within 30 days of the dispatch:
1. Identification of engine dispatched;

2. Load capacity of engine dispatched;
3. Cumulative total of load capacity of engines dispatched (megawatts); and
4. Cumulative total of diesel PM emission rate of engines dispatched (g/hr).

(D) Within 30 calendar days of receiving the environmental dispatch protocol, or a time period mutually agreed by the parties, the District APCO shall approve or disapprove the protocol.

(*i*) *Additional Reporting Requirements for the Stationary Emergency Standby Diesel-Fueled CI Engines Used To Fulfill the Requirements of an Interruptible Service Contract (ISC).*

(1) The owner or operator of an ISC engine shall provide to the District the following information, as necessary to the extent the District does not already have the information:

(A) For each diesel-fueled engine enrolled in the ISC:
1. Owner's Company Name (if applicable);
2. Contact name, phone number, e-mail address; and
3. Diesel PM emission rate of the engine (g/bhp-hr).

(B) For engines enrolled in an ISC prior to January 1, 2005, the information identified in J.(i)(1)(A) shall be provided to the District by January 31, 2005; and

(C) For engines enrolled in an ISC after January 1, 2005, the information identified in J.(i)(1)(A) shall be provided to the District no later than 30 days after the engine is enrolled in an ISC.

The owner or operator shall update the information as necessary to reflect the current inventory of ISC engines and shall provide the updated information to the District upon request.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

K. REGULATION for Stationary CI Engines – Compliance Schedule for Owners or Operators of Three or Fewer Engines (>50 bhp) Located within a District.

(a) All owners and operators of three or fewer engines located within a District, who will meet the requirements of section F.(b) solely by maintaining or reducing the current annual hours of operation for maintenance and testing, shall be in compliance with the annual hours of operation limits beginning January 1, 2006.

(b) All owners and operators of three or fewer engines located within a District, which are not in compliance with section K(a) but are required to meet the requirements of sections F.(b) or G.(b), shall comply with section F.(b) or G.(b), whichever applies, according to the following schedule:

(1) All pre-1989 through 1989 model year engines, inclusive, shall be in compliance by no later than January 1, 2006;

(2) All 1990 through 1995 model year engines, inclusive, shall be in compliance by no later than January 1, 2007; and

(3) All 1996 and later model year engines shall be in compliance by no later than January 1, 2008.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

L. REGULATION for Stationary CI Engines – Compliance Schedule for Owners or Operators of Four or More Engines (>50 bhp) Located within a District.

(a) All owners and operators of four or more engines located within a District, who will meet the requirements of section F.(b) solely by maintaining or reducing the current annual hours of operation for maintenance and testing, shall be in compliance with the annual hours of operation limits beginning January 1, 2006.

(b) All owners and operators of four or more engines located within a District, who are not in compliance with section L(a) but are required to meet the requirements of sections F.(b) or G.(b), shall comply with sections F.(b) or G.(b), whichever applies, according to the following schedule:

Pre-1989 Through 1989 Model Year Engines, Inclusive

Percent of Engines	*Compliance date*
50%	January 1, 2007
75%	January 1, 2008
100%	January 1, 2009

1990 through 1995 Model Year Engines, Inclusive

Percent of Engines	*Compliance date*
30%	January 1, 2007
60%	January 1, 2008
100%	January 1, 2009

1996 and Later Model Year Engines

Percent of Engines	*Compliance date*
50%	January 1, 2008
100%	January 1, 2009

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

M. REGULATION for Stationary CI Engines – Compliance Demonstration.

(a) Upon approval by the District APCO, the following sources of data may be used in whole or part to demonstrate compliance with the emissions standards or requirements of sections F. through I.:

(1) off-road engine certification test data for the stationary diesel-fueled CI engine,
(2) engine manufacturer test data,
(3) emissions test data from a similar engine,
(4) emissions test data used in meeting the requirements of the Verification Procedure for the emission control strategy implemented, or
(5) An alternative compliance demonstration as described in section M(f).

(b) Emissions testing of a stationary diesel-fueled CI engine, for purposes of showing compliance with the requirements of sections F. through I., shall be done in accordance with the methods specified in section N.

(c) For purposes of emissions testing, the particulate matter (PM) emissions from a dual-fueled stationary CI engine, which uses as its fuel a mixture of diesel fuel and other fuel(s), shall be deemed to be 100% diesel PM.

(d) Emissions testing for the purposes of determining the percent change from baseline shall include baseline and emission control strategy testing subject to the following conditions:

(1) Baseline testing may be conducted with the emission control strategy in place, provided the test sample is taken upstream of the emission control strategy and the presence of the emission control strategy is shown to the District APCO's satisfaction as having no influence on the emission test results;

(2) Control strategy testing shall be performed on the stationary diesel-fueled CI engine with full implementation of the emission control strategy;

(3) The percent change from baseline shall be calculated as the baseline emissions minus control strategy emissions, with the difference being divided by the baseline emissions and the result expressed as a percentage; and

(4) The same test method shall be used for determining both baseline emissions and control strategy emissions.

(e) Emission testing for the purposes of demonstrating compliance with an emission level shall be performed on the stationary diesel-fueled CI engine with the emission control strategy fully implemented.

(f) *Alternative Compliance Demonstration:* The owner or operator of a new or in-use stationary diesel-fueled CI engine greater than 50 bhp may demonstrate compliance with the 0.01 g/bhp-hr PM emission standard of sections F. through I. by using one of the following:

(1) A Level 3 Verified Diesel Emission Control Strategy in combination with a certified CI engine that meets the 0.15 g/bhp-hr PM emission standard, or

(2) An 85 percent PM emission reduction control strategy in combination with a certified CI engine that meets 0.15 g/bhp-hr PM emission standard, or

(3) A certified CI engine that meets the 0.15 g/bhp-hr PM emission standard in combination with one of the emission control strategies identified in section M(f)(1) or (f)(2) and meets the requirements of section C.(s) or section C.(v), or

(4) Off-road CI equipment manufactured in compliance with the Transitional Implementation Flexibility Provisions for Equipment Manufacturers specified in title 13, CCR, section 2423(d); title 40 CFR, section 89.102(d); or title 40, CFR, section 1039.625 in combination with one of the emission control strategies identified in sections M(f)(1) or (f)(2) provided the CI engine meets the 0.15 g/bhp-hr PM emission standard, or

(5) A certified CI engine in an engine family identified by the manufacturer to participate in the averaging, banking, or trading program for that model year in compliance with the applicable subparts of title 40, CFR, section 89; title 40, CFR, section 1039; or title 13, CCR, section 2423(b)(2), provided the CI engine meets the 0.15 g/bhp-hr PM emission standard and is used in combination with one of the emission control strategies identified in sections M(f)(1) or (f)(2), or

(6) A Tier 4 certified CI engine or a new piece of equipment identified in section (f)(4) that emits no more than 0.015 g/bhp-hr PM.

NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

N. REGULATION for Stationary CI Engines – Test Methods.

(a) The following test methods shall be used to determine diesel PM, HC, NOx, CO and NMHC emission rates:

(1) Diesel PM emission testing shall be done in accordance with one of the following methods:

(A) California Air Resources Board Method 5 (ARB Method 5), "Determination of Particulate Matter Emissions from Stationary Sources," as amended July 28, 1997, which is incorporated herein by reference.

1. For purposes of this subsection, diesel PM shall be measured only by the probe catch and filter catch and shall not include PM captured in the impinger catch or solvent extract.
2. The tests are to be carried out under steady state operation. Test cycles and loads shall be in accordance with ISO-8178 Part 4 or alternative test cycle approved by the District APCO.
3. The District APCO may require additional engine or operational duty cycle data if an alternative test cycle is requested; or

(B) International Organization for Standardization (ISO) 8178 Test procedures: ISO 8178-1:1996(E) ("ISO 8178 Part 1") ISO 8178-2: 1996(E) ("ISO 8178 Part 2"); and ISO 8178-4:1996(E) ("ISO 8178 Part 4"), which are incorporated herein by reference; or

(C) Title 13, California Code of Regulations, section 2423, "Exhaust Emission Standards and Test Procedures - Off-Road Compression Ignition Engines," which is incorporated herein by reference.

(2) NOx, CO and HC emission testing shall be done in accordance with one of the following methods:

(A) California Air Resources Board Method 100 (ARB Method 100), "Procedures for Continuous Gaseous Emission Stack Sampling," as amended July 28, 1997, which is incorporated herein by reference.

1. Tests using ARB Method 100 shall be carried out under steady state operation. Test cycles and loads shall be in accordance with ISO-8178 Part 4 or alternative test cycle approved by the District APCO.
2. The District APCO may require additional engine or operational duty cycle data if an alternative test cycle is requested; or

(B) International Organization for Standardization (ISO) 8178 Test procedures: ISO 8178-1:1996(E) ("ISO 8178 Part 1") ISO 8178-2: 1996(E) ("ISO 8178 Part 2"); and ISO 8178-4:1996(E) ("ISO 8178 Part 4"), which are incorporated herein by reference; or

(C) Title 13, California Code of Regulations, section 2423, "Exhaust Emission Standards and Test Procedures - Off-Road Compression Ignition Engines," which is incorporated herein by reference.

(3) NMHC emission testing shall be done in accordance with one of the following methods:

(A) International Organization for Standardization (ISO) 8178 Test procedures: ISO 8178-1:1996(E) ("ISO 8178 Part 1") ISO 8178-2:1996(E) ("ISO 8178 Part 2"); and ISO 8178-4:1996(E) ("ISO 8178 Part 4"), which are incorporated herein by reference; or

(B) Title 13, California Code of Regulations, section 2423, "Exhaust Emission Standards and Test Procedures - Off-Road Compression Ignition Engines," which is incorporated herein by reference.

(b) The District APCO may approve the use of alternatives to the test methods listed in section N.(a), provided the alternatives are demonstrated to the APCO's satisfaction as accurate in determining the emission rate of diesel PM, HC, NOx, NMHC, or CO.
NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511 and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511 and 43013, Health and Safety Code.

O. REGULATION for Stationary CI Engines – Severability.

Each part of this REGULATION shall be deemed severable, and in the event that any part of this REGULATION is held to be invalid, the remainder of this REGULATION shall continue in full force and effect.
NOTE: Authority cited: Sections 39600, 39601, 39658, 39659, 39666, 41511, and 43013, Health and Safety Code. Reference: Sections 39002, 39650, 39658, 39659, 39666, 40000, 41511, and 43013, Health and Safety Code.

***** ARTICLE V HEARING BOARD *****

Sec 110. GCAPCD APPLICABLE ARTICLES OF THE HEALTH AND SAFETY CODE.

A. A Hearing Board shall be chosen and appointed by the County Air Pollution Control Board as specified in Chapter 8, California Health and Safety Code except that if a vacancy occurs under Section 40802, the Board may appoint anyone to fill the vacancy except employees of any city, county, state or district.
B. The provisions of Division 26, Chapter 4, Article 2, of the State of California Health and Safety Code, as amended, respectively entitled "Variances" and "Procedure", are incorporated herein by this reference.

Sec 111. GCAPCD FILING PETITIONS. Requests for hearing shall be initiated by the filing of a petition with the Air Pollution Control District, and the payment of the fee provided for in Section 150 of these Regulations. No fee shall be required for the filing of a petition by a public agency or a public officer acting in the scope of this official capacity.

Sec 112. GCAPCD CONTENTS OF PETITIONS. Every petition shall state:

A. The name, address and telephone number of the petitioner, or other person authorized to receive service of notices;
B. Whether the petitioner is an individual, co-partnership, corporation or other entity; names and addresses of the partners if a co-partnership; names and addresses of the officers if a corporation; and the names and addresses of the persons in control, if other entity;
C. The type of business or activity involved in the application, and the street address at which it is conducted;
D. A brief description of the article, machine, equipment or other contrivance, if any, involved in the application;
E. The section or rule under which the petition is filed that is, whether petitioner desires a hearing;
    1. For a variance under Section 40828, Health and Safety Code;
    2. To revoke or modify a variance under Section 42356, Health and Safety Code;
    3. To review the denial or conditional granting of an Authorization to Construct, under Sections 54 and 55 of these Regulations.
F. Each petition shall be signed by the petitioner, or by some person on his behalf; and where the person signing is not the petitioner, it shall set forth his authority to sign.