NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Potential NOx and VOC Emissions Controls
Ozone Transport Commission
Stationary and Area Source Committee
March 16, 2010

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(First Draft Model Rules)

There are additional measures under consideration by the OTC Stationary and Area Source Committee including:

- performance standards for high electric demand day (HEDD) units, industrials commercial and institutional (ICI) boilers and municipal waste combustors,
- limits for architectural industrial and maintenance (AIM) coatings and solvent degreasers,
- requirements for minor new source review at facilities and stage 1 and 2 at gas stations, and
- coordination with energy efficiency / renewable energy programs.

The Committee has not drafted Model Rules for these strategies at this time.

Please contact Seth Barna of the OTC staff (sbarna@otcair.org) for additional information on the "Stationary and Area Source Committee, Potential NOx and VOC Emissions Controls"

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Draft Model Rule

Control of Oil and Gas Fired Electric Generating Unit Boiler NOx Emissions

1.0 Purpose

The purpose of this regulation is to control the emissions of nitrogen oxides (NOx) from oil and gas fired boilers serving steam electric generating units, thereby reducing the impact on public health, safety, and welfare.

2.0 Applicability

This regulation is applicable to any existing oil-fired or gas-fired boiler serving an electric generating unit (EGU) with a nameplate capacity of 25 MW or greater. This regulation is not applicable to any existing oil-fired or gas-fired boiler serving an H.E.D.D. unit with a nameplate rating of 25 MW or greater whose NOx emissions are controlled by a H.E.D.D. rule or regulation, provided that the controls and limitations of the H.E.D.D. rule or regulation are effective during all periods of H.E.D.D. unit operation on an annual basis.

3.0 Definitions

The following words and terms, when used in this regulation, shall have the following meanings:

"Administrator" means the Administrator of the United States Environmental Protection Agency or the Administrator's duly authorized representative.

"Boiler" means a device that combusts fuel to generate steam.

"Electric generating unit (EGU)" means an electric generator driven by a steam turbine prime mover, and which delivers all or part of its electrical output to the power distribution grid for commercial sale.

"Electric generator" means a device that utilizes rotary motion from an input shaft to create electrical energy.

"Existing" means the EGU was synchronized to the grid on or before the effective date of this regulation.

"Gas" means any non-solid or non-liquid fuel, including natural gas, digester gas, landfill gas, process gas, or any gas stored as a liquid at high pressure such as liquefied petroleum gas.

"Gas fired "means a device capable of combusting only gas as a fuel.

"H.E.D.D." means high electric demand day.

"H.E.D.D. unit" means an electric generating unit that operates to generate electricity during H.E.D.D. periods, and <as defined by the state regulatory agency>.

"Nameplate capacity" means, starting from the initial installation of an electric generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other de-ratings) as specified by the manufacturer of the generator or, starting from the completion of any physical change in the generator resulting in an increase in the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other de-ratings), such increased maximum amount as specified by the person conducting the physical change.

"Oil" means any petroleum product used as a fuel, and includes distillate oils (No. 1 and No. 2) and residual oils (No. 4, No. 5, and No. 6).

"Oil fired" means a device combusting any amount of oil as a main or secondary fuel (other than burner pilots) during any previous or current year, and the EGU maintains the ability to store and fire oil as a main or secondary fuel (other than burner pilots).

"Oil/gas fired" means a device combusting oil and gas fuels, as primary or secondary fuels, in any fraction in a single EGU boiler.

"Operator" means any person who operates, controls, or supervises a boiler subject to this regulation and shall include, but not be limited to, any holding company, utility system, or plant manager of such boiler.

"Owner" means any holder of any portion of the legal or equitable title in a boiler subject to this regulation.

"Reasonably available control technology (RACT)" means the lowest emission limit for NOx that a particular source is capable of meeting by the application of NOx emissions control technology that is reasonably available considering technological and economic feasibility.

"Shutdown" means the period of time between when the EGU generator breaker is opened and the EGU electric generator is separated from the grid and the time when all fuel combustion in the related subject boiler is stopped.

"Startup' means the period of time between when any fuel combustion in the subject boiler is commenced and the related EGU generator breaker is closed connecting the EGU electric generator to the grid.

4.0 NOx Emissions Limitations

4.1 Except as provided for in Section 5.0 of this regulation, after January 1, 2013, no owner or operator of an EGU boiler subject to this regulation shall cause to be emitted into the atmosphere any NOx emissions in excess of the following presumptive RACT NOx emission rate limits:

Fuel Type	NOx Emission Rate Limit
Gas Only	0.08 lb/MMBTU
Oil or Oil/ Gas	0.15 lb/MMBTU

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

4.2 Compliance with the emission rate requirements of paragraph 4.1 of this regulation shall be demonstrated on a rolling 24-hour average basis.

4.3 Compliance with the emission rate requirements of paragraph 4.1 of this regulation shall be demonstrated with a continuous emission monitoring system that is installed, calibrated, operated, and certified in accordance with the requirements of 40 CFR Part 75, or other method approved by <state regulatory body> and the Administrator.

4.4 The NOx emission rate limits of paragraph 4.1 of this regulation are applicable during all periods of fuel combustion, including startup and shutdown, unless otherwise specified in the subject unit's operating permit.

4.5 No later than July 1, 2009, the owner or operator of a boiler subject to this regulation shall submit to the <state regulatory agency> a compliance plan acceptable to the <state regulatory agency> documenting either existing compliance with the requirements of paragraph 4.1 through paragraph 4.4 of this regulation, or a NOx emission control plan detailing all actions, including a schedule of increments of progress, which will be taken to comply with the requirements of paragraph 4.1 through 4.4 of this regulation. The submittal shall contain, as a minimum, the following information:

4.5.1 Facility and boiler identification.

4.5.2 Notation of all fuel types, primary and secondary, and approximate historic annual heat input percentages.

4.5.3 Documentation of NOx emission rates at current control levels and operating practices.

4.5.4 Where applicable, technical description of proposed emission control technology, equipment design, or process changes to be implemented to achieve compliance with the requirements of paragraph 4.1 through 4.4 of this regulation.

4.5.5 A proposed compliance schedule.

4.5.6 Any other information requested by the <state regulatory agency>.

5.0 Alternative RACT Determination

5.1 If the owner or operator of a boiler subject to this regulation is unable to comply with the presumptive RACT NOx emissions rate limitations of paragraph 4.1 of this regulation, an alternative NOx RACT determination shall be required to be submitted and approved by the <state regulatory agency> in accordance with Section 5.0 of this regulation.

5.2 Alternative RACT determinations made pursuant to paragraph 5.1 of this regulation shall be submitted to <state regulatory agency> no later than January 1, 2011 for review and approval.

5.3 The <state regulatory agency> will submit each approved alternative RACT determination made under Section 5.0 of this regulation to the Administrator for approval as a revision to the State Implementation Plan (SIP).

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

5.4 An alternative NOx RACT determination submitted in accordance with paragraph 5.1 of this regulation shall include, as a minimum, the following information:

5.4.1 Identification of equipment or process modifications that are proposed for implementation on the subject boiler.

5.4.2 Expected NOx emission rate for the range of normal operation.

5.4.3 Technical evaluation and economic evaluation to support the alternative RACT proposal, including technical and economic evaluation of any technically feasible alternatives other than the proposed alternative.

5.4.4 Baseline NOx emission rates for the subject boiler established with approved CEMS, stack test, or other method approved by the <state regulatory agency>.

5.4.5 Proposed implementation schedule.

5.4.6 Any other information requested by the <state regulatory agency>.

6.0 Recordkeeping

The owner or operator of a boiler subject to this regulation shall maintain, for a period of at least five years, copies of all measurements, tests, reports, logs, required to demonstrate compliance with this regulation. This information shall be provided to the <state regulatory agency> upon request at any time.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Draft Model Rule for Stationary Generators

(Items highlighted in gray scale are references to dates or other sections, which are subject to change.)

Section 01 Definitions The following words, terms, and abbreviations used in this regulation shall have the following meanings:

(a) "Combined heat and power" and "CHP" means a generator that sequentially produces both electric power and thermal energy from a single source, where the thermal energy is wholly or partly used for either industrial processes or other heating or cooling purposes.

(b) "Demand response" means when end-use customers reduce their use of electricity in response to power grid needs, economic signals from a competitive wholesale market, or special retail rates.

(c) "Digester gas" means gas generated by the anaerobic digestion of organic wastes, which include, but are not limited to, livestock manure, industrial wastewater, or food processing waste.

(d) "Electric generating unit" means a unit that generates electricity that is sold by the owner or operator of the unit. This term includes, but is not limited to, stationary combustion turbines or stationary internal combustion engines used to generate electricity.

(e) "Electric public utility" means a public utility that transmits and distributes electricity to end users within a State and which is regulated by a Public Utilities Commission.

(f) "Emergency" means:

(1) an electric power outage due to: a failure of the electrical grid; on-site disaster; local equipment failure; or public service emergencies such as flood, fire, natural disaster, or severe weather conditions (*e.g.*, hurricane, tornado, blizzard, etc.); or

(2) when there is a deviation of voltage or frequency from the electric public utility to the premises of three percent (3%) or greater above, or five percent (5%) or greater below, standard voltage or frequency.

(g) "Emergency" means an unforeseeable condition that is beyond the control of the owner or operator of an emergency engine and that:

(1) Results in an interruption of electrical power from the electricity supplier to the premises;

(2) Results in a deviation of voltage from the electricity supplier to the premises of three percent (3%) above or five percent (5%) below standard voltage in accordance with subsection (a) of section 16-11-115 of the Regulations of Connecticut State Agencies;

(3) Requires an interruption of electrical power from the electricity supplier to the premises enabling the owner or operator to perform emergency repairs;

(4) Requires operation of the emergency engine to minimize damage from fire, flood, or any other catastrophic event, natural or man-made; or

(5) Notwithstanding section 22a-174-22(a)(3) of the Regulations of Connecticut State Agencies, requires operation of the emergency engine under an agreement with the New England region system operator during the period of time the New England region system operator is implementing voltage reductions or involuntary load interruptions within the Connecticut load zone due to a capacity deficiency. *(OPTIONAL definition for CT or other states within ISO-NE territory)*

(h) "Emergency engine" means stationary reciprocating engine or a turbine engine which is used as a means of providing mechanical or electrical power only during periods of testing and scheduled maintenance or during either an emergency or in accordance with a contract intended to ensure an adequate supply of electricity for use within the state of Connecticut during the loss of electrical power derived from nuclear facilities. The term does not include an engine for which the owner or operator of such engine is party to any other agreement to sell electrical power from such engine to an electricity supplier, or otherwise receives any reduction in the cost of electrical power for agreeing to produce power during periods of reduced voltage or reduced power availability. *(OPTIONAL definition for CT or other states within ISO-NE territory)*

(i) "Emergency generator" means any generator powered by a stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. This term shall not include any of the following:

(1) generators used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity, such as an electric public utility or an independent system operator;

(2) equipment that serves as an energy or power source in circumstances other than emergencies, such as a load shaving unit or a generator participating in demand response;

(3) equipment which continues to be used after the primary energy or power source has either become operable again or should have become operable had the owner or operator made a reasonable effort to repair it;

(4) a peaking electric generating unit;

(5) naval marine internal combustion engines operated by the United States Navy for the purpose of testing and operational training; or

(6) a stationary internal combustion engine used at a nuclear power plant as an emergency generator which is subject to the regulations of the Nuclear Regulatory Commission (NRC).

(j) “Existing” means a generator which is installed before XXXX (effective date).

(k) “Generator” means an internal combustion engine, except for a combustion turbine, and associated equipment that converts primary fuel (including fossil fuels and renewable fuels) into electricity, or electricity and thermal energy.

(l) "Internal combustion engine” means either a reciprocating engine or combustion turbine in which power, produced by heat and/or pressure that is developed in the engine combustion chambers by the burning of a mixture of air and fuel, is subsequently converted to mechanical work.

(m) “Landfill gas” means gas generated by the decomposition of organic waste deposited in a landfill (including municipal solid waste landfills) or derived from the evolution of organic compounds in the waste.

(n) “lb/MWh” means the pounds of emissions emitted per the megawatts of electricity produced per hour.

(o) “Load response” means the same as demand response.

(p) “Load shaving unit" means an electric generating unit which generates electricity for sale or use during periods of higher than normal demand for electricity.

(q) "Maximum allowable emission rate" means the maximum amount of an air contaminant that may be emitted into the ambient air during one of the following:

(1) A prescribed interval of time, such as one hour or one day;

(2) The period of time required for a unit activity, such as the burning of one gallon of fuel; or

(3) The period of time required to produce a given unit of output, such as the generation of one megawatt of electricity.

(r) “Maintenance” means the work necessary to repair, prevent damage, or sustain existing components of a generator or any ancillary equipment associated with its use.

(s) “New” means a generator which is installed or repowered on or after XXXX (effective date).

(t) “Non-emergency generator” means a stationary generator that may be used during an emergency, during testing, and for maintenance purposes, as well as for any other purpose at times other than during an emergency. This term includes, but is not limited to, electric generating units, load shaving units, peaking electric generating units, and generators participating in demand response.

(u) “Owner” means the owner, operator, or person responsible for a generator.

(v) “Peaking electric generating unit” means a load shaving unit.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(w) "Power outage" means an interruption in the provision of electricity to customers because normally available sources of electrical energy are unavailable due to circumstances beyond the control of both the customer and the power supplier.

(x) “Power to heat ratio” means for a CHP unit, the design electrical output divided by the design recovered thermal output in consistent units.

(y) “Prime power rating” means the maximum amount of power a generator is capable of supplying during continuous duty, as specified by the manufacturer.

(z) “Reciprocating engine” means an internal combustion engine with a crankshaft.

(aa)**“**Repower**”** means the replacement of the internal combustion engine of a generator with another internal combustion engine.

(bb)“Standby power rating” means the amount of power a generator is capable of supplying during a power outage for the duration of the interruption, as specified by the manufacturer.

(cc) “Stationary” means a generator powered by an internal combustion engine which is not propelled or intended to be propelled while performing its function, that is used either in a fixed application, or in a portable (or transportable) application in which the engine will stay at a single location on a property (which includes the land, the buildings, and all improvements thereon) for more than 12 consecutive months (i.e., a generator which is not mobile).

(dd)"Stationary reciprocating engine" means an internal combustion engine that is a reciprocating engine that remains for more than 30 days at a single site (for example, any building, structure, facility, or installation), and;

(1) not self-propelled, but may be mounted on a vehicle for portability; or

(2) is self-propelled on tracks at a facility, but does not in the course of its normal operation leave the facility. This term does not include mobile electric generators being used by the military, locomotive engines or construction engines. *(OPTIONAL definition for defining “stationary”)*

(ee)“Testing” means determining the capability of a generator to meet the specified requirements of this regulation or determining if the generator and any ancillary equipment associated with its use are functioning correctly.

(ff) “Waste gas” means manufacturing or mining byproduct gases that are not used and are otherwise flared or incinerated. A manufacturing or mining byproduct is a material that is not one of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation, and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation. The term does not include an intermediate manufacturing or mining product which results from one of the steps in a manufacturing or mining process and is typically processed through the next step of the process within a short time.

Section 02 Applicability

(a) This regulation applies on or after XXXX (effective date) to any stationary generator that has a maximum standby power rating which equals or exceeds X kW *(this rating could be any level between 10-100kW, depending on State needs)*, except that this category shall not include

stationary internal combustion engines used at a nuclear power plant as an emergency generator which are subject to regulations of the Nuclear Regulatory Commission (NRC), nor naval marine internal combustion engines operated by the United States Navy for the purpose of testing and operational training.

(b) Use of the term "generator" in this regulation shall refer to any and all generators subject to the requirements of this regulation unless the type of generator being referred to is otherwise specified.

(c) Any stationary generator which is moved from one property to another in a deliberate attempt to circumvent the residence time requirement of 12 consecutive months shall be deemed stationary.

(d) The requirements of Section 04 shall apply to a non-emergency generator if the generator is operated at any time other than during emergencies, for testing, or for maintenance purposes.

(e) The requirements of Section 05 shall apply to an emergency generator if:

(1) The generator is only operated during emergencies due to circumstances beyond the control of the owner or operator of the facility, or for testing or maintenance of the generator to ensure operability; and

(2) The owner or operator complies with the provisions of Section 05 Emission Standards and Control Options for Emergency Generators.

Section 03 Registration of Stationary Generators

(a) The owner of a stationary generator shall submit to the State the following information, prior to the installation of any new generator, or prior to XXXX (3 months after effective date) for any existing generator:

(1) the generator owner's name and telephone number;

(2) the physical address where the generator is installed, or will be installed;

(3) the geographical coordinates (latitude and longitude) where the generator is installed, or will be installed;

(4) a description of the generator including the make, model number, and serial number;

(5) the year of manufacture for the generator;

(6) the standby power rating or the prime power rating for the generator, or both power ratings if both are known; and

(7) the date of installation for existing generators, or the expected date of installation for new generators.

(b) The owner of a stationary generator shall submit to the State a letter stating whether the generator is to be classified as an emergency generator or a non-emergency generator.

Section 04 Emission Standards for Non-Emergency Generators

(a) The owner or operator of a non-emergency generator which meets the applicability criteria of Section 02(d) above shall ensure that the generator complies with the provisions of this section,

unless the generator is operating as an emergency generator.

(b) The emissions of a non-emergency generator shall be limited at all times to conform with the following applicable maximum allowable emission rates:

(1) For an existing, non-emergency generator:

i. 4.0 lb/MWh nitrogen oxides;

ii. 1.9 lb/MWh hydrocarbons;

iii. 0.7 lb/MWh particulate matter (for liquid-fueled generators only); and

iv. 10.0 lb/MWh carbon monoxide.

(2) For a new, non-emergency generator, installed after XXXX (effective date) and before January 1, 2012:

i. 1.0 lb/MWh nitrogen oxides;

ii. 0.5 lb/MWh hydrocarbons;

iii. 0.7 lb/MWh particulate matter (for liquid-fueled generators only); and

iv. 10.0 lb/MWh carbon monoxide.

(3) For a new, non-emergency generator, installed after January 1, 2012:

i. 0.6 lb/MWh nitrogen oxides;

ii. 0.3 lb/MWh hydrocarbons;

iii. 0.07 lb/MWh particulate matter (for liquid-fueled generators only); and

iv. 2.0 lb/MWh carbon monoxide.

(4) For a new, non-emergency generator that uses waste, landfill, or digester gases, installed after XXXX (effective date):

i. 2.2 lb/MWh nitrogen oxides;

ii. 0.7 lb/MWh hydrocarbons;

iii. 10.0 lb/MWh carbon monoxide.

(c) The compliance dates for the emissions standards of Section 04(b)shall be:

a. XXXX (1 year after effective date) for each existing, non-emergency generator; and

b. prior to initial operation for a new, non-emergency generator.

(d) Compliance with the emission standards specified in this section shall be determined by the emissions data obtained from the test methods specified in Section XXXX.*(State specific section)*

(a) The recordkeeping and reporting requirements for generators shall be in accordance with the provisions of Section 07, Section XXXX and Section XXXX, respectively *(These sections refer to individual State recordkeeping, reporting, and emission statement requirements)*.

Section 05 Emission Standards and Control Options for Emergency Generators

(a) The owner or operator of an emergency generator which meets the applicability criteria of Section 02(e) shall ensure that the emergency generator complies with the provisions of this section.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(b) The emergency generator is operated only during emergencies due to circumstances beyond the control of the owner or operator of the facility, or for testing the engine to ensure operability.

(c) The owner or operator of an emergency generator shall not test the emergency generator on days when air quality is predicted by the State or designated Agency to be at least "unhealthy for sensitive groups" as defined in the U.S. EPA's Air Quality Index.

(d) The owner or operator of an emergency generator shall:

(1) at all times,operate the generator in conformance with the generator manufacturer's instructions, such as following maintenance and operating requirements to help minimize emissions, if the generator is considered to be an existing, emergency generator;

(2) ensure the generator meets the applicable maximum allowable emission rates in 40 CFR 60, Subpart IIII or Subpart JJJJ (July 1, 2009 ed.), for the stationary engine powering the emergency generator, prior to its initial operation, if the generator is considered to be a new, emergency generator according to this regulation;

(3) notify the State of XXXX in writing in the event that a generator fails to comply with the requirements of Env-A xxxx.05 (b) or (c).

(e) An existing generator shall not be considered a new generator, as defined by this regulation, if it is relocated and reinstalled on the same property, nor if it is reclassified from an emergency generator to a non-emergency generator or vice versa.

(f) The recordkeeping and reporting requirements for emergency generators shall be in accordance with the provisions of Section 07, Section XXXX and Section XXXX, respectively *(These sections refer to individual State recordkeeping, reporting, and emission statement requirements)*.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Section 06 Credit for Concurrent Emissions Reductions *(OPTIONAL – Up to each state to decide to include)*

(a) Flared Fuels. If a generator combusts fuel that would otherwise be flared (i.e., not used for generation or other energy related purpose), the emissions that were or would have been produced through the flaring can be deducted from the actual emissions of the generator, for the purposes of calculating compliance with the requirements of this regulation. If the actual emissions from flaring can be documented, they may be used as the basis for calculating the credit, subject to the approval of the State. If the actual emissions from flaring cannot be documented, then the following default values shall be used:

Emissions	Waste, Landfill, Digester Gases
Nitrogen Oxides	0.1 lbs/MMBtu
Particulate Matter	N/A
Carbon Monoxide	0.7 lb/MMBtu

(b) Combined Heat and Power.

(1) CHP installations shall meet the following requirements to be eligible for emissions credits related to thermal output:

i. At least 20% of the fuel's total recovered energy shall be thermal and at least 13% shall be electric. This corresponds to an allowed power-to-heat ratio range of between 4.0 and 0.15.

ii. The design system efficiency shall be at least 55%.

(2) A CHP system that meets the requirements of Section 06(b)(1) of this regulation may receive a compliance credit against its actual emissions based on the emissions that would have been created by a conventional separate system used to generate the same thermal output. The credit shall be subtracted from the actual generator emissions for purposes of calculating compliance with the limits in Section 04 or Section 05 of this regulation. The credit will be calculated according to the following assumptions and procedures:

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

i. The emission rates for CHP facilities that replace existing thermal systems (e.g., boiler) for which historic emission rates can be documented shall be the historic emission rates in lbs/MMBtu, but not more than the emission rates for new facilities that displace a thermal system, which are:

Emissions	Maximum Rate
Nitrogen Oxides	0.2 lbs/MMBtu
Particulate Matter	N/A
Carbon Monoxide	0.08 lbs/MMBtu

ii. The emissions rate of the thermal system in lbs/MMBtu will be converted to an output-based rate by dividing by the thermal system efficiency. For new systems the efficiency of the avoided thermal system will be assumed to be 80% for boilers or the design efficiency of other process heat systems. If the design efficiency of the other process heat system cannot be documented, an efficiency of 80% will be assumed. For retrofit systems, the historic efficiency of the displaced thermal system can be used if that efficiency can be documented and if the displaced thermal system is either enforceably shut down and replaced by the CHP system, or if its operation is measurably and enforceably reduced by the operation of the CHP system.

iii. The emissions per MMBtu of thermal energy output will be converted to emissions per MWh of thermal energy by multiplying by 3.413 MMBtu/$MWh_{thermal}$.

iv. The emissions credits in lbs/$MWh_{thermal}$, as calculated in Section 06(b)(2)(iii) of this regulation, will be converted to emissions in lbs/$MWh_{emissions}$ by dividing by the CHP system power-to-heat ratio.

v. The credit, as calculated in Section 06(b)(2)(iv) of this regulation, will be subtracted from the actual emission rate of the CHP unit to produce the emission rate used for compliance purposes.

vi. The mathematical calculations set out in Section 06(b)(2)(i) through Section 06(b)(2)(iv) of this regulation are expressed in the following formula:

$$\text{Credit lbs/MWh}_{\text{emissions}} = \frac{(\text{boiler limit lbs/MMBtu})}{(\text{boiler efficiency})} \times \frac{3.413}{(\text{power to heat ratio})}$$

(c) Non-Emitting Resources. When electricity generation that does not produce any of the emissions regulated herein is installed and operated simultaneously at the facility where the generator is installed and operated, then the electricity savings supplied by the non-emitting electricity source

shall be added to the electricity supplied by the generator for the purposes of calculating compliance with the requirements of this regulation, subject to the approval of the Department and in accordance with the following formula for determining such savings:

$Rate_{EF} = (Rate_A) * [(Size_A)/(Size_A + Size_{NER})]$

$Rate_{EF}$ = effective emission rate of generator, accounting for non-emitting resource(s) (lb/MWh)

$Rate_A$ = actual emission rate of generator alone (lb/MWh)

$Size_A$ = actual prime power rating of generator (MW)

$Size_{NER}$ = total generating capacity of non-emitting resource(s) (MW)

Section 07 Record Keeping and Reporting

(a) Record-Keeping Requirements. The owner of a generator shall maintain the following records on the property where the generator is installed, or at such other readily accessible location that the State approves in writing:

(1) An owner shall monitor the monthly and yearly amounts of fuel, or fuels, consumed by their generators. Yearly fuel consumption shall be calculated and recorded each calendar month by recording (for each fuel) the current calendar month's fuel consumption and adding it to those of the previous eleven consecutive months.

(2) A non-resettable hour metering device shall be used by an owner to continuously monitor the monthly and yearly operating hours for each of their generators. Yearly operating hours shall be calculated and recorded each calendar month by recording the current calendar month's operating hours and adding them to those of the previous eleven consecutive months.

(3) Monthly and yearly operating hours for an emergency generator. Yearly operating hours during which testing or maintenance occurred shall be calculated and recorded each calendar month by recording the current calendar month's testing or maintenance hours and adding them to those of the previous eleven consecutive months. A brief description of each testing or maintenance performed shall also be recorded.

(b) Availability of Records. The owner shall maintain each record required by Section 07(a) of this regulation for a minimum of five years after the date the record is made. The owner may retain hard copies (e.g., paper) or electronic copies (e.g., compact discs, computer disks, magnetic tape, etc.) of the records. An owner shall promptly provide the original or a copy of a record or records to the State upon request.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Draft Model Rule for Control of Nitrogen Oxide (NOx) Emissions from Natural gas-fired Industrial, Commercial, and Institutional (ICI) Boilers, Steam Generators, Process Heaters, and Water Heaters.

Statement of purpose: The provisions of this model rule limit nitrogen oxide (NOx) emissions from natural gas-fired industrial, commercial, and institutional (ICI) boilers, steam generators, process heaters, and water heaters. This model rule achieves NOx reductions by imposing restrictions on the manufacture, distribution, sale, and installation of natural gas-fired ICI boilers, steam generators, process heaters, and water heaters.

San Joaquin Valley Air Pollution Control District Rule 4308 for boilers, steam generators, process heaters and water heaters with maximum rated heat input capacity equal to or greater than 75,000 Btu/hr and up to but less than 2.0 million Btu/hr, San Joaquin Valley Air Pollution Control District Rule 4307 for gas-fired and liquid fuel-fired boilers, steam generators, and process heaters with maximum rated capacity of 2.0 million Btu/hr up to and including 5.0 million Btu/hr, and similar rules adopted by the State of Texas and other California Air Pollution Control Districts form the basis of this model rule.

Please note that States opting to promulgate rules base on this model rule must comply with State specific administrative requirements and procedures.

NOTE: “xxxx” is a place holder for State-specific section numbers, title numbers, or State names.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Model Rule for
Control of Nitrogen Oxide (NOx) Emissions
From Natural gas-fired Industrial, Commercial, and Institutional (ICI) Boilers,
Steam Generators, Process Heaters, and Water Heaters

PART Env-A xxxx Control of Nitrogen Oxide (NOx) Emissions From Natural gas-fired Industrial, Commercial, and Institutional (ICI) Boilers, Steam Generators, Process Heaters, and Water Heaters

01 Definitions
02 Applicability
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09 NOx Compliance Record Keeping and Reporting Obligations **[Optional]**

Env-A xxxx.01 Definitions. The following words, terms, and abbreviations used in this part (subchapter) shall have the following meaning:

The definitions in this section are optional and only provided as examples for state adoption as needed. These sample definitions were taken from San Joaquin Valley Air Pollution Control District Rules 4307 and 4308, the OTC Model Rule for Additional NOx Control Measures dated March 6, 2001, and 40 CFR 63.

(a) "Annual Heat Input" means the actual, total heat inputs of fuels burned by a unit in a calendar year, as determined from the higher heating value (hhv) and cumulative annual usage of each fuel;

(b) "Atmospheric unit" means any unit with a non-sealed combustion chamber in which the combustion air and flue gases are drawn through the unit without the use of a fan;

(c) "Boiler, Steam Generator, or Water Heater" means any external combustion equipment fired with any fuel to produce hot water or steam;

(d) "British Thermal Unit (Btu)" means the amount of heat required to raise the temperature of one pound of water from 59° F to 60° F at one atmosphere pressure;

(e) "Control apparatus" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere;

(f) "Emission unit" means an individual piece of equipment or control apparatus from which any air contaminant is emitted to the ambient air, e.g., an individual boiler;

(g) "Gaseous fuel" means any fuel which is a gas at Standard Conditions;

Alternate definition: "Gas" or Gaseous fuel" means any of the following, if they can be used to create useful heat and/or mechanical energy:
(1) Natural gas;
(2) Gaseous substances produced synthetically from coal or oil;

(3) Gaseous substances derived from the decomposition of organic matter; or
(4) Gaseous substances derived as a by-product of a manufacturing process

(h) "Heat Input" means the heat (hhv basis) released due to fuel combustion in a unit, not including the sensible heat of incoming combustion air and fuel;

(i) "Heat Output" means the enthalpy of the working fluid output of the unit;

(j) "Higher Heating Value (hhv)" means the total heat liberated per mass of fuel burned (expressed as Btu per pound), when fuel and dry air at standard conditions undergo complete combustion and all resulting products are brought to their standard states at standard conditions;

(k) "Humidifier" means a device or system that uses an air stream heated by a direct contact combustion process in combination with a water spray to produce warm air of high humidity in order to maintain or increase the moisture content of material being processed or conveyed by the air stream;

(l) "Industrial/Commercial/Institutional (ICI) boiler" means a steam generating unit that generates steam to supply power and/or heat to an industrial, institutional, or commercial operation. This term doesn't include boilers that serve electric generating units and cogeneration facilities;

(m) "Liquid fuel" means any fuel which is a liquid at Standard Conditions;

(n) "Manufactured Home" means a manufactured home as defined in 42 United States Code Section 5402 and California Health and Safety Code Section 18007;

(o) "Maximum allowable emission rate" means the maximum amount of an air contaminant that may be emitted into the ambient air during one of the following:

(1) A prescribed interval of time, such as one hour or one day;
(2) The period of time required for a unit activity, such as the burning of one therm of natural gas or one gallon of fuel;
(3) The period of time required to produce a given unit of output; such as one pound of steam

(p) "Maximum heat input rate" means, for a given unit of fuel-burning equipment, its maximum steady state fuel firing rate, in Btus per hour of gross heat input as determined by the design rating of the equipment manufacturer;

(q) "MM Btu" means million British thermal units;

(r) "Natural gas" means:

(1) A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquid petroleum gas, as defined by the ASTM Standard Specification for Liquid Petroleum Gases, D1835-82;

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(s) "NOx Emissions" means the sum of the oxides of nitrogen as expressed as NO_2 in the flue gas;

(t) "Oxides of nitrogen (NOx)" means all oxides of nitrogen, except nitrous oxide, as measure in accordance with test methods approved by the State of xxxx and EPA, such as the test methods set forth at 40 CFR 60 Appendix A Method 7E;

(u) "ppmvd" means parts per million dry volume**;**

(v) "Process Heater" means any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to water or process streams excluding kilns or ovens used for drying, baking, cooking, calcining, or vitrifying; and unfired waste recovery heaters used to recover sensible heat from the exhaust of combustion equipment.

(w) "Qualified Technician" means a stationary source employee or any personnel contracted by a stationary source operator who has a documented training and a demonstrated experience performing tune-ups on a unit to the satisfaction of the Air Pollution Control Officer (APCO). The documentation of tune-up training and experience shall be made available to the APCO upon request.

(x) "Rated Heat Input" (expressed as million Btu per hour) means the heat input capacity specified on the name plate of the unit. If the unit has been physically modified such that its maximum heat input differs from what is specified on the nameplate, the modified maximum heat input shall be considered as the rated heat input and made enforceable by the Permit to Operate;

(y) "Residential dwelling" means a structure severing as a dwelling for one or more persons, especially for a family or household.

(z) "School" means any public or private school used for the purpose of education and instruction of school pupils in the Kindergarten through Grade 12, but does not include any private school in which education and instruction are primarily conducted in private homes;

(aa) "Solid Fuel" means any fuel which is solid at Standard Conditions;

(bb) "Standard Conditions" means a gas temperature of 70 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute. Results of all analyses and tests shall be calculated or reported at this gas temperature and pressure;

(cc) "Stationary Source" means any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. Building, structure, facility, or installation includes all pollutant emitting activities which are under the same or common ownership or operation, or which are owned or operated by entities which are under common control and belong to the same industrial grouping either by virtue of falling within the same two-digit standard industrial classification code or by virtue of being part of a common industrial process, manufacturing process, or connected process involving a common raw material, and are located on one or more contiguous or adjacent properties;

(dd) "Steam generating unit" means fuel burning equipment or combustion equipment that combusts any fuel, process byproduct, or waste in order to produce steam or to heat water or any heat transfer medium;

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(ee) "Unit" means any boiler, steam generator, process heater or water heater as defined in this rule.

Env-A xxxx.02 Applicability.

(a) Except as provided in section (b) below this rule applies to any person who on or after January 1, 2013 manufactures, distributes, supplies, sells, offers for sale, for lease, for rent, imports, delivers, installs, or solicits the installation of, any new or replacement natural gas-fired industrial, commercial, and institutional (ICI) boilers, steam generators, process heaters, and water heaters by size as follows:

(1) Type 1 unit - maximum rated heat input capacity greater than or equal to 75,000 BTU/hr but no more than 400,000 Btu/hr;
(2) Type 2 unit - maximum rated heat input capacity greater than 400,000 Btu/hr but less than 2.0 million Btu/hr; and
(3) Type 3 unit - maximum rated heat input capacity of 2.0 million Btu/hr up to and including 5.0 million Btu/hr

(b) This rule does not apply to:
(1) Units using a fuel other than natural gas;
(2) Units used in recreational vehicles;
(3) Units installed in manufactured homes;
(4) Humidifiers, where the products of combustion come into direct contact with the material to be heated; or
(5) Units intended for shipment and use outside of **State xxxx**.

States also have the option to adopt one or both of the following exemptions:
(6) Type 3 units located in residential dwellings designed for 4 or fewer families;
(7) Type 3 units burning less than 9,000 therms of gas per calendar year based on gas bills;

[States may choose to implement this model rule as a manufacturing restriction or sales restriction, which may be enforced through the acceptance of San Joaquin Valley Air Quality Management District's certification program or South Coast Air Quality Management District's certification program, through a state certification program, through performance testing, or through a combination of any of these options. The choices offered in this model rule are voluntary options for states to consider based on available resources and current enforcement practices. Sample text for the compliance options are set out in this model rule as regulatory concepts that will need to be revised by any state prior to rule adoption.]

Env-A xxxx.03 NOx Emission Limits

(a) The NOx limits for natural gas-fired boilers, steam generators, process heaters, or water heaters
supplied, sold, offered for sale, installed, or solicited for installation within **State xxxx** are as follows:

(1) Type 1 units
a. manufactured on or after 1/1/2013: 0.093 lbs NOx/mmBtu heat input

(2) Type 2 units
b. manufactured on or after 1/1/2013: 0.036 lbs NOx/mmBtu heat input

(3) Type 3 units

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Upon installation of a new or replacement unit on or after 1/1/2013:

a. For Atmospheric Units: 0.014 lb/MMBtu heat input or 12 ppmv

b. For Non-Atmospheric Units: 0.011 lb/MMBtu heat input or 9 ppmv

(b) All NOx emission limits specified in Env-A xxxx.03 (a) above shall be corrected to 3% oxygen by volume on a dry basis.

(c) To demonstrate compliance with the NOx emission limits specified in Env-A xxxx.03 (a) above, a person shall: [Note: The compliance requirements may apply to a seller, manufacturer, and/or the owner or operator of a unit, at an individual state's option. The enforcement responsibilities to the state will differ depending on which persons are required to demonstrate compliance.]

(1) Obtain certification pursuant to Env-A xxxx.05; or

(2) Conduct compliance testing specified in Env-A xxxx.07 [Note: Env-A xxxx.07 allows states to require initial and/or periodic stack testing (once every 3 years after the initial compliance test).]

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Env-A xxxx.04 Combustion Tune-Ups [Optional]

This section is optional and inserted as *an example* of existing rules that deal with this issue.

(a) Except as provided in section Env-A xxxx.02 (b) above, the owners or operators of all Type 3 units shall:

(1) Before April 1st of each year:

a. Perform an efficiency test using the test procedures specified in chapter 3, Combustion Efficiency Tables, Taplin, Harry, R. Fairmont Press, 1991; and

b. Adjust the combustion process of the boiler in accordance with the procedures specified in chapter 5, Combustion Efficiency Tables, Taplin, Harry, R. Fairmont Press, 1991; and

1st Alternate language for (a)(1):

(1) Before April 1st of each year:

a. Perform an efficiency test using the test procedures specified in New York Department of Environmental Conservation's (NYDEC's) Air Guide-33 (Small Boiler Tune-up Requirements for NOx RACT Compliance); and

b. Adjust the combustion process of the boiler in accordance with the procedures specified in New York Department of Environmental Conservation's (NYDEC's) Air Guide-33 (Small Boiler Tune-up Requirements for NOx RACT Compliance); and

2nd Alternate language for (a)(1):

(1) Before April 1st of each year:

a. Perform an efficiency test using the test procedures specified in ASME/ANSI Boiler Test Code 4.1; and

b. Adjust the combustion process of the boiler in accordance with the procedures specified in ASME/ANSI Boiler Test Code 4.1; and

(2) Maintain in a permanently bound log book the following information:

a. The date(s) on which:

1. The efficiency test was conducted; and

2. The combustion process was last adjusted;

b. The name(s), title, and affiliation of the person(s) who:

1. Conducted the efficiency test; and

2. Made the adjustments;

c. The NOx emission concentration, in parts-per-million by volume, dry basis (ppmvd), corrected to 15% oxygen, after the adjustments are made;

d. The CO emission concentration, in ppmvd, corrected to 15% oxygen, after the adjustments are made;

e. The opacity readings; and

f. Any other information required by Env-A xxx (state specific general recordkeeping requirements), Env-A xxx (state specific NOx emission statements requirements), and Env-A xxx (state specific NOx emission statement reporting requirements)

1st Alternate language for (a)(2)

(2) Maintain written copies of all records specified in New York Department of Environmental Conservation's (NYDEC's) Air Guide-33 (Small Boiler Tune-up Requirements for NOx RACT Compliance)

2nd Alternate language for (a)(2):

(2) Maintain written copies of all information generated pursuant to the test procedures specified in ASME/ANSI Boiler Test Code 4.1;

Env-A xxxx.05 NOx Compliance Certification

This section is inserted as *an example* of an existing rule that deals with this issue.

(a) A person may demonstrate compliance with the applicable NOx emission limits specified in Env-A xxxx.03 (a) by obtaining one of the following certifications:

(1) Certification by the San Joaquin Valley Air Pollution Control District that the equipment complies with San Joaquin Valley Air Pollution Control District Rule 4306 or 4307 for the applicable Type of unit; or

(2) Certification by [another state or regional air quality program like California's South Coast Air Quality Control District] that the equipment complies with the NOx emission limits specified in Env-A xxxx.03 for the applicable Type of unit; or

(3) Certification by the manufacturer that the equipment complies with the NOx emission limits in Env-A xxxx.03 for the applicable Type of unit; or

(4) Certification by [State X air quality program] pursuant to Env-A xxxx.06.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(b) Documentation sufficient to demonstrate certification shall include:

(1) A valid certificate from the manufacturer stating that the subject make and model of boiler, steam generator, process heater, or water heater is capable of compliance with the NOx emission limits specified in Env-A xxxx.03 for the applicable type of unit;

(2) A valid and effective order issued by the San Joaquin Valley Air Pollution Control District certifying compliance as provided for in Env-A xxxx.05 (a)(1) above; or

(3) A valid and effective certificate of compliance issued by **State X** certifying compliance as provided for in Env-A xxxx.05 (a)(4) above.

(c) A certification under Env-A xxxx.05 (a)(3) above shall apply to a specific make and model of boiler, steam generator, process heater or water heater and shall include the certifying entity's statement that such make and model of boiler, steam generator, process heater, or water heater has the ability to operate in compliance with the NOx emission limits in Env-A xxxx.03 for the applicable Type of unit for the lesser of the first 15,000 hours of operation or three years, when such boiler, steam generator, process heater, or water heater is installed, operated and maintained according to the manufacturer's instructions.

(d) A boiler, steam generator, process heater, or water heater's compliance with the NOx emission limits in Env-A xxxx.03 for the applicable Type of unit shall be verifiable for the first three years of the boiler, steam generator, process heater or water heater's operation by an emission test performed in accordance with Env-A xxxx.07

(e) An owner or operator of a boiler, steam generator, process heater, or water heater that is operating in compliance pursuant to a certification provide for under Env-A xxxx.04(a) above shall maintain such boiler, steam generator, process heater, or water heater prescribed by the manufacturer and this section.

Env-A xxxx.06 [State X] Compliance Certification Program

This section is *inserted as a place holder* for a State that may already be implementing a boiler certification program or a State that may choose to establish and implement a boiler certification program. States will need to specify criteria and procedures for boiler certification.

Env-A xxxx.07 NOx Compliance Testing [Optional]

This section is optional and inserted as *an example* of an existing rule that deals with this issue.

(a) Except for those units that have demonstrated compliance pursuant to Env-A xxxx.05 or those units specified in Env-A xxxx.xx [refers to State specific requirement], all Type 3 units subject to this part shall conduct an initial compliance stack test to demonstrate compliance with the NOx emission limits specified in Env-A xxxx.03.

(b) Except for those units specified in Env-A xxxx.xx [refers to State specific requirement], all Type 3 units subject to this part shall conduct periodic stack testing, no less frequently than once every 3 years, in order to demonstrate compliance with the NOx emission limits specified in Env-A xxxx.03. The first test shall occur no later than 3 years from the date of the initial compliance stack test required by Env-A xxxx.07 (a).

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(c) The owner or operator of a stationary source or unit required to conduct an initial compliance stack test or periodic stack testing shall submit a stack test report to the State of xxxx within in 30 days of the date of such stack test.

(d) For stationary sources, including industrial, commercial, and institutional boilers, the following test methods shall be used:

(1) Method 7, 7A, 7C, 7D or 7E, 40 CFR Part 60, Appendix A or ISO 8178-2 to determine NOx concentrations in stack gases from applicable stationary sources.

(2) Method 1 or 2, 40 CFR Part 60, Appendix A to determine the exit velocity of stack gases from applicable stationary sources.

(e) Method 3 or 3A, 40 CFR Part 60, Appendix A to determine carbon dioxide, oxygen, excess air and molecular weight (dry basis) of stack gases from applicable stationary sources.

(f) Method 4, 40 CFR Part 60, Appendix A to determine moisture content (volume fraction of water vapor) of stack gases from applicable stationary sources.

(g) Gaseous concentration measurements required by Env-A xxxx.03 for nitrogen oxides (NOx), carbon monoxide (CO), and oxygen (O_2) shall be conducted with the following procedures and the following equipment:

(1) Any of the following monitors shall be acceptable for making the gaseous concentration measurements:

a. All analyzers meeting the specifications set forth in the applicable sections of 40 CFR Part 60, Appendix B, Performance Specifications 2 through 4;

b. Portable extractive monitors using an electrochemical sensor performing the gas concentration measurement; and

c. Alternative monitors, if written technical information is provided to the State of xxxx demonstrating that the analyzer in the alternative monitor is at least as accurate as the analyzer using the electrochemical sensor;

(2) All concentration monitors shall be operated following the operating procedures specified by the manufacturer;

(3) Measurements shall be taken at one minute intervals at each representative operation condition over a minimum of a 15-minute period following the achievement of stable operation;

(4) All measurements shall be documented and averaged over the period of testing;

(5) Prior to and following measurement, a zero and calibration span shall be performed following the manufacturer's recommended procedures. The span calibration values shall be chosen by the operator of the instrument at a value between 80 and 150% of the expected concentration based on manufacturer's data or EPA-published emission factors for the emission unit:

(6) All calibration data shall be recorded and kept on-site; and

(7) Concentration measurements shall be reported on a dry basis. If the direct measurement is on a wet basis, the basis for the percentage moisture used and the correction calculation to dry basis shall be documented.

(h) Stationary sources and units subject to this part shall also comply with the testing requirements specified in Env-A xxxx [Refers to other State specific testing requirements].

Env-A xxxx.08 NOx Compliance Monitoring Requirements [Optional]

This section is optional and inserted as *an example* of an existing rule that deals with this issue.

The State of xxxx shall require installation, operation, maintenance, and quality assurance testing of a CEM system for NOx which meets all of the requirements specified in Env-A xxxx [Refers to other State specific CEM requirements], if any of the following conditions exist:

(a) A source or unit utilizes air pollution control equipment in order to maintain compliance with a NOx emission limit and continuous emission monitoring is determined by the State of xxxx to be necessary in order to ensure that this emission limit is not exceeded and that the control equipment is performing correctly; and

(b) Any stationary source or unit subject to the provisions of Env-A xxxx.xx [Refers to other State specific CEM requirements].

Env_A xxxx.09 NOx Compliance Record Keeping and Reporting Obligations [Optional]

This section is optional and inserted as *an example* of an existing rule that deals with this issue.

(a) The owner or operator of a unit subject to this regulation shall maintain, for a period of at least 5 years, copies of all measurements, tests, reports, logs, required to demonstrate compliance with this regulation. This information shall be provided to the [state regulatory agency] upon request.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Draft Model Rule for Consumer Products

This draft model rule was developed by the Ozone Transport Commission (OTC) as part of a regional effort to attain and maintain the eight-hour ozone standard, and reduce eight-hour ozone levels. This is an amendment to the Final Draft September 13, 2006 Model Rule which was developed and implemented by the OTC states to address the eight-hour standard and area shortfalls.

Notes:

1. Certain compounds affected by this model rule may not cause or contribute to formation of ozone, but due to their hazardous nature are included in this model for convenience of the states, which may regulate such compounds under other state authorities. Such compounds are noted with a double asterisk (**) and it is up to each state to decide whether it wishes to include regulation of said compounds in its state-specific rulemaking. OTC takes no position on whether to include these compounds in such a rulemaking.

2. States opting to promulgate rules based on this model rule must comply with State specific administrative requirements and procedures.

3. Enclose material to be deleted in brackets (**[ ]**) and computer underline new material. These changes are based on the 2006 California Air Resources Board (CARB) amendments to CARB's Consumer Products Regulation.

4. Place deleted material ahead of new material.

5. The term (OTC STATE) or (OTC STATE AGENCY) are placeholders for individual State names.

Sections

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Subpart 235-11 Alternative Control Plan (ACP) for Consumer Products

Section 235-1.1 Applicability.

Except as provided in Subpart 235-4 of this Part, this Part shall apply to any person who sells, supplies, offers for sale, or manufactures consumer products for use in the State of New York (OTC STATE).

Section 235-2.1 Definitions.

For the purpose of this Part, the following definitions apply:

(a) 'ACP agreement' means the document signed by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) which includes the conditions and requirements of the ACP, and which allows manufacturers to sell ACP products in the State of New York (OTC STATE) pursuant to the requirements of this Part.

(b) 'ACP emissions' means the sum of the VOC emissions from every ACP product subject to an ACP agreement approving an ACP, during the compliance period specified in the ACP agreement, expressed to the nearest pound of VOC and calculated according to the following equation:

ACP Emissions = $(\text{Emissions})_1 + (\text{Emissions})_2 + ... + (\text{Emissions})_N$

where,

$$\text{Emissions} = \frac{(\text{VOC Content}) \times (\text{Enforceable Sales})}{100}$$

(c) 'ACP limit' means the maximum allowable ACP emissions during the compliance period specified in an ACP agreement approving an ACP, expressed to the nearest pound of VOC and calculated according to the following equation:

ACP Limit = $(\text{Limit})_1 + (\text{Limit})_2 + ... + (\text{Limit})_N$

where,

$$\text{Limit} = \frac{(\text{APC Standard}) \times (\text{Enforceable Sales})}{100}$$

where,

1,2,...N = each product in an ACP up to the maximum N.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(d) 'ACP product' means any consumer product subject to the VOC content limits specified in the table of standards in section 235-3.1(a) of this Part, except those products that have been exempted under Subpart 235-4 of this Part, or exempted as innovative products under Subpart 235-5 of this Part.

(e) 'ACP reformulation or ACP reformulated' means the process of reducing the VOC content of an ACP product, within the period that an ACP is in effect, to a level which is less than the current VOC content of the product.

(f) 'ACP standard' means either the ACP product's pre-ACP VOC content or the applicable VOC content limit as specified in the Table of Standards in section 235-3.1(a) of this Part, whichever is the lesser of the two.

(g) 'ACP VOC standard' means the maximum allowable VOC content for an ACP product, determined as follows:

(1) The applicable VOC standard specified in the Table of Standards in Section 235-3.1 of this Part, except for charcoal lighter material;

(2) For charcoal lighter material products only, the VOC standard for purposes of this regulation shall be calculated according to the following equation:

VOC Standard = (0.020 pound $_{CH2}$ per start ×100) ÷ Certified Use Rate

where,

0.020 = the certification emissions level for the New York State (OTC STATE) approved product, as specified in subparaph Section 235-3.1(f)(2)(i) of this Part, and

Certified Use Rate = the usage level for products approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) under section 235-3.1(f) of this Part, as determined pursuant to South Coast Air Quality Management District, Rule 1174, Ignition Method Compliance Certification Protocol (Feb. 28, 1991) (see Table 1, Section 200.9 of this Title), expressed to the nearest 0.001 pound certified product used per start.

(h) 'Adhesive' means any product that is used to bond one surface to another by attachment. Adhesive does not include products used on humans and animals, adhesive tape, contact paper, wallpaper, shelf liners, or any other product with an adhesive incorporated onto or in an inert substrate. For construction, panel, and floor covering adhesive and general purpose adhesive only, adhesive also does not include units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces. In addition, for contact adhesive only, adhesive also does not include units of product, less packaging, which consist of more than one gallon. These package size limitations do not apply to aerosol adhesives.

(i) 'Adhesive remover' means a product designed to remove adhesive from either a specific substrate or a variety of substrates. “Adhesive remover” does not include products that remove adhesives intended exclusively for use on humans or animals. For purposes of this definition and the definitions in paragraphs (1) through (4) of this subdivision, the term “adhesive” shall mean a substance used to bond one or more materials. Adhesive includes, but is not limited to: caulks; sealants; glues; or similar substances used for the purpose of forming a bond.

(1) 'Floor and wall covering adhesive remover' means a product which is designed or labeled for use in removing floor or wall coverings and associated adhesive from the underlying substrate.

(2) 'Gasket or thread locking adhesive remover' means a product which is designed or labeled for use in removing gaskets or thread locking adhesives. Products labeled for dual use as a paint stripper and gasket remover and/or thread locking adhesive remover are considered "gasket or thread locking adhesive remover"

(3) 'General purpose adhesive remover' means a product designed or labeled for use in removing cyanoacrylate adhesives as well as non-reactive adhesives or residue from a variety of substrates. "General purpose adhesive remover" includes, but is not limited to: products that remove thermoplastic adhesives; pressure sensitive adhesives; dextrine or starch based adhesives; casein glues; rubber or latex-based adhesives; as well as products that remove stickers, decals, stencils, or similar materials. "General purpose adhesive remover" does not include "Floor or wall covering adhesive remover."

(4) 'Specialty adhesive remover' means a product designed to remove reactive adhesives from a variety of substrates. Reactive adhesives include adhesives that require a hardener or catalyst in order for the bond to occur. Examples of reactive adhesives include, but are not limited to: epoxies; urethanes; and silicones. "Specialty adhesive remover" does not include "gasket or thread locking adhesive remover.

(j) 'Aerosol adhesive' means an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for hand-held application without the need for ancillary hoses or spray equipment. "Aerosol adhesives" include special purpose spray adhesives, mist spray adhesives and web spray adhesives.

(k) 'Aerosol cooking spray' means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be applied on food, or both.

(l) 'Aerosol product' means a pressurized spray system that dispenses product ingredients by means of a propellant contained in a product or a product's container, or by means of a mechanically induced force. Aerosol product does not include "pump spray".

(m) 'Agricultural use' means the use of any pesticide or method or device for the control of pests in connection with the commercial production, storage or processing of any animal or plant crop. Agricultural use does not include the sale or use of pesticides in properly labeled packages or containers which are intended for:

(1) home use;
(2) use in structural pest control;
(3) industrial; or
(4) institutional use. For the purposes of this definition only:
(i) 'home use' means use in a household or its immediate environment;
(ii) 'structural pest' control means a use requiring a license under Part 325 of this Title;

(iii) 'industrial use' means use for or in a manufacturing, mining, or chemical process or use in the operation of factories, processing plants, and similar sites; and

(iv) 'institutional use' means use within the lines of, or on property necessary for the operation of buildings such as hospitals, schools, libraries, auditoriums, and office complexes.

(n) 'Air freshener' means any consumer product including, but not limited to, sprays, wicks, powders, and crystals, designed for the purpose of masking odors, or freshening, cleaning, scenting, or deodorizing the air. Air freshener does not include products that are used on the human body, products that function primarily as cleaning products as indicated on a product label, “toilet/urinal care products”, disinfectant products claiming to deodorize by killing germs on surfaces, or institutional/industrial disinfectants when offered for sale solely through institutional and industrial channels of distribution. Air freshener does include spray disinfectants and other products that are expressly represented for use as air fresheners, except institutional and industrial disinfectants when offered for sale through institutional and industrial channels of distribution. To determine whether a product is an air freshener, all verbal and visual representations regarding product use on the label or packaging and in the product's literature and advertising may be considered. The presence of, and representations about, a product's fragrance and ability to deodorize (resulting from surface application) shall not constitute a claim of air freshening.

(o) 'All other carbon-containing compounds' means all other compounds which contain at least one carbon atom and are not a Table B compound or a LVP-VOC.

(p) 'All other forms' means all consumer product forms for which no form-specific VOC content limit is specified. Unless specified otherwise by the applicable VOC content limit, *all other forms* include, but are not limited to, solids, liquids, <u>(which includes the liquid containing or liquid impregnated portion of the cloth or paper wipes (towelettes)),</u> wicks, powders, <u>and</u> crystals[, and cloth or paper wipes].

(q) 'Alternative control plan or ACP' means any emissions averaging program approved by the director, Division of Air Resources, Department of Environmental Conservation pursuant to the provisions of this Part.

(r) 'Antimicrobial hand or body cleaner or soap' means a cleaner or soap which is designed to reduce the level of microorganisms on the skin through germicidal activity. Antimicrobial hand or body cleaner or soap includes, but is not limited to:

(1) antimicrobial hand or body washes/cleaners;

(2) foodhandler hand washes;

(3) healthcare personnel hand washes;

(4) pre-operative skin preparations; and

(5) surgical scrubs.

Antimicrobial hand or body cleaner or soap does not include prescription drug products, antiperspirants, astringent/toner, deodorant, facial cleaner or soap, general-use hand or body cleaner or soap, hand dishwashing detergent (including antimicrobial), heavy-duty hand cleaner or soap, medicated astringent/medicated toner, and rubbing alcohol.

(s) 'Antiperspirant' means any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that is intended by the manufacturer to be used to reduce perspiration in the human axilla by at least 20 percent in at least 50 percent of a target population.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(t) 'Anti-Static product' means a product that is labeled for use in eliminating, preventing, or inhibiting the accumulation of static electricity. "Anti-Static product" does not include "electronic cleaner," "floor polish or wax," "floor coating," and products that meet the definition of "aerosol coating product" or "architectural coating."

(u) 'Architectural coating' means a coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs.

(v) 'ASTM' means the American Society for Testing and Materials.

(w) 'Astringent/Toner' means any product not regulated as a drug by the United States Food and Drug Administration (FDA) which is applied to the skin for the purpose of cleaning or tightening pores. This category also includes clarifiers and substrate-impregnated products. This category does not include any hand, face, or body cleaner or soap product, medicated astringent/medicated toner, cold cream, lotion, or antiperspirant.

[(x)] [*Automotive brake cleaner* means a cleaning product designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.]

[(y)] (x) 'Automotive hard paste wax' means an automotive wax or polish which is:

(1) designed to protect and improve the appearance of automotive paint surfaces;

(2) a solid at room temperature; and

(3) contains zero percent water by formulation.

[(z)] (y) 'Automotive instant detailer' means a product designed for use in a pump spray that is applied to the painted surface of automobiles and wiped off prior to the product being allowed to dry.

[(aa)] (z) 'Automotive rubbing or polishing compound' means a product designed primarily to remove oxidation, old paint, scratches or swirl marks, and other defects from the painted surfaces of motor vehicles without leaving a protective barrier.

[(ab)] (aa) 'Automotive wax, polish, sealant or glaze' means a product designed to seal out moisture, increase gloss, or otherwise enhance a motor vehicle's painted surfaces. Automotive wax, polish, sealant or glaze includes, but is not limited to, products designed for use in autobody repair shops and drive-through car washes, as well as products designed for the general public. Automotive wax, polish, sealant or glaze does not include automotive rubbing or polishing compounds, automotive wash and wax products, surfactant-containing car wash products, and products designed for use on unpainted surfaces such as bare metal, chrome, glass, or plastic.

[(ac)] (ab) 'Automotive windshield washer fluid' means any liquid designed for use in a motor vehicle windshield washer system either as an antifreeze or for the purpose of cleaning, washing, or wetting the windshield. Automotive windshield washer fluid does not include fluids placed by the manufacturer in a new vehicle.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

[(ad)] (ac) 'Bathroom and tile cleaner' means a product designed or labeled to clean tile or surfaces in bathrooms. Bathroom and tile cleaner does not include [products primarily designed to clean toilet bowls, toilet tanks or urinals] "Toilet/Urinal Care Product." [.]

(ad) 'Brake Cleaner' means a cleaning product designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.

(ae) 'Bug and tar remover' means a product labeled for use in the removal of one or both of the following from painted motor vehicle surfaces without causing damage to the finish:

(1) biological-type residues such as insect carcasses and tree sap; and

(2) road grime, such as road tar, roadway paint markings, and asphalt.

(af) 'CARB' means the California Air Resources Board.

(ag) 'Carburetor or fuel-injection air intake cleaners' means a product designed or labeled to remove fuel deposits, dirt, or other contaminants from a carburetor, choke, throttle body of a fuel-injection system, or associated linkages. Carburetor or fuel-injection air intake cleaners does not include products designed or labeled exclusively to be introduced directly into the fuel lines or fuel storage tank prior to introduction into the carburetor or fuel injectors[.], or products designed or labeled exclusively to be introduced during engine operation directly into air vacuum lines by using a pressurized sprayer wand.

(ah) 'Carpet and upholstery cleaner' means a cleaning product designed for the purpose of eliminating dirt and stains on rugs, carpeting, and the interior of motor vehicles and/or on household furniture or objects upholstered or covered with fabrics such as wool, cotton, nylon or other synthetic fabrics. Carpet and upholstery cleaner includes, but is not limited to, products that make fabric protectant claims. Carpet and upholstery cleaner does not include general purpose cleaners, spot removers, vinyl or leather cleaners, dry cleaning fluids, or products designed exclusively for use at industrial facilities engaged in furniture or carpet manufacturing.

(ai) 'Charcoal lighter material' means any combustible material designed to be applied on, incorporated in, added to, or used with charcoal to enhance ignition. Charcoal lighter material does not include any of the following:

(1) electrical starters and probes;

(2) metallic cylinders using paper tinder;

(3) natural gas;

(4) propane; and

(5) fat wood.

(aj) 'Colorant' means any pigment or coloring material used in a consumer product for an aesthetic effect, or to dramatize an ingredient.

(ak) 'Compliance period' means the period of time, not to exceed one year, for which the ACP limit and ACP emissions are calculated and for which compliance with the ACP limit is determined, as specified in the ACP agreement approving an ACP.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(al) 'Construction, panel, and floor covering adhesive' means any non-aerosol, one-component adhesive that is designed [exclusively] or labeled for the installation, remodeling, maintenance, or repair of:

(1) structural and building components that include, but are not limited to, beam, trusses, studs, paneling (drywall or drywall laminates, fiberglass reinforced plastic (FRP), plywood, particle board, insulation board, pre-decorated hardboard or tileboard, etc.), a ceiling and acoustical tile, molding fixtures,counter tops or counter top laminates, cove or wall bases, and flooring or sub flooring; or

(2) floor or wall coverings that include, but are not limited to, wood or simulated wood covering, carpet, carpet pad or cushion, vinyl-backed carpet, flexible flooring material, nonresilient flooring material, mirror tiles and other types of tiles, and artificial grass. Construction, panel, and floor covering adhesive does not include floor seam sealer.

(am) 'Consumer' means any person who purchases, or acquires any consumer product for personal, family, household, or institutional use. Persons acquiring a consumer product for resale are not consumers for that product.

(an) 'Consumer product' means a chemically formulated product used by household and institutional consumers including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. Consumer products shall also refer to aerosol adhesives, including aerosol adhesives used for consumer, industrial or commercial uses.

(ao) 'Contact adhesive' means a[n] non-aerosol adhesive that:

(1) is designed for application to both surfaces to be bonded together;

(2) is allowed to dry before the two surfaces are placed in contact with each other;

(3) forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and

(4) does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces. “Contact Adhesive” does not include rubber cements that are primarily intended for use on paper substrates. “Contact Adhesive” also does not include vulcanizing fluids that are designed and labeled for use for tire repair only.

(ap) ‘Contact adhesives – general purpose’ means any contact adhesive that is not a “contact adhesive – special purpose.”

(aq) ‘Contact adhesive – special purpose’ means a contact adhesive that:

(1) is used to bond melamine-covered board, unprimed metal, unsupported vinyl, teflon, ultra-high molecular weight polyethylene, rubber, high pressure laminate or wood veneer 1/16 inch or less in thickness to any porous or nonporous surface, and is sold in units of product, less packaging, that contain more than eight fluid ounces, or

(2) is used in automotive applications that are:

(i) automotive under the hood applications requiring heat, oil or gasoline resistance, or

(ii) body-side molding, automotive weatherstrip or decorative trim.

(ar) 'Container/packaging' means the part or parts of the consumer or institutional product which serve only to contain, enclose, incorporate, deliver, dispense, wrap or store the chemically formulated substance or mixture of substances which is solely responsible for accomplishing the purposes for which the product was designed or intended. Container/packaging includes any article onto or into which the principal display panel and other accompanying literature or graphics are incorporated, etched, printed or attached.

(as) 'Contact person' means a representative(s) that has been designated by the responsible ACP party for the purpose of reporting or maintaining any information specified in the ACP agreement approving an ACP.

(at) 'Crawling bug insecticide' means any insecticide product that is designed for use against ants, cockroaches, or other household crawling arthropods, including, but not limited to, mites, silverfish or spiders. Crawling bug insecticide does not include products designed to be used exclusively on humans or animals, or any house dust mite product. For the purposes of this definition only:

(1) 'house dust mite product' means a product whose label, packaging, or accompanying literature states that the product is suitable for use against house dust mites, but does not indicate that the product is suitable for use against ants, cockroaches, or other household crawling arthropods; and

(2) 'house dust mite' means mites which feed primarily on skin cells shed in the home by humans and pets and which belong to the phylum Arthropoda, the subphylum Chelicerata, the class Arachnida, the subclass Acari, the order Astigmata, and the family Pyroglyphidae.

(au) 'Date-code' means the day, month and year on which the consumer product was manufactured, filled, or packaged, or a code indicating such a date.

(av) 'Deodorant' means:

(1) For products manufactured before January 1, 2010: any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that is intended by the manufacturer to be used to minimize odor in the human axilla by retarding the growth of bacteria which cause the decomposition of perspiration.

(2) For products manufactured on or after January 1, 2010: any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that the product can be used on or applied to the human axilla to provide a scent and/or minimize odor. A "deodorant body spray" product that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that it can be used or applied to the human axilla, is a "deodorant."

(aw) 'Deodorant body spray' means a "personal fragrance product" with 20 percent or less fragrance, that is designed for application all over the human body to provide a scent.

(ax) 'Device' means any instrument or contrivance (other than a firearm) which is designed for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than man and other than bacterium, virus, or another microorganism on or in living man or other living animals); but not including equipment used for the application of pesticides when sold separately therefrom.

(ay) 'Disinfectant' means a[ny] product [intended] that is labeled as a "disinfectant", or is labeled to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects and whose label is registered as a "disinfectant" under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136, *et. seq.*) (see Table 1, section 200.9 of this Title). Products that are labeled as both a "sanitizer" and a "disinfectant" are considered disinfectants. Disinfectant does not include any of the following:

(1) products [designed] labeled solely for use on human or animals;

(2) products [designed] labeled solely for agricultural use;

(3) products [designed] labeled solely for use in swimming pools, therapeutic tubs, or hot tubs; [and]

(4) products which, [as indicated on the principal display panel or label, are designed primarily for use as bathroom and tile cleaners, glass cleaners, general purpose cleaners, toilet bowl cleaners, or metal polishes.] are labeled to be used on heat sensitive critical or semi-critical medical devices medical equipment surfaces;

(5) products which are pre-moistened wipes or towelettes sold exclusively to medical, convalescent, or veterinary establishments;

(6) products which are labeled to be applied to food-contact surfaces and are not required to be rinsed prior to contact with food; or

(7) products which are labeled as "Bathroom and tile cleaners," "Glass cleaners," General purpose cleaners," "Toilet/Urinal care products," "Metal polishes," "Carpet cleaners," or "Fabric refreshers" that may also make disinfecting or anti-microbial claims on the label.

(az) 'Distributor' means any person to whom a consumer product is sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers, and consumers are not distributors.

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(ba) 'Double phase aerosol air freshener' means an aerosol air freshener with the liquid contents in two or more distinct phases that requires the product container be shaken before use to mix the phases, producing an emulsion.

(bb) 'Dry cleaning fluid' means any non-aqueous liquid product designed and labeled exclusively for use on:

(1) fabrics which are labeled for use for dry clean only, such as clothing or drapery; or

(2) s-coded fabrics.

Dry cleaning fluid includes, but is not limited to, those products used by commercial dry cleaners and commercial businesses that clean fabrics such as draperies at the customer's residence or work place. Dry cleaning fluid does not include spot remover or carpet and upholstery cleaner. For the purposes of this definition 's-coded fabric' means an upholstery fabric designed to be cleaned only with water-free spot cleaning products as specified by the joint industry fabric standards committee.

(bc) 'Dusting aid' means a product designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone based coating. Dusting aid does not include "Pressurized Gas Duster".

(bd) 'Electrical cleaner' means a product labeled for use to remove soils such as grease, grime, or oil from electrical equipment, including, but not limited to, electric motors, armatures, relays, electric panels, or generators. Electrical cleaner does not include "general purpose cleaner," "general purpose degreaser," "dusting aid," "electronic cleaner," "energized electrical cleaner," "pressurized gas duster," "engine degreaser," "anti-static product," or products designed to clean the casings or housings of electrical equipment.

(be) 'Electronic cleaner' means a product labeled for use for the removal of dirt, moisture, dust, flux or oxides from the internal components of electronic or precision equipment such as circuit boards, and the internal components of electronic devices, including but not limited to, radios, compact disc (CD) players, digital video disc (DVD) players, and computers. Electronic Cleaner does not include "general purpose cleaner," "general purpose degreaser," "dusting aid," "pressurized gas duster," "engine degreaser," "electrical cleaner," "energized electrical cleaner," "anti-static product," or products [designed] <u>labeled</u> to clean the casings or housings of electronic equipment. <u>"Electronic cleaner" does not include any product that meets both of the following criteria:</u>

<u>(1) The product is labeled to clean and/or degrease electronic equipment, where cleaning and/or degreasing is accomplished when electrical current exists, or when there is residual electrical potential from a component.</u>

<u>(2) The product label clearly displays the statements: "Engerized Electronic Equipement use only."</u>

(bf) 'Energized electrical cleaner' means a product that meets both of the following criteria:

(1) The product is labeled for use to clean and/or degrease electrical equipment, where cleaning and/or degreasing is accomplished when electrical current exist, or when there is a residual electrical potential from a component, such as a capacitor.

(2) The product label clearly displays the following language: 'Energized Equipment use only. Not to be used for motorized vehicle maintenance, or their parts."

Energized Electrical Cleaner does not include "electronic cleaner."

(bg) 'Enforceable sales' means the total amount of an ACP product sold for use in the State of New York (OTC STATE), during the applicable compliance period specified in the ACP agreement approving an ACP, as determined through enforceable sales records (expressed to the nearest pound, excluding product container and packaging).

(bh) 'Enforceable sales record' means a written, point-of-sale record or any other system of documentation approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) from which the mass, in pounds (less product container and packaging), of an ACP product sold to the end user in the State of New York (OTC STATE) during the applicable compliance period can be accurately documented. For the purposes of this Part, enforceable sales records include, but are not limited to, the following types of records:

(1) accurate records of direct retail or other outlet sales to the end user during the applicable compliance period;

(2) accurate compilations, made by independent market surveying services, of direct retail or other outlet sales to the end users for the applicable compliance period, provided that a detailed method which can be used to verify any data comprising such summaries is submitted by the responsible ACP party and approved by the director, Division of Air resources, Department of Environmental Conservation (OTC STATE AGENCY); and

(3) any other accurate product sales records approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) as meeting the criteria specified in this Subpart.

(bi) 'Engine degreaser' means a cleaning product designed to remove grease, grime, oil and other contaminants from the external surfaces of engines and other mechanical parts.

(bj) 'Existing Product' means any formulation of the same product category and form sold, supplied, manufactured, or offered for sale in the State of New York (OTC STATE) prior to January 1, 201[0]3, or any subsequently introduced identical formulation.

(bk) 'Fabric protectant' means:

(1) For products manufactured before January 1, 2013: a product designed to be applied to fabric substrates to protect the surface from soiling from dirt and other impurities or to reduce absorption of liquid into the fabric's fibers. Fabric protectant does not include waterproofers, products designed for use solely on leather, or products designed for use solely on fabrics which are labeled for dry clean only and sold in containers of 10 fluid ounces or less.

(2) For products manufactured on or after January 1, 2013: a product labeled to be applied to fabric subsrates to protect the surface from soiling from dirt or other impurities or to

reduce absorption of liquid into the fabric fibers. Fabric protectant does not include waterproofers, or products labeled for use solely on leather. Fabric protectant does not include pigmented products that are designed to be used primarily for coloring, products used for construction, reconstruction, modification, structural maintenance or repair of fabric substrates, or products that renew or restore fabric and qualifying "Clear coating" or "Vinyl/fabric/leather/polycarbonate coating."

(bl) 'Fabric refresher' means a product labeled for use to neutralize or eliminate odors on non-laundered fabric including, but not limited to, soft household surfaces, rugs, carpeting, draperies, bedding, automotive interiors, footwear, athletic equipment, clothing and/or on household furniture or objects upholstered or covered with fabrics such as, but not limited to, wool, cotton, or nylon. "Fabric refresher" does not include "anti-static product," "carpet and upholstery cleaner," [soft household surface sanitizers,] "footwear or leather care product," "spot remover," or "disinfectant," or products labeled for use for application to both fabric and human skin. [For the purposes of this definition only, "soft household surface sanitizer" means a product labeled for use to neutralize or eliminate odors on surfaces listed above whose label is registered as a sanitizer under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA, 7 U.S. C. 136 et seq.) [(see Table 1, Section 200.9 of this Title).]

(bm) 'Facial cleaner or soap' means a cleaner or soap designed primarily to clean the face. Facial cleaner or soap includes, but is not limited to, facial cleansing creams, semisolids, liquids, lotions, and substrate-impregnated forms. Facial cleaner or soap does not include prescription drug products, antimicrobial hand or body cleaner or soap, astringent/toner, general-use hand or body cleaner or soap, medicated astringent/medicated toner, or rubbing alcohol.

(bn) 'Fat wood' means pieces of wood kindling with high naturally-occurring levels of sap or resin which enhance ignition of the kindling. Fat wood does not include any kindling with substances added to enhance flammability, such as wax-covered or wax-impregnated wood-based products.

(bo) 'Flea and tick insecticide' means any insecticide product that is designed for use against fleas, ticks, their larvae, or their eggs. Flea and tick insecticide does not include products that are designed to be used exclusively on humans or animals and their bedding.

[(bp)] [*Flexible flooring material* means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl and vinyl composite flooring.]

[(bq)] (bp) 'Floor Coating' means an opaque coating that is labeled for use and designed for application to flooring, including but not limited to, decks, porches, steps, and other horizontal surfaces which may be subject to foot traffic.

[(br)] (bq) 'Floor polish or wax' means [a wax, polish, or any other] product designed or labeled to polish, wax, condition, protect, temporarily seal, or otherwise enhance floor surfaces by leaving a protective [coating] finish that is designed or labeled to be periodically replenished. Floor polish or wax does not include spray buff products, [products designed solely for the purpose of cleaning floors,] floor

[finish] wax strippers, products designed or labeled for unfinished wood floors, [and] or coatings subject to [Part 205 of this Title] architectural coatings regulations.

Floor polish or wax is divided into three categories: products for resilient flooring materials, products for nonresilient floring materials and wood floor wax.

For the purposes of this article:

(1) Resilient flooring material means flexible floorng material including but is not limited to, asphalt, cork, linoleum, no-wax, rubber, seemless vinyl, and vinyl composite flooring.

(2) Nonresilient flooring material means flooring of a mineral content which is not flexible. Nonresilient flooring material includes but is not limited to terrazzo, marble, slate, granite, brick, stone, ceramic tile, and concrete.

(3) Wood floor wax means wax-based products for use solely on wood floors.

[(bs)] (br) 'Floor seam sealer' means any product designed and labeled for use exclusively for bonding, fusing, or sealing (coating) seams between adjoining rolls of installed flexible sheet flooring.

[(bt)] (bs) 'Floor wax stripper' means a product designed to remove natural or synthetic floor polishes or waxes through breakdown of the polish or wax polymers, or by dissolving or emulsifying the polish or wax. Floor wax stripper does not include aerosol floor wax strippers or products designed to remove floor wax solely through abrasion.

[(bu)] (bt) 'Flying bug insecticide' means any insecticide product that is designed for use against flying insects or other flying arthropods, including but not limited to flies, mosquitoes, moths, or gnats. Flying bug insecticide does not include wasp and hornet insecticide, products that are designed to be used exclusively on humans or animals, or any moth-proofing product. For the purposes of this definition only:

(1) 'moth-proofing product' means a product whose label, packaging, or accompanying literature indicates that the product is designed to protect fabrics from damage by moths, but does not indicate that the product is suitable for use against flying insects or other flying arthropods.

[(bv)] (bu) 'Footwear or leather care product' means any product designed or labeled for use to be applied to footwear or to other leather articles/components, to maintain, enhance, clean, or modify the appearance, durability, fit, or flexibility of the footwear or leather article/component. Footwear includes both leather and non-leather apparel. "Footwear or leather care product" does not include "fabric protectant," "general purpose adhesive," "contact adhesive," "vinyl/fabric/leather/polycarbonate coating," "rubber [and]/ vinyl protectant," "Fabric refresher," products solely for deodorizing, or sealant products with adhesive properties used to create external protective layers greater than two millimeters thick.

[(bw)] (bv) 'Fragrance' means a substance or complex mixture of aroma chemicals, natural essential oils, and other functional components with a combined vapor pressure not in excess of two

millimeters of Mercury (mm Hg) at 20 degrees Celsius, the sole purpose of which is to impart an odor or scent, or to counteract a malodor.

[(bx)] (bw) 'Furniture maintenance product' means a wax, polish, conditioner, or any other product [designed] labeled for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors and other furniture surfaces including but not limited to acrylics, ceramic, plastics, stone surfaces, metal surfaces, and fiberglass. Furniture maintenance product does not include dusting aids, wood cleaners, products designed solely for the purpose of cleaning, [and] or products designed to leave a permanent finish such as stains, sanding sealers and lacquers.

[(by)] (bx) 'Furniture coating' means any paint designed for application to room furnishings including, but not limited to, cabinets (kitchen, bath and vanity), tables, chairs, beds, and sofas.

[(bz)] (by) 'Gel' means a colloid in which the disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.

[(ca)] (bz) 'General purpose adhesive' means any non-aerosol adhesive designed for use on a variety of substrates. General purpose adhesive does not include:

(1) contact adhesives;

(2) construction, panel, and floor covering adhesives;

(3) adhesives designed exclusively for application on one specific category of substrates (*i.e.*, substrates that are composed of similar materials, such as different types of metals, paper products, ceramics, plastics, rubbers, or vinyls); or

(4) adhesives designed exclusively for use on one specific category of articles (*i.e.*, articles that may be composed of different materials but perform a specific function, such as gaskets, automotive trim, weather-stripping, or carpets).

[(cb)] (ca) 'General purpose cleaner' means a genreal purpose cleaning product [designed] labeled for [general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations] use on a variety of hard surfaces, including small appliances. General purpose cleaner includes, but is not limited to, products designed or labeled for general floor cleaning, kitchen, [or] countertop, or sink cleaning, and cleaners designed or labeled to be used on a variety of hard surfaces such as stovetops, cooktops, or microwaves and does not include general purpose degreasers and electronic cleaners.

[(cc)] (cb) 'General purpose degreaser' means any product labeled for use to remove or dissolve grease, grime, oil and other oil-based contaminants from a variety of substrates, including automotive or miscellaneous metallic parts. General purpose degreaser does not include engine degreaser, general purpose cleaner, adhesive remover, electronic cleaner, “electrical cleaner”, “energized electrical cleaner”, metal polish/cleanser, products used exclusively in solvent cleaning tanks or related equipment, or products that are:

(1) sold exclusively to establishments which manufacture or construct goods or commodities; and

(2) labeled not for retail sale.

Solvent cleaning tanks or related equipment includes, but is not limited to, cold cleaners, vapor degreasers, conveyorized degreasers, film cleaning machines, or products designed to clean miscellaneous metallic parts by immersion in a container.

[(cd)] (cc) 'General-use hand or body cleaner or soap' means a cleaner or soap designed to be used routinely on the skin to clean or remove typical or common dirt and soils. General-use hand or body cleaner or soap includes, but is not limited to, hand or body washes, dual-purpose shampoo-body cleaners, shower or bath gels, and moisturizing cleaners or soaps. General-use hand or body cleaner or soap does not include prescription drug products, antimicrobial hand or body cleaner or soap, astringent/toner, facial cleaner or soap, hand dishwashing detergent (including antimicrobial), heavy-duty hand cleaner or soap, medicated astringent/medicated toner, or rubbing alcohol.

[(ce)] (cd) 'Glass cleaner' means a cleaning product designed primarily for cleaning surfaces made of glass. Glass cleaner does not include products designed solely for the purpose of cleaning optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines.

[(cf)] (ce) 'Graffiti remover' means a product labeled for use to remove spray paint, ink, marker, crayon, lipstick, nail polish, or shoe polish, from a variety of non-cloth or non-fabric substrates. "Graffiti remover" does not include "paint remover or stripper," or "spot remover." Products labeled for dual use as both a paint stripper and graffiti remover are considered "Graffiti removers."

[(cg)] (cf) 'Gross New York State (OTC STATE) sales' means the estimated total New York State (OTC STATE) sales of an ACP product during a specific compliance period (expressed to the nearest pound), based on either of the following methods, whichever the responsible ACP party demonstrates to the satisfaction of the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) will provide an accurate New York State (OTC STATE) sales estimate:

(1) apportionment of national or regional sales of the ACP product to [New York State] (OTC STATE) sales, determined by multiplying the average national or regional sales of the product by the fraction of the national or regional population, respectively, that is represented by the [State of New York's] (OTC STATE) current population; or

(2) any other documented method which provides an accurate estimate of the total current New York State (OTC STATE) sales of the ACP product.

[(ch)] (cg) 'Hair mousse' means a hairstyling foam designed to facilitate styling of a coiffure and provide limited holding power.

[(ci)] (ch) 'Hair shine' means any product designed for the primary purpose of creating a shine when applied to the hair. Hair shine includes, but is not limited to, dual-use products designed primarily

to impart a sheen to the hair. Hair shine does not include hair spray, hair mousse, “hair styling product”, hair styling gel, or products whose primary purpose is to condition or hold the hair.

[(cj)] (ci) 'Hair styling gel' means a consumer product manufactured before January 1, 2010, that is a high viscosity, often gelatinous, product that contains a resin and is designed for the application to hair to aid in styling and sculpting of the hair coiffure.

[(ck)] (cj) 'Hair spray' means:

(1) for products manufactured before January 1, 2010: a consumer product designed primarily for the purpose of dispensing droplets of a resin on and into a hair coiffure which will impart sufficient rigidity to the coiffure to establish or retain the style for a period of time, and

(2) for products manufactured on or after January 1, 2010: a consumer product that is applied to styled hair, and is designed or labeled for use to provide sufficient rigidity, to hold, retain and/or (finish) the style of the hair for a period of time. “Hair Spray” includes aerosol hair sprays, pump hair sprays, spray waxes; color, glitter, or sparkle hairsprays that make finishing claims; and products that are both a styling and finishing product. “Hair Spray” does not include spray products that are intended to aid in styling but does not provide finishing of a hairstyle. “Finish” or “finishing” means the maintaining and/or holding of previously styled hair for a period of time. For the purposes of this subchapter, “styling” means the forming, sculpting, or manipulating the hair to temporarily alter the hair’s shape.

[(cl)] (ck) ‘Hair styling product’ means a consumer product manufactured on or after January 1, 2010, that is designed or labeled for use for the application to wet, damp, or dry hair to aid is defining, shaping, lifting, styling and/or sculpting of the hair. “Hair styling product” includes, but is not limited to hair balm, clay, cream, crème, curl straightener, gel, liquid, lotion, paste, pomade, putty, root lifter, serum, spray gel, stick, temporary hair straightener, wax, spray products that aid in styling but do not provide finishing of a hairstyle, and leave-in volumizers, detanglers and/or conditioners that make styling claims. “Hair styling product” does not include “hair mousse,” “hair shine,” “hair spray,” or shampoos and/or conditioners that are rinsed from the hair prior to styling. “Finish” or “finishing” means the maintaining and/or holding of previously styled hair for a period of time. "Styling” means the forming, sculpting, or manipulating the hair to temporarily alter the hair’s shape.

[(cm)] (cl) 'Heavy-duty hand cleaner or soap' means a product designed to clean or remove difficult dirt and soils such as oil, grease, grime, tar, shellac, putty, printer’s ink, paint, graphite, cement, carbon, asphalt, or adhesives from the hand with or without the use of water. Heavy-duty hand cleaner or soap does not include prescription drug products, antimicrobial hand or body cleaner or soap, astringent/toner, facial cleaner or soap, general-use hand or body cleaner or soap, medicated astringent/medicated toner or rubbing alcohol.

[(cn)] (cm) 'Herbicide' means a pesticide product designed to kill or retard a plant’s growth, but excludes products that are:

(1) for agricultural use; or

(2) restricted materials that require a permit for use and possession.

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[(co)] (cn) 'High volatility organic compound (HVOC)' means any VOC that exerts a vapor pressure greater than 80 millimeters of Mercury (mm Hg) when measured at 20 ^{o}C.

[(cp)] (co) 'Household product' means any consumer product that is primarily designed to be used inside or outside of living quarters or residences that are occupied or intended for occupation by individuals, including the immediate surroundings.

[(cq)] (cp) 'Insecticide' means a pesticide product that is designed for use against insects or other arthropods, but excluding products that are:

(1) for agricultural use;

(2) for a use which requires a structural pest control license under Part 325 of this Title (applicable OTC STATE laws or regulations) ; or

(3) restricted materials that require a permit for use and possession.

[(cr)] (cq) 'Insecticide fogger' means any insecticide product designed to release all or most of its content, as a fog or mist, into indoor areas during a single application.

[(cs)] (cr) 'Institutional product or industrial and institutional (i&i) product' means a consumer product that is designed for use in the maintenance or operation of an establishment that:

(1) manufactures, transports, or sells goods or commodities, or provides services for profit; or

(2) is engaged in the nonprofit promotion of a particular public, educational, or charitable cause.

Establishments include, but are not limited to, government agencies, factories, schools, hospitals, sanitariums, prisons, restaurants, hotels, stores, automobile service and parts centers, health clubs, theaters, or transportation companies. Institutional product does not include household products and products that are incorporated into or used exclusively in the manufacture or construction of the goods or commodities at the site of the establishment.

[(ct)] (cs) 'Label' means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any consumer product or consumer product package, for purposes of branding, identifying, or giving information with respect to the product or to the contents of the package.

[(cu)] (ct) 'Laundry prewash' means a product that is designed for application to a fabric prior to laundering and that supplements and contributes to the effectiveness of laundry detergents and/or provides specialized performance.

[(cv)] (cu) 'Laundry starch/sizing/fabric finish product' means a product that is [designed] labeled for application to a fabric, either during or after laundering, to impart and prolong a crisp, fresh look and may also act to help ease ironing of the fabric. Laundry / Sizing / Fabric Finish Starch Product includes, but is not limited to, starch, sizing, and fabric finish[, sizing, and starch].

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[(cw)] (cv) 'Lawn and garden insecticide' means an insecticide product labeled for use primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods. Notwithstanding the requirements of Subdivision 235-6.1(c) of this section, aerosol “lawn and garden insecticide” may claim to kill insects or other arthropods.

[(cx)] (cw) 'Liquid' means a substance or mixture of substances which is capable of a visually detectable flow as determined under ASTM D 4359-90 (2000)el, (see Table 1, section 200.9 of this Title). Liquid does not include powders or other materials that are composed entirely of solid particles.

[(cy)] (cx) 'Lubricant' means a product designed to reduce friction, heat, noise, or wear between moving parts, or to loosen rusted or immovable parts or mechanisms. Lubricant does not include automotive power steering fluids; products for use inside power generating motors, engines, and turbines, and their associated power-transfer gearboxes; two cycle oils or other products designed to be added to fuels; products for use on the human body or animals or products that are:

(1) sold exclusively to establishments which manufacture or construct goods or commodities; and

(2) labeled not for retail sale.

[(cz)] (cy) 'LVP content' means the total weight, in pounds, of LVP compounds in an ACP product multiplied by 100 and divided by the product's total net weight (in pounds, excluding container and packaging), expressed to the nearest 0.1.

[(da)] (cz) 'LVP-VOC' means a chemical compound or mixture that contains at least one carbon atom and meets one of the following:

(1) has a vapor pressure less than 0.1 mm Hg at 20°C, as determined by CARB Method 310 (see Table 1, section 200.9 of this Title);

(2) is a chemical compound with more than 12 carbon atoms, or a chemical mixture comprised solely of compounds with more than 12 carbon atoms as verified by formulation data, and the vapor pressure (is) and boiling point are unknown; or

(3) is a chemical compound with a boiling point greater than 216°C, as determined by CARB Method 310 (see Table 1, section 200.9 of this Title); or

(4) is the weight percent of a chemical mixture that boils above 216°C, as determined by CARB Method 310 (see Table 1, section 200.9 of this Title).

For the purposes of the definition of LVP-VOC: 'chemical compound' means a molecule of definite chemical formula and isomeric structure; and 'chemical mixture' means a substrate comprised of two or more chemical compounds.

[(db)] (da) 'Manufacturer' means any person who imports, manufactures, assembles, produces, packages, repackages, or relabels a consumer product.

[(dc)] (db) 'Medicated astringent/medicated toner' means any product regulated as a drug by the United States Food and Drug Administration (FDA) which is applied to the skin for the purpose of

cleaning or tightening pores. Medicated astringent/medicated toner includes, but is not limited to, clarifiers and substrate-impregnated products. Medicated astringent/medicated toner does not include hand, face, or body cleaner or soap products, astringent/toner, cold cream, lotion, antiperspirants, or products that must be purchased with a doctor's prescription.

[(dd)] (dc) 'Medium volatility organic compound (MVOC)' means any VOC that exerts a vapor pressure greater than 2 mm Hg and less than or equal to 80 mm Hg when measured at 20°C.

[(de)] (dd) 'Metal polish/cleanser' means any product designed primarily to improve the appearance of finished metal, metallic, or metallized surfaces by physical or chemical action. To *improve the appearance* means to remove or reduce stains, impurities, or oxidation from surfaces or to make surfaces smooth and shiny. Metal polish/cleanser includes, but is not limited to, metal polishes used on brass, silver, chrome, copper, stainless steel and other ornamental metals. Metal polish/cleanser does not include automotive wax, polish, sealant or glaze, wheel cleaner, paint remover or stripper, products designed and labeled for use exclusively for automotive and marine detailing, or products designed for use in degreasing tanks.

[(df)] (de) 'Missing data days' means the number of days in a compliance period for which the responsible ACP party has failed to provide the required enforceable sales or VOC content data to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), as specified in the ACP agreement approving an ACP.

[(dg)] (df) 'Mist spray adhesive' means any aerosol which is not a special purpose spray adhesive and which delivers a particle or mist spray, resulting in the formation of fine, discrete particles that yield a generally uniform and smooth application of adhesive to the substrate.

[(dh)] (dg) 'Multi-purpose dry lubricant' means any lubricant which is:

(1) designed and labeled for use to provide lubricity by depositing a thin film of graphite, molybdenum, disulfide (moly), or polytetrafluoroethylene or closely related fluoropolymer (teflon) on surfaces; and

(2) designed for general purpose lubrication, or for use in a wide variety of applications.

[(di)] (dh) 'Multi-purpose lubricant' means any lubricant designed for general purpose lubrication, or for use in a wide variety of applications. Multi-purpose lubricant does not include multi-purpose dry lubricants, penetrants, or silicone-based multi-purpose lubricants.

[(dj)] (di) 'Multi-purpose solvent' means:

(1) for products manufactured before January 1, 2013: any organic liquid designed to be used for a variety of purposes, including cleaning or degreasing of a variety of substrates, or thinning, dispersing or dissolving other organic materials. "Multi-purpose solvent" includes solvents used in institutional facilities, except for laboratory reagents used in analytical, educational research, scientific or other laboratories. "Multi-purpose solvent" does not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, or solvent that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment.

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(2) for products manufactured on or after January 1, 2013: any [organic] liquid product designed or labeled to be used for [a variety of purposes, including cleaning or degreasing of a variety of substrates, or thinning,] dispersing or dissolving or removing contaminants or other organic materials. Multi-purpose solvent includes:

(i) products that do not display specific use instructions on the product container or packaging,

(ii) products that do not specify an end-use function or application on the product container or packaging, and

(iii) solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories.

Multi-purpose solvent does not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, or solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment. Multi-purpose solvent also does not include any product making any representation that the product may be used as, or is suitable for use as a consumer product which qualifies under another definition in section 235-2 (applicable section under OTC STATE's consumer products regulation); such products are not multi-purpose solvents and are subject to the "Most Restrictive Limit" provision of section 235-6.1(c)(2) (applicable section under OTC STATE's consumer products regulation).

[(dk)] (dj) 'Nail polish' means any clear or colored coating designed for application to the fingernails or toenails and including but not limited to, lacquers, enamels, acrylics, base coats and top coats.

[(dl)] (dk) 'Nail polish remover' means a product designed to remove nail polish and coatings from fingernails or toenails.

[(dm)] (dl) 'New York State (OTC STATE)' sales means the sales (net pounds of product, less packaging and container, per year) in the State of New York (OTC STATE) for either the calendar year immediately prior to the year that the registration is due or, if that data is not available, any consecutive 12 month period commencing no earlier than two years prior to the due date of the registration. If direct sales data for the State of New York (OTC STATE) is not available, sales may be estimated by prorating national or regional sales data by population.

[(dn)] (dm) 'Non-aerosol product' means any consumer product that is not dispensed by a pressurized spray system.

[(do)] (dn) 'Non-carbon containing compound' means any compound which does not contain any carbon atoms.

[(dp)] [*Nonresilient flooring* means flooring of a mineral content which is not flexible. Nonresilient Flooring includes terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.]

[(dq)] (do) 'Non-selective terrestrial herbicide' means a terrestrial herbicide product that is toxic to plants without regard to species.

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[(dr)] (dp) 'One-product business' means a responsible ACP party which sells, supplies, offers for sale, or manufactures for use in the State of New York (OTC STATE):

(1) only one distinct ACP product, sold under one product brand name, which is subject to the requirements of Subpart 235-3 of this Part; or

(2) only one distinct ACP product line subject to the requirements of Subpart 235-3 of this Part, in which all the ACP products belong to the same product category(ies) and the VOC contents in the products are within 98 percent and 102 percent of the arithmetic mean of the VOC contents over the entire product line.

[(ds)] (dq) 'Oven cleaner' means any cleaning product designed or labeled to clean and to remove dried or baked on food deposits from oven walls.

[(dt)] (dr) 'Paint' means any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate in a thin layer which is converted to an opaque solid film after application and is used for protection, decoration or identification, or to serve some functional purpose such as the filling or concealing of surface irregularities or the modification of light and heat radiation characteristics.

[(du)] (ds) 'Paint remover or stripper' means any product designed to strip or remove paints or other related coatings, by chemical action, from a substrate without markedly affecting the substrate. Paint remover or stripper does not include multi-purpose solvents, paint brush cleaners, products designed and labeled for use exclusively as “Graffiti removers,” and hand cleaner products that claim to remove paints and other related coatings from skin.

[(dv)] (dt) 'Penetrant' means a lubricant designed and labeled for use primarily to loosen metal parts that have bonded together due to rusting, oxidation, or other causes. Penetrant does not include multi-purpose lubricants that claim to have penetrating qualities, but are not labeled for use primarily to loosen bonded parts.

[(dw)] (du) ‘Personal fragrance product’ means any product which is applied to the human body or clothing for the primary purpose of adding a scent or masking a malodor, including cologne, perfume, aftershave, and toilet water. “Personal fragrance product” does not include:

(1) deodorant;

(2) medicated products designed primarily to alleviate fungal or bacteria growth on feet or other areas of the body;

(3) mouthwashes, breath fresheners and deodorizes;

(4) lotions, moisturizers, powders or other skin care products used primarily to alleviate skin conditions such as dryness and irritations;

(5) products designed exclusively for use on human genitalia;

(6) soaps, shampoos, and products primarily to clean the human body; and

(7) fragrance products designed to be used exclusively on non-human animals.

[(dx)] (dv) 'Pesticide' means and includes any substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling or mitigating any pest, or any substance or mixture of substances labeled, designed, or intended for use as a defoliant, desiccant, or plant regulator, provided that the term pesticide will not include any substance, mixture of substances, or device which the United States Environmental Protection Agency does not consider to be a pesticide.

[(dy)] (dw) 'Pre-ACP VOC content' means the lowest VOC content of an ACP product between January 1, 1990 and the date on which the application for a proposed ACP is submitted to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), based on either the data on the product obtained from the March 12, 1991 CARB Consumer Products Survey, or other accurate records available to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), whichever yields the lowest VOC content for the product.

[(dz)] (dx) 'Pressurized gas duster' means a pressurized product labeled for use to remove dust from a surface solely by means of mass air or gas flow, including surfaces such as photographs, photographic film negatives, computer keyboards, and other types of surfaces that cannot be cleaned with solvents. "Pressurized gas duster" does not include "dusting aid."

[(ea)] (dy) 'Principal display panel or panels' means that part, or those parts of a label that are so designed as to most likely be displayed, presented, shown or examined under normal and customary conditions of display or purchase. Whenever a principal display panel appears more than once, all requirements pertaining to the principal display panel shall pertain to all such principal display panels.

[(eb)] (dz) 'Product brand' name means the name of the product exactly as it appears on the principal display panel of the product.

[(ec)] (ea) 'Product category' means the applicable category which best describes the product as listed in this Subpart and in the Table of Standards in Subpart 235-3.1(a) of this Part.

[(ed)] (eb) 'Product Form' means for the purpose of complying with Subparts 235-7.1(a)(5) and 235-7.1(d)(2)(iii) of this Part only, the applicable form which most accurately describes the product's dispensing form as follows:

(1) A = "Aerosol product";
(2) S = "Solid";
(3) P = "Pump spray";
(4) L = "Liquid";
(5) SS = "Semisolid";and
(6) O = "Other".

[(ee)] (ec) 'Product line' means a group of products of identical form and function belonging to the same product category(ies).

[(ef)] (ed) 'Propellant' means a liquefied or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.

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[(eg)] (ee) 'Pump spray' means a packaging system in which the product ingredients within the container are not under pressure and in which the product is expelled only while a pumping action is applied to a button, trigger or other actuator.

[(eh)] (ef) 'Reconcile or reconciliation' means to provide sufficient VOC emission reductions to completely offset any shortfalls generated under the ACP during an applicable compliance period.

[(ei)] (eg) 'Reconciliation of shortfalls plan' means the plan to be implemented by the responsible ACP party when shortfalls have occurred, as approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) pursuant to section 235-11.1(c)(1)(vii)('j')of this Part.

[(ej)] (eh) 'Responsible party' means the company, firm or establishment which is listed on the product's label. If the label lists two companies, firms or establishments, the responsible party is the party which the product was manufactured for or distributed by, as noted on the label.

[(ek)] (ei) 'Responsible ACP party' means the company, firm or establishment which is listed on the ACP product's label. If the label lists two or more companies, firms, or establishments, the responsible ACP party is the party which the ACP product was manufactured for or distributed by, as noted on the label.

[(el)] (ej) 'Restricted materials' means pesticides established as restricted materials under applicable Part 325 of this Title.

[(em)] (ek) 'Retailer' means any person who sells, supplies, or offers consumer products for sale directly to consumers.

[(en)] (el) 'Retail outlet' means any establishment at which consumer products are sold, supplied, or offered for sale directly to consumers.

[(eo)] (em) 'Roll-on product' means any antiperspirant or deodorant that dispenses active ingredients by rolling a wetted ball or wetted cylinder on the affected area.

[(ep)] (en) Rubber [and] / vinyl protectant means:

(1) For products manufactured before January 1, 2013: any product designed to protect, preserve or renew vinyl, rubber, and plastic on vehicles, tires, luggage, furniture, and household products such as vinyl covers, clothing, and accessories. Rubber [and] / vinyl protectant does not include products primarily designed to clean the wheel rim, such as aluminum or magnesium wheel cleaners, and tire cleaners that do not leave an appearance-enhancing or protective substance on the tire.

(2) For products manufactured on or after January 1, 2013: any product labeled to protect, preserve or renew vinyl, or rubber on vehicles, tires, luggage, furniture, and/or household products such as vinyl covers, clothing, or accessories. Rubber / vinyl protectant does not include: products labeled to clean the wheel rim, such as aluminum or magnesium wheel cleaners; tire cleaners that do not leave an appearance-

enchancing or protective substance on the tire; pigmented products designed or labeled to be used primarily for coloring; products used for construction, reconstruction, modification, structural maintenance or repair of rubber or vinyl substrates; or products, other than those labeled to be used on vehicle tires; qualifying as either "Clear Coating" or "Vinyl/fabric/leather/polycarbonate coating."

[(eq)] (eo) 'Rubbing alcohol' means any product containing isopropyl alcohol (also called isopropanol) or denatured ethanol and labeled for topical use, usually to decrease germs in minor cuts and scrapes, to relieve minor muscle aches, as a rubefacient, and for massage.

(ep) 'Sanitizer' means a product that is labeled as a "sanitizer", or labeled to reduce, but not necessary eliminate, microorganisms in the air, on surfaces, or on inanimate objects, and whose label is registered as a "sanitizer" under the Federal Insecticide, Fungicide, and Roednticide Act (FIFRA; 7 U.S.C. section 136 et seaq.) Peoducts that are labeled as both a "sanitizer" and a "disinfectant," are considered disinfectants.

Sanitizer does not include:

(1) Disinfectant,

(2) products labeled solely for use on humans or animals,

(3) products labeled solely for agricultural use,

(4) products labeled solely for use in swimming, therapeutic tubs, or hot tubs,

(5) products which are labeled to be used on heat sensitive critical or semi-critical medical devices or medical equipment surfaces,

(6) products which are pre-moistened wipes or towelettes sold exclusively to medical, convalescent or veterinary establishments,

(7) products which are labeled to be applied to food-contact surfaces and are not required to be rinsed prior to contact with food, or

(8) products which are labeled as "bathroom and tile cleaners," "glass cleaners," "general purposes," "toilet/urinal carre products," "metal polishers, " "carpet cleaners, " or "fabric refreshers" that may also make sanitizing or anti-microbial claims on the label.

[(er)] (eq) 'Sealant and caulking compound' means any product with adhesive properties that is designed to fill, seal, waterproof, or weatherproof gaps or joints between two surfaces. Sealant and caulking compound does not include roof cements and roof sealants; insulating foams; removable caulking compounds; clear/paintable/water resistant caulking compounds; floor seam sealers; products designed exclusively for automotive uses; or sealers that are applied as continuous coatings. Sealant and caulking compound also does not include units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces. For the purposes of this definition only: 'removable caulking compounds' means a compound which temporarily seals windows or doors for three to six month time intervals; and 'clear/paintable/water resistant caulking compounds' means a compound which

contains no appreciable level of opaque fillers or pigments; transmits most or all visible light through the caulk when cured; is paintable; and is immediately resistant to precipitation upon application.

[(es)] (er) 'Semisolid' means a product that, at room temperature, will not pour, but will spread or deform easily, including but not limited to gels, pastes, and greases.

[(et)] (es) 'Shaving Cream' means an aerosol product which dispenses a foam lather intended to be used with a blade or cartridge razor, or other wet-shaving system, in the removal of facial or other bodily hair. “Shaving cream does not include “shaving get”.

[(eu)] (et) ‘Shaving gel’ means an aerosol product which dispenses a post-foaming semisolid designed to be used with a blade, cartridge razor, or other shaving system in the removal of facial or other bodily hair. “Shaving gel” does not include “shaving cream.”

[(ev)] (eu) 'Shortfall' means the ACP emissions minus the ACP limit when the ACP emissions were greater than the ACP limit during a specified compliance period, expressed to the nearest pound of VOC. Shortfall does not include emissions occurring prior to the date that the ACP agreement approving an ACP is signed by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE_AGENCY).

[(ew)] (ev) 'Silicone-based multi-purpose lubricant' means any lubricant which is:

(1) designed and labeled for use to provide lubricity primarily through the use of silicone compounds including, but not limited to, polydimethylsiloxane; and

(2) designed and labeled for use for general purpose lubrication, or for use in a wide variety of applications.

"Silicone-based multi-purpose lubricant" does not include products designed and labeled for use exclusively to release manufactured products from molds.

[(ex)] (ew) 'Single phase aerosol air freshener' means an aerosol air freshener with the liquid contents in a single homogeneous phase and which does not require that the product container be shaken before use.

[(ey)] (ex) 'Small business' means any business that is independently owned and operated, and employs 100 or fewer individuals.

[(ez)] (ey) 'Solid' means a substance or mixture of substances which, either whole or subdivided (such as the particles comprising a powder), is not capable of visually detectable flow as determined under ASTM D 4359-90 (2000)el, (see Table 1, section 200.9 of this Title).

[(fa)] (ez) 'Special purpose spray adhesive' means an aerosol adhesive that meets any of the following definitions:

(1) 'Mounting adhesive' means an aerosol adhesive designed to permanently mount photographs, artwork, and any other drawn or printed media to a backing (paper, board, cloth, etc.) without causing discoloration to the artwork.

(2) 'Flexible vinyl adhesive' means an aerosol adhesive designed to bond flexible vinyl to substrates. 'Flexible vinyl' means a nonrigid polyvinyl chloride plastic with at least five percent, by weight, of plasticizer content. A 'plasticizer' is a material, such as a high boiling point organic solvent, that is incorporated into a plastic to increase its flexibility, workability, or distensibility, and may be determined using ASTM Method E 260-96 (2001), (see Table 1, section 200.9 of this Title) or from product formulation data.

(3) 'Polystyrene foam adhesive' means an aerosol adhesive designed to bond polystyrene foam to substrates.

(4) 'Automobile headliner adhesive' means an aerosol adhesive designed to bond together layers in motor vehicle headliners.

(5) 'Polyolefin adhesive' means an aerosol adhesive designed to bond polyolefins to substrates.

(6) 'Laminate repair/edgebanding adhesive' means an aerosol adhesive designed for:

(i) the touch-up or repair of items laminated with high pressure laminates (*e.g.*, lifted edges, delaminates, etc.); or

(ii) for the touch-up, repair, or attachment of edgebanding materials, including but not limited to, other laminates, synthetic marble, veneers, wood molding, and decorative metals.

For the purposes of this definition: 'high pressure laminate' means sheet materials which consist of paper, fabric, or other core material that have been laminated at temperatures exceeding 265°F, and at pressures between 1,000 and 1,400 psi.

(7) 'Automotive engine compartment adhesive' means an aerosol adhesive designed for use in motor vehicle under-the-hood applications which require oil and plasticizer resistance, as well as high shear strength, at temperatures of 200° - 275°F.

[(fb)] (fa) 'Spot remover' means any product which is labeled for use in cleaning localized areas, or removing localized spots or stains on cloth or fabric such as drapes, carpets, upholstery, and clothing, that does not require subsequent laundering to achieve stain removal. Spot remover does not include dry cleaning fluid, laundry prewash, or multi-purpose solvent.

[(fc)] (fb) 'Spray buff product' means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.

[(fd)] (fc) 'Stick product' means any antiperspirant or deodorant that contains active ingredients in a solid matrix form, and that dispenses the active ingredients by frictional action on the affected area.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

[(fe)] (fd) 'Structural waterproof adhesive' means an adhesive whose bond lines are resistant to conditions of continuous immersion in fresh or salt water, and that conforms with Federal Specification MMM-A-181D (Type 1, Grade A) (see Table 1, section 200.9 of this Title). This definition is as per the Federal Consumer Products Regulation 40 CFR part 59, subpart C (see Table 1, section 200.9 of this Title).

[(ff)] (fe) 'Surplus reduction' means the ACP limit minus the ACP emissions when the ACP limit was greater than the ACP emissions during a given compliance period, expressed to the nearest pound of VOC. Except as provided in section 235-11.1(g)(3) of this Part, surplus reduction does not include emissions occurring prior to the date that the ACP agreement approving an ACP is signed by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY).

[(fg)] (ff) 'Surplus trading' means the buying, selling, or transfer of surplus reductions between responsible ACP parties.

[(fh)] (fg) 'Table B compound' means any carbon-containing compound listed as an exception to the definition of VOC as defined in Part 200 of this Title.

(fh) 'Temporary hair color' means any product that applies color, glitter, or UV-active pigments to hair, wigs, or fur and is removable when washed. "Temporary hair color" includes hair color mousses and products labeled to add texture or thickness to cover thinning/balding areas. " Temporary hair color" does not include "hair Spray," "hair styling product," or "hair mousse."

(fi) 'Terrestrial' means to live on or grow from land.

(fj) 'Tire sealant and inflation' means any pressurized product that is designed to temporarily inflate and seal a leaking tire.

(fk) 'Toilet/Urinal care product' means any product designed or labeled for use to clean and/or deodorize toilet bowls, toilet tanks, or urinals. Toilet bowls, toilet tanks, or urinals includes, but is not limited to, toilets or urinals connected to permanent plumbing in buildings and other structures, portable toilets or urinals placed at temporary or remote locations, and toilets or urinals in vehicles such as buses, recreational motor homes, boats, ships, and aircraft. "Toilet/Urinal care product" does not include "bathroom and tile cleaner" or "general purpose cleaner."

[(eu)] (fl) 'Total maximum historical emissions (TMHE)' means the total VOC emissions from all ACP products for which the responsible ACP party has failed to submit the required VOC content or enforceable sales records. The TMHE shall be calculated for each ACP product during each portion of a compliance period for which the responsible ACP has failed to provide the required VOC content or enforceable sales records. The TMHE shall be expressed to the nearest pound and calculated according to the following calculation:

$TMHE = (MHE)_1 + (MHE)_2 + ... + (MHE)_N$

where,

$$\text{'MHE'} = \frac{\text{('Highest VOC Content'} \times \text{'Highest Sales')}}{100 \times 365} \times \text{'Missing Data Days'}$$

where,

'Highest VOC Content' = the maximum VOC content which the ACP product has contained in the previous five years, if the responsible ACP party has failed to meet the requirements for reporting VOC content data (for any portion of the compliance period), as specified in the ACP agreement approving the ACP, or the current actual VOC content, if the responsible ACP party has provided all required VOC content data (for the entire compliance period), as specified in the ACP agreement.

'Highest Sales' = the maximum one-year gross New York State (OTC STATE) sales of the ACP product in the previous five years, if the responsible ACP party has failed to meet the requirements for reporting enforceable sales records (for any portion of the compliance period), as specified in the ACP agreement approving the ACP, or the current actual one-year enforceable sales for the product, if the responsible ACP party has provided all required enforceable sales records (for the entire compliance period), as specified in the ACP agreement approving the ACP.

'Missing Data Days' = the number of days in a compliance period for which the responsible ACP party has failed to provide the required enforceable sales or VOC content data as specified in the ACP agreement approving an ACP.

1, 2, ..., N = each product in an ACP, up to the maximum N, for which the responsible ACP party has failed to submit the required enforceable sales or VOC content data as specified in the ACP agreement approving an ACP.

(fm) 'Type A propellent' means a compressed gas such as CO_2, N_2, N_2O, or compressed air which is used as a propellent, and is either incorporated with the product or contained in a separate chamber within the product's packaging.

(fn) 'Type B propellent' means any halocarbon which is used as a propellent including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs).

(fo) 'Type C propellent' means any propellent which is not a Type A or Type B propellent, including propane, isobutane, n-butane, and dimethyl ether (also known as dimethyl oxide).

(fp) 'Undercoating' means any aerosol product designed to impart a protective, non-paint layer to the undercarriage, trunk interior, and/or firewall of motor vehicles to prevent the formation of rust or to deaden sound. Undercoating includes, but is not limited to, rubberized, mastic, or asphaltic products.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(fq) 'Usage directions' means the text or graphics on the product's principal display panel, label, or accompanying literature which describes to the end user how and in what quantity the product is to be used.

(fr) 'Vinyl/Fabric/Leather/Polycarbonate coating' means a coating designed and labeled for use exclusively to coat vinyl, fabric, leather, or polycarbonate substrates.

(fs) 'VOC content' means, except for charcoal lighter products, the total weight of VOC in a product expressed as a percentage of the product weight (exclusive of the container or packaging), as determined pursuant to sections 235-9.1(a) and 235-9.1(b) of this Part, and calculated according to the following equations:

For all products except for charcoal lighter material products:

$$\text{VOC Content'} = \frac{((\text{'B'} - \text{'C'}) \times 100)}{\text{'A'}}$$

where,

A	=	net weight of unit (excluding container and packaging)
B	=	total weight of all VOC per unit, as defined in Part 200 of this Title
C	=	total weight of all exempted VOCs per unit, as specified in Subpart 235-4 of this Part

For charcoal lighter material products only:

$$\text{'VOC Content'} = \frac{(\text{'Certified Emissions'} \times 100)}{\text{'Certified Use Rate'}}$$

where,

Certified Emissions = the emissions level for products approved by director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) under section 235-3.1(f)of this Part, as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (Feb. 28, 1991) (see Table 1, section 200.9 of this Title), expressed to the nearest 0.001 pound CH_2 per start.

Certified Use Rate = the usage level for products approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) under section 235-3.1(f) of this Part, as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (Feb. 28, 1991) (see Table 1, section 200.9 of this Title), expressed to the nearest 0.001 pound certified product used per start.

(ft) 'Wasp and hornet insecticide' means any insecticide product that is designed for use against wasps, hornets, yellow jackets or bees by allowing the user to spray from a distance a directed stream or burst at the intended insects, or their hiding place.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(fu) 'Waterproofer' means a product designed and labeled for use exclusively to repel water from fabric or leather substrates. Waterproofer does not include fabric protectants.

(fv) 'Wax' means a material or synthetic thermoplastic substance generally of high molecular weight hydrocarbons or high molecular weight esters of fatty acids or alcohols, except glycerol and high polymers (plastics). Wax includes, but is not limited to, substances derived from the secretions of plants and animals such as carnuba wax and beeswax, substances of a mineral origin such as ozocerite and paraffin, and synthetic polymers such as polyethylene.

(fw) 'Web spray adhesive' means any aerosol adhesive which is not a mist spray or special purpose spray adhesive.

(fx) 'Wood cleaner' means a product labeled for use to clean wooden materials including but not limited to decking, fences, flooring, logs, cabinetry, and furniture. "Wood cleaner" does not include "dusting aid," "general purpose cleaners," "furniture maintenance product," "floor wax stripper," "floor polish or wax," or products designed and labeled for use exclusively to preserve or color wood.

[(fy)] [*Wood floor wax* means wax-based products for use solely on wood floors.]

[(fz)] (fy) 'Working day' means any day between Monday through Friday, inclusive, except for days that are Federal holidays.

Section 235-3.1 Standards.

(a) Except as provided in Subparts 235-4 (Exemptions), 235-5 (Innovative Products), 235-8 (Variances), and 235-11 (Alternative Control Plan) of this Part, no person shall sell, supply, offer for sale, or manufacture for sale in the State of New York any consumer product manufactured on or after the corresponding date listed below in the Table of Standards (Table) which contains VOCs in excess of the VOC content limits specified in the following Table of Standards:

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Table of Standards

	'VOC Content Limit' ('percent by weight')	
'Product Category'	Manufactured on or after January 1, 20[05]10	Manufactured on or after January 1, 201[0]3
Adhesive Removers:		
Floor or Wall covering	5	[5]
Gasket or Thread Locking	50	[50]
General Purpose	20	[20]
Specialty	70	[70]
Adhesives:		
Mist Spray	65	
Web Spray	55	
Special Purpose Spray Adhesives:		
Mounting, Automotive Engine Compartment, and Flexible Vinyl	70	
Polystyrene Foam and Automotive Headliner	65	
Polylolefin and Laminate Repair/Edgebanding	60	
Construction, Panel, and Floor Covering	15*	
Non-aerosol		7
Contact	[80*]	
Contact General purpose	55	[55]
Contact Special purpose	80	[80]
General Purpose	10	

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Structural Waterproof	15	
Air Fresheners:		
Single-Phase Aerosols	30	
Double-Phase Aerosols	25	
Liquids/Pump Sprays	18	
Solids/Gels	3	
Antiperspirants:		
Aerosols	40 HVOC 10 MVOC	
Non-Aerosols	0 HVOC 0 MVOC	
Anti-static Product:		
Aerosol		80
Non-aerosol	11	[11]
[Automotive Brake Cleaners]	[45]	
Automotive Rubbing or Polishing Compound	17	
Automotive Wax, Polish, Sealant or Glaze:		
Hard Paste Waxes	45	
Instant Detailers	3	
All Other Forms	15	
Automotive Windshield Washer Fluids	35	
Bathroom and Tile Cleaners:		
Aerosols	7	
[All Other Forms]Non-aerosols	5*	1
Brake Cleaner	45*	10
Bug and Tar Remover	40	

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Carburetor or Fuel-Injection Air Intake Cleaners	45*	10
Carpet and Upholstery Cleaners:		
Aerosols	7	
Non-Aerosols (Dilutables)	0.1	
Non-Aerosols (Ready-to-Use)	3	
Charcoal Lighter Material	see subdivision 235-3.1(f)	
Cooking Spray:		
Aerosols	18	
Disinfectant		
Aerosols		70
Non-Aerosols		1
Deodorants:		
Aerosols	0 HVOC 10 MVOC	
Non-Aerosols	0 HVOC 0 MVOC	
Dusting Aids:		
Aerosols	25	
All Other Forms	7	
Electrical Cleaner	45	[45]
Electronic Cleaner	75	[75]
Engine Degreasers:		
Aerosols	35*	10
Non-Aerosols	5	
Fabric Protectants	60	

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Fabric Refresher:		
Aerosols	15	[15]
Non-Aerosols	6	[6]
Floor Polishes[/] or Waxes:		
[Products for] Resilient [Flexible] Flooring Materials	7*	1
[Products for] Nonresilient Flooring Materials	10*	1
Wood Floor Wax	90	
Floor Wax Strippers:		
Non-Aerosols	See subdivision 235-3.1(h)	
Footwear or Leather Care Product:		
Aerosol	75	[75]
Solid	55	[55]
Other forms	15	[15]
Furniture Maintenance Products:		
Aerosols	17	
[All Other Forms] Non-Aerosols (Except Solid or Paste)	7*	3
General Purpose Cleaners:		
Aerosols	10*	8
Non-Aerosols	4	
General Purpose Degreasers:		
Aerosols	50*	10
Non-Aerosols	4	
Glass Cleaners:		
Aerosols	12	

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Non-Aerosols	4	
Graffiti Remover:		
Aerosol	50	[50]
Non-Aerosols	30	[30]
Hair Mousses	6	
Hairshines	55	
Hairsprays	55	
Hair Styling Gels	6	
Hair Styling Products:		
Aerosols and Pump Sprays	6	[6]
All other forms	2	[2]
Heavy-Duty Hand Cleaner or Soap	8	
Insecticides:		
Crawling Bug (Aerosol)	15	
Crawling Bug (All Other Forms)	20	
Flea and Tick	25	
Flying Bug (Aerosol)	25	
Flying Bug (All Other Forms)	35	
Foggers	45	
Lawn and Garden (All Other Forms)	20	
Lawn and Garden (Non-Aerosol)	3	
Wasp and Hornet	40	
Laundry Prewash:		
Aerosols/Solids	22	
All Other Forms	5	

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Laundry Starch / Sizing / Fabric Finish Products	5*	4.5
Metal Polishes/Cleaners	30	
Multi-Purpose Lubricant (Excluding Solid or Semi-Solid Products)	50	
Nail Polish Remover	75	
Non-Selective Terrestrial Herbicide:		
Non-Aerosols	3	
Oven Cleaners:		
Aerosols [/Pump Sprays]	8	
[Liquids] Non-aerosols (including pump sprays and liquids)	5*	TBD[1]
Paint Remover or Strippers	50	
Penetrants	50	
Rubber [and] / Vinyl Protectant[s]:		
[Non-]Aerosols	[3] 10	
Non-Aerosols	[10] 3	
Sanitizer		
Aerosol		70
Non-Aerosol		1
Sealants and Caulking Compounds	4	
Shaving Creams	5	
Shaving Gel	7*	[7] 4
Silicone-Based Multi-Purpose Lubricants (Excluding Solid or Semi-Solid Products)	60	
Spot Removers:		
Aerosols	25	

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Non-Aerosols	8	
Temporary Hair Color:		
Aerosol		55
Tire Sealants and Inflators	20	
Toilet/Urinal Care:		
Aerosol	10	[10]
Non-Aerosol	3	[3]
Undercoatings:		
Aerosols	40	
Wood Cleaner:		
Aerosol	17	[17]
Non-Aerosol	4	[4]

* VOC standards will expire on December 31, 20[09]12 for these categories because they [category] will [be split into two categories.] have revised VOC standards that will take effect on January 1, 2013.

[1]TBD (To be determined): CARB is currently doing a technical review for the proposed revised 1 percent VOC content limit for the product category Oven Cleaners (Non-aerosols (including pump sprays and liquids)) which took effect in California on December 31, 2008. There is a good possibility that the proposed 1 percent VOC limit will be changed because of this technical review.

(b) No person shall sell, supply, offer for sale, or manufacture for sale in the State of New York (OTC STATE) any antiperspirant or deodorant which contains any compound that has been identified by the CARB in Title 17, California Code of Regulations, division 3, chapter 1, subchapter 7, section 93000 (see Table 1, section 200.9 of this Title) as a toxic air contaminant.

(c) 'Products that are diluted prior to use'.

(1) For consumer products for which the label, packaging, or accompanying literature specifically states that the product should be diluted with water or non-VOC solvent prior to use, the VOC content limits specified in the Table of Standards in this Subpart shall apply to the product only after the minimum recommended dilution has taken place. For purposes of this Subpart, minimum recommended dilution shall not include recommendations for incidental use of a concentrated product to deal with limited special applications such as hard-to-remove soils or stains.

(2) For consumer products for which the label, packaging, or accompanying literature states that the product should be diluted with any VOC solvent prior to use, the VOC content limits specified in the Table of Standards in this Subpart shall apply to the product only after the maximum recommended dilution has taken place.

(d) 'Sell-through of products'.

(1) Sell-through period. Notwithstanding the provisions of Subparts 235-3.1(a) or 235-3.1(g) of this Part, a consumer product manufactured prior to the effective date specified for that product in the Table of Standards may be sold, supplied, or offered for sale after each of the specified effective dates. This subdivision shall not apply to:

(i) any consumer product that does not display on the product container or package the date on which the product was manufactured, or a code indicating such date, in accordance with Subpart 235-6.1(a) of this Part, or

(ii) Solid Air Fresheners and Toilet/Urinal Care Products that contain para-dichlorobenzene; these products are subject to the one-year sell-through period specified in Subpart 235-3.1(n) of this Part.

(e) 'Products registered under FIFRA'. For those consumer products that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA; 7 U.S.C. section 136, *et. seq*.) (see Table 1, section 200.9 of this Title), the effective date of the VOC content limits specified in Table of Standards in this Subpart is January 1, 20[11]14.

(f) *Requirements for charcoal lighter materials*. The following requirements shall apply to all charcoal lighter material products as defined in section 235-2.1(ai) of this Part:

(1) Regulatory standards.

(i) No person shall sell, supply, or offer for sale after January 1, 2005 any charcoal lighter material product unless at the time of the transaction:

(*a*) the manufacturer can demonstrate that they have been issued a currently effective certification by the CARB under the Consumer Products provisions under subchapter 8.5, article 2, section 94509(h), of title 17 of the California Code of Regulations (see Table 1, section 200.9 of this Title). This certification remains in effect for the State of New York (OTC STATE) for as long as the CARB certification remains in effect. Any manufacture claiming such a certification on this basis must submit to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) a copy of the certification decision (*i.e.* , the Executive Order), including all conditions established by CARB applicable to the certification;

(*b*) the manufacturer or distributor of the charcoal lighter material has been issued a currently effective certification pursuant to paragraph (2) of this subdivision;

(*c*) the charcoal lighter material meets the formulation criteria and other conditions specified in the applicable ACP agreement issued pursuant to paragraph (2) of this subdivision; and

(*d*) the product usage directions for the charcoal lighter material are the same as those provided to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY pursuant to subparagraph 235-3.1(f)(2)(iii) of this subdivision.

(2) Certification requirements.

(i) No charcoal lighter material formulation shall be certified under this subsection unless the applicant for certification demonstrates to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) satisfaction that the VOC emissions from the ignition of charcoal with the charcoal lighter material are less than or equal to 0.020 pound of VOC per start, using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol, dated February 28, 1991 (the South Coast Air Quality Management District Rule 1174 Testing Protocol)(see Table 1, section 200.9 of this Title). The provisions relating to LVP-VOC in sections 235-2.1[(da)] (cz) and 235-4.1 (f) of this Part shall not apply to any charcoal lighter material subject to the requirements of this subdivision and subdivision (a) of this section.

(ii) The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) may approve alternative test procedures which are shown to provide equivalent results to those obtained using the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (see Table 1, section 200.9 of this Title).

(iii) A manufacturer or distributor of charcoal lighter material may apply to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) for certification of a charcoal lighter material formulation in accordance with this paragraph. The application shall be in writing and shall include, at a minimum, the following:

(*a*) the results of testing conducted pursuant to the procedures specified in South Coast Air Quality Management District Rule 1174 Testing Protocol (see Table 1, section 200.9 of this Title).

(*b*) the exact text and/or graphics that will appear on the charcoal lighter material's principal display panel, label, and any accompanying literature. The provided material shall clearly show the usage directions for the product. These directions shall accurately reflect the quantity of charcoal lighter material per pound of charcoal that was used in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (see Table 1, section 200.9 of this Title) for that product, unless

(*1*) the charcoal lighter material is intended to be used in fixed amounts independent of the amount of charcoal used, such as certain paraffin cubes; or

(*2*) the charcoal lighter material is already incorporated into the charcoal, such as certain bag light, instant light or match light products;

(*c*) for a charcoal lighter material which meets the criteria specified in subclause 235-3.1(f)(2)(iii)(*b*)(*1*) of this subpart, the usage instructions

provided to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall accurately reflect the quantity of charcoal lighter material used in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (see Table 1, section 200.9 of this Title) for that product; and

(*d*) any physical property data, formulation data, or other information required by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) for use in determining when a product modification has occurred and for use in determining compliance with the conditions specified on the ACP agreement issued pursuant to this paragraph.

(iv) Within 30 days of receipt of an application, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall advise the applicant in writing either that it is complete or that specified additional information is required to make it complete. Within 30 days of receipt of additional information, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall advise the applicant in writing either that the application is complete, or that specified additional information or testing is still required before it can be deemed complete.

(v) If the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) finds that an application meets the requirements of this paragraph, then an ACP agreement shall be issued certifying the charcoal lighter material formulation and specifying such conditions as are necessary to insure that the requirements of this section are met. The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall act on a complete application within 90 days after the application is deemed complete.

(3) Notice of modifications. For any charcoal lighter material for which certification has been granted pursuant to paragraph 235-3.1(f)(2) of this subpart, the applicant for certification shall notify the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) in writing within 30 days of:

(i) any change in the usage directions; or

(ii) any change in product formulation, test results, or any other information submitted pursuant to paragraph 235-3.1(f)(2) of this subpart which may result in VOC emissions greater than 0.020 pound of VOC per start.

(4) Revocation of certification. If the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) determines that any certified charcoal lighter material formulation results in VOC emissions from the ignition of charcoal which are greater than 0.020 pound of VOC per start, as determined by the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (see Table 1, section 200.9 of this Title) and the statistical analysis procedures contained therein, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY shall revoke or modify the certification in accordance with Part 621 of this Title (applicable OTC STATE laws and regulations) and the procedures therein as is necessary to assure that the charcoal

lighter material will result in VOC emissions of less than or equal to 0.020 pound of VOC per start.

(g) 'Requirements for aerosol adhesives'.

(1) As specified in California Health and Safety Code section 41712(h)(2) (see Table 1, section 200.9 of this Title) (or applicable New York State (OTC STATE) laws and regulations), the standards for aerosol adhesives apply to all uses of aerosol adhesives, including consumer, industrial, and commercial uses. Except as otherwise provided in Subparts 235-4, 235-5, and 235-8 of this Part, no person shall sell, supply, offer for sale, use or manufacture for sale in the State of New York (OTC STATE) any aerosol adhesive which, at the time of sale, use, or manufacture, contains VOCs in excess of the specified standard.

(2) (i) In order to qualify as a special purpose spray adhesive the product must meet one or more of the definitions for "special purpose spray adhesive" specified in section 235-2.1[(fa)] (ez) of this Part, but if the product label indicates that the product is suitable for use on any substrate or application not listed in one of the definitions for "special purpose spray adhesive", then the product shall be classified as either a web spray adhesive or a mist spray adhesive.

(ii) If a product meets more than one of the definitions specified in section 235-2.1[(fa)] (ez) of this Part for special purpose spray adhesive, and is not classified as a web spray adhesive or mist spray adhesive under subparagraph 235-3.1(g)(2)(i) of this subpart, then the VOC content limit for the product shall be the lowest applicable VOC content limit specified in the Table of Standards in this Subpart.

(3) Effective January 1, 2005, no person shall sell, supply, offer for sale, or manufacture for use in the State of New York (OTC STATE) any aerosol adhesive which contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.

(4) All aerosol adhesives must comply with the labeling requirements specified in section 235-6.1(d) of this Part.

(h) 'Requirements for floor wax strippers'. No person shall sell, supply, offer for sale, or manufacture for use in the State of New York (OTC STATE) any floor wax stripper unless the following requirements are met:

(1) The label of each non-aerosol floor wax stripper must specify a dilution ratio for light or medium build-up of polish that results in an as-used VOC concentration of three percent by weight or less.

(2) If a non-aerosol floor wax stripper is also intended to be used for removal of heavy build-up of polish, the label of that floor wax stripper must specify a dilution ratio for heavy build-up of polish that results in an as-used VOC concentration of 12 percent by weight or less.

(3) The terms light build-up, medium build-up or heavy build-up are not specifically required, as long as comparable terminology is used.

(i) 'Products containing ozone-depleting compounds'. For any consumer product for which VOC content limits are specified in the Table of Standards under this Subpart, no person shall sell, supply,

offer for sale, or manufacture for sale in the State of New York (OTC STATE) any consumer product which contains any of the following ozone-depleting compounds:

CFC-11 (trichlorofluoromethane);
CFC-12 (dichlorodifluoromethane);
CFC-113 (1,1,1-trichloro-2,2,2-trifluoroethane);
CFC-114 (1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane);
CFC-115 (chloropentafluoroethane);
halon 1211 (bromochlorodifluoromethane);
halon 1301 (bromotrifluoromethane);
halon 2402 (dibromotetrafluoroethane);
HCFC-22 (chlorodifluoromethane);
HCFC-123 (2,2-dichloro-1,1,1-trifluoroethane);
HCFC-124 (2-chloro-1,1,1,2-tetrafluoroethane);
HCFC-141b (1,1-dichloro-1-fluoroethane);
HCFC-142b (1-chloro-1,1-difluoroethane);
1,1,1-trichloroethane; and,
carbon tetrachloride.

(j) The requirements of subdivision (i) of this section shall not apply to any existing product formulation that complies with the Table of Standards of this Subpart or any existing product formulation that is reformulated to meet the Table of Standards of this Subpart, provided the ozone depleting compound content of the reformulated product does not increase.

(k) The requirements of subdivision (i) of this section shall not apply to any ozone depleting compounds that may be present as impurities in a consumer product in an amount equal to or less than 0.01 percent by weight of the product.

(l) Requirements for contact adhesives, electronic cleaners, footwear or leather care products, and general purpose degreasers.

(1) Except as provided below in paragraphs 235-3.1(l)(2) and 235-3.1(l)(4) of this subpart, effective January 1, 2010, no person shall sell, supply, offer for sale, or manufacture for use in the State of New York (OTC STATE) any contact adhesive, electronic cleaner, footwear or leather care product, or general purpose degreaser that contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.

(2) Sell-through of Products. Contact adhesives, electronic cleaners, footwear or leather care products, and general purpose degreasers that contain methylene chloride, perchloroethylene, or trichloroethylene and were manufactured before January 1, 2010, may be sold, supplied, or offered for sale until January 1, 2011, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date, in accordance with Subpart 235-6.1(a) of this Part.

(3) Notification for products sold during the sell-through period. Any person who sells or supplies a consumer product identified above in paragraph 235-3.1(l)(1) of this subpart must notify the purchaser of the product in writing that the sell-through period for that product will end on January 1, 2011, provided, however, that this notification must be given only if both of the following conditions are met:

(i) the product is sold or supplied to a distributor or retailer; and

(ii) the product is sold or supplied on or after June 30, 2010.

(4) Impurities. The requirements of paragraphs 235-3.1(l)(1) and 235-3.1(l)(3) of this subpart shall not apply to any contact adhesive, electronic cleaner, footwear or leather care product, or general purpose degreaser containing methylene chloride, perchloroethylene, or trichloroethylene that is present as an impurity in a combined amount equal to or less than 0.01 percent by weight.

(m) Requirements for adhesive removers, electrical cleaners, and graffiti removers.

(1) Except as provided below in sections 3(m)(2) and (m)(4) of this paragraph, effective January 1, 2010, no person shall sell, supply, offer for sale, or manufacture for use in the State of New York (OTC STATE) any adhesive remover, electrical cleaner, or graffiti remover that contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.

(2) Sell-through of Products. Adhesive removers, electrical cleaners, and graffiti removers that contain methylene chloride, perchloroethylene, or trichloroethylene and were manufactured before January 1, 2010, may be sold, supplied, or offered for sale until January 1, 2011, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date, in accordance with section 235-6.1(a) of this Part.

(3) Notification for products sold during the sell-through period. Any person who sells or supplies a consumer product identified above in paragraph 235-3.1(m)(1) of this subdivision must notify the purchaser of the product in writing that the sell-through period for that product will end on January 1, 2011, provided, however, that this notification must be given only if both of the following conditions are met:

(i) the product is sold or supplied to a distributor or retailer; and

(ii) the product is sold or supplied on or after June 30, 2010.

(4) Impurities. The requirements of paragraphs 235-3.1(m)(1) and 235-3.1(m)(3) of this subpart shall not apply to any adhesive remover, electrical cleaner, or graffiti remover containing methylene chloride, perchloroethylene, or trichloroethylene that is present as an impurity in a combined amount equal to or less than 0.01 percent by weight.

(n) Requirements for solid air fresheners and toilet/urinal care products.

(1) Effective January 1, 2010, no person shall sell, supply, offer for sale, or manufacture for use in the State of New York (OTC STATE) any solid air fresheners or toilet/urinal care products that contain para-dichlorobenzene, except that solid air fresheners and toilet/urinal care products that contain para-dichlorobenzene and were manufactured before January 1, 2010, may be sold, supplied, or offered for sale until January 1, 2011, so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date, in accordance with section 235-6.1(a) of this Part.

(2) Notification for products sold during the sell-through period. Any person who sells or supplies any Solid Air Freshener or Toilet/Urinal Care Product that contains para-dichlorobenzene must notify the purchaser of the product in writing that the sell-through period for the product will end on January 1, 2011, provided, however, that this notification must be given only if both of the following conditions are met:

(i) the product is sold or supplied to a distributor or retailer; and

(ii) the product is sold or supplied on or after June 30, 2010.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

** (o) Requirements for Bathroom and tile cleaners, Construction, panel, and floor covering adhesives, electronic cleaners labeled as energized electronic equipment use only, general purpose cleaners, and oven cleaners.

** (1) Except as provided below in sections 3(o)(2) and (o)(4), effective January 1, 2013, no person shall sell, supply, offer for sale, or manufacture for use in (OTC STATE) any bathroom and tile cleaners, construction, panel, and floor covering adhesives, electronic cleaners labeled as energized electronic equipment use only, general purpose cleaners, or oven cleaners that contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.

** (2) Sell-through of Products. Bathroom and tile cleaners, construction, panel, and floor covering adhesives, electronic cleaners labeled as energized electronic equipment use only, general purpose cleaners, and oven cleaners that contain methylene chloride, perchloroethylene, or trichloroethylene and were manufactured before January 1, 2013, may be sold, supplied, or offered for sale (Optional 3 year sell through: until January 1, 2016), so long as the product container or package displays the date on which the product was manufactured, or a code indicating such date, in accordance with section 6(a).

** (3) (Optional 3 year sell through requirement for products containing any methylene chloride, perchloroethylene, or trichloroethylene) Notification for products sold during the sell-through period. Any person who sells or supplies a consumer product identified above in section 3(o)(1) must notify the purchaser of the product in writing that the sell-through period for that product will end on January 1, 2016, provided, however, that this notification must be given only if both of the following conditions are met:

(i) the product is sold or supplied to a distributor or retailer; and

(ii) the product is sold or supplied on or after June 30, 2015.

** (4) Impurities. The requirements of sections 3(o)(1) and 3(o)(3) of this subpart shall not apply to any bathroom and tile cleaners, construction, panel, and floor covering adhesives, electronic cleaners labeled as energized electronic equipment use only, general purpose cleaners, or oven cleaners containing methylene chloride, perchloroethylene, or trichloroethylene that is present as an impurity in a combined amount equal to or less than 0.01 percent by weight.

Section 235-4.1 Exemptions.

(a) This Part shall not apply to any consumer product manufactured in the State of New York (OTC STATE) for shipment and use outside of the State of New York (OTC STATE).

(b) The provisions of this Part shall not apply to a manufacturer or distributor who sells, supplies, or offers for sale in the State of New York a consumer product that does not comply with the VOC content limits specified in section 235-3.1(a) of this Part, as long as the manufacturer or distributor can demonstrate both that the consumer product is intended for shipment and use outside of the State of New York, and that the manufacturer or distributor has taken reasonable prudent precautions to assure that the consumer product is not distributed to the State of New York. This subdivision does not apply to consumer products that are sold, supplied, or offered for sale by any person to retail outlets in the State of New York.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(c) The medium volatility organic compound (MVOC) content limits specified in section 235-3.1(a) of this Part for antiperspirants or deodorants, shall not apply to ethanol.

(d) The VOC content limits specified in section 235-3.1(a) of this Part shall not apply to fragrances up to a combined level of two percent by weight contained in any consumer product and shall not apply to colorants up to a combined level of two percent by weight contained in any antiperspirant or deodorant.

(e) The requirements of section 235-3.1(a) of this Part for antiperspirants or deodorants shall not apply to those VOCs that contain more than 10 carbon atoms per molecule and for which the vapor pressure is unknown, or that have a vapor pressure of 2 mm Hg or less at 20° C.

(f) The VOC content limits specified in section 235-3.1(a) of this Part shall not apply to any LVP-VOC.

(g) The requirements of section 235-6.1(a) of this Part shall not apply to consumer products registered under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA; 7 U.S.C. section 136, *et. seq*.) (see Table 1, section 200.9 of this Title).

(h) The VOC content limits specified in section 235-3.1(a) of this Part shall not apply to air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs under Part 200 of this Title or exempted under subdivision (f) of this section.

(i) The VOC content limits specified in section 235-3.1(a) of this Part shall not apply to air fresheners and insecticides containing at least 98 percent paradichlorobenzene.

(1) Until January 1, 2010, the VOC limits specified in section 235-3.1(a) of this Part shall not apply to solid air fresheners containing at least 98 percent para-dichlorobenzene. On or after January 1, 2010, the provisions of section 235-3.1(n) of this Part apply to solid air fresheners containing para-dichlorobenzene.

(j) The VOC content limits specified in section 235-3.1(a) of this Part shall not apply to adhesives sold in containers of one fluid ounce or less.

(k) The VOC content limits specified in section 235-3.1(a) of this Part shall not apply to bait station insecticides. For the purpose of this Subpart, *bait station insecticides* are containers enclosing an insecticidal bait that is not more than 0.5 ounce by weight, where the bait is designed to be ingested by insects and is composed of solid material feeding stimulants with less than five percent active ingredients.

Section 235-5.1 Innovative products.

(a) Any manufacturer of consumer products which have been granted an innovative product exemption by the CARB under the innovative products provisions in section 94511 or 94503.5 of title 17 of the California Code of Regulations (see Table 1, section 200.9 of this Title) shall be exempt from the Table of Standards in section 235-3.1(a) of this Part for the period of time that the CARB innovative products exemption remains in effect provided that all consumer products within the CARB innovative products exemption are contained in the Table of Standards in section 235-3.1(a) of this Part. Any manufacturer claiming such an exemption on this basis must submit to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) a copy of the CARB innovative product exemption decision (*i.e.,* the Executive Order), including all conditions established by CARB applicable to the exemption. When approved by the director, Division of Air Resources,

Department of Environmental Conservation (OTC STATE AGENCY), the innovative product exemption will be submitted to the United States Environmental Protection Agency as a State Implementation Plan revision for approval.

(b) Manufacturers of consumer products that have been granted an innovative products exemption under the innovative products provisions in sections 94511, or 94503.5 of Title 17 of the California Code of Regulations (see Table 1, section 200.9 of this Title) based on California specific data, or that have not been granted an exemption by the CARB may seek an innovative products exemption in accordance with the following criteria:

(1) The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall exempt a consumer product from the VOC content limits specified in section 235-3.1(a) of this Part if a manufacturer demonstrates by clear and convincing evidence that, due to some characteristic of the product formulation, design, delivery systems or other factors, the use of the product will result in less VOC emissions as compared to:

(i) the VOC emissions from a representative consumer product which complies with the VOC content limits specified in section 235-3.1(a) of this Part; or

(ii) the calculated VOC emissions from a noncomplying representative product, if the product had been reformulated to comply with the VOC content limits specified in section 235-3.1(a) of this Part. VOC emissions shall be calculated using the following equation:

$$E_R = E_{NC} \times VOC_{STD} \div VOC_{NC}$$

where,

E_R = the VOC emissions from the noncomplying representative product, had it been reformulated.

E_{NC} = the VOC emissions from the noncomplying representative product in its current formulation.

VOC_{STD} = the VOC content limit specified in the Table of Standards in section 235-3.1(a) of this Part.

VOC_{NC} = the VOC content of the noncomplying product in its current formulation.

If a manufacturer demonstrates that this equation yields inaccurate results due to some characteristic of the product formulation or other factors, an alternative method which accurately calculates emissions may be used upon approval of the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY).

(2) For the purposes of this Subpart, *representative consumer product* means a consumer product which meets all of the following criteria:

(i) the representative product shall be subject to the same VOC content limit in section 235–3.1(a) of this Part as the innovative product;

(ii) the representative product shall be of the same product form as the innovative product, unless the innovative product uses a new form which does not exist in the product category at the time the application is made; and

(iii) the representative product shall have at least similar efficacy as other consumer products in the same product category based on tests generally accepted for that product category by the consumer products industry.

(3) A manufacturer shall apply in writing to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) for any exemption claimed under paragraph (1) of this subdivision. The application shall include the supporting documentation that demonstrates the emissions from the innovative product, including the actual physical test methods used to generate the data and, if necessary, the consumer testing undertaken to document product usage. In addition, the applicant must provide any information necessary to enable the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) to establish enforceable conditions for granting the exemption including the VOC content for the innovative product and test methods for determining the VOC content. All information submitted by a manufacturer pursuant to this Subpart shall be handled in accordance with the procedures specified in applicable New York State (OTC STATE) confidentiality requirements.

(4) Within 30 days of receipt of the exemption application the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall determine whether an application is complete as provided in applicable New York State laws or regulations.

(5) Within 90 days after an application has been deemed complete, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall determine whether, under what conditions, and to what extent, an exemption from the requirements of section 235-3.1(a) of this Part will be permitted. The applicant and the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) may mutually agree to a longer time period for reaching a decision, and additional supporting documentation may be submitted by the applicant before a decision has been reached. The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall notify the applicant of the decision in writing and specify such terms and conditions that are necessary to insure that emissions from the product will meet the emissions reductions specified in paragraph (1) of this subdivision, and that such emissions reductions can be enforced. When approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), the innovative product exemption will be submitted to the United States Environmental Protection Agency as a State Implementation Plan revision for approval.

(6) In granting an exemption for a product the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall establish conditions that are enforceable. These conditions shall include the VOC content of the innovative product, dispensing rates, application rates and any other parameters determined by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) to be necessary. The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall also specify the test methods for determining conformance to the conditions established. The test methods shall include criteria for reproducibility, accuracy, sampling and laboratory procedures.

(7) For any product for which an exemption has been granted pursuant to this Subpart, the manufacturer shall notify the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) in writing within 30 days of any change in the product formulation or recommended product usage directions, and shall also notify the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) within 30 days if the manufacturer learns of any information which would alter the emissions estimates submitted to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) in support of the exemption application.

(8) If the VOC content limits specified in section 235-3.1(a) of this Part are lowered for a product category through any subsequent rule making, all innovative product exemptions granted for products in the product category, except as provided in this paragraph, shall have no force and effect as of the effective date of the modified VOC content limit. This paragraph shall not apply to those innovative products which have VOC emissions less than the applicable lowered VOC content limit and for which a written notification of the product's emissions status versus the lowered VOC content limit has been submitted to and approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) at least 60 days before the effective date of such limits.

(9) If the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) believes that a consumer product for which an exemption has been granted no longer meets the criteria for an innovative product specified in paragraph (1) of this subdivision, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) may review, and for good cause, modify or revoke the exemption in accordance with Part 621 of this Title and the procedures therein as necessary to assure that the product will meet these criteria.

Section 235-6.1 Administrative requirements.

(a) *Product dating*.

(1) Each manufacturer of a consumer product subject to Subpart 235-3 of this Part shall clearly display on each consumer product container or package, the day, month, and year on which the product was manufactured, or a code indicating such date.

(2) A manufacturer who uses the following code to indicate the date of manufacture shall not be subject to the requirements of subpart 235-6.1(b)(1) of this Part, if the code is represented separately from other codes on the product container so that it is easily recognizable:

YY DDD = year year day day day

Where:

“YY” = two digits representing the year in which the product was manufactured, and

“DDD” = three digits representing the day of the year on which the product was manufactured, with “001” representing the first day of the year, “002” representing the second day of the year, and so forth (i.e. the “Julian date”)

(3) This date or code shall be displayed on each consumer product container or package no later than twelve months prior to the effective date of the applicable standard specified in section 235-3.1(a) of this Part.

(4) The date or date-code information shall be located on the container or inside the cover/cap so that it is readily observable or obtainable (by simply removing the cap/cover) without irreversibly disassembling any part of the container or packaging. For the purposes of this subdivision, information may be displayed on the bottom of a container without removing any product packaging.

(5) The requirements of this subdivision shall not apply to:

(i) products containing no VOCs (as defined in subdivision 200.1(cf) of this Title), or containing VOCs at 0.10 percent by weight or less.

(b) *Additional product dating requirements*.

(1) If a manufacturer uses a code indicating the date of manufacture, for any consumer product subject to Subpart 235-3 of this Part an explanation of the date portion of the code must be on file with the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) [by the close of business on December 31, 2010] no later than twelve months prior to the to the effective date of the applicable standard specified in section 3.

(2) If a manufacturer changes any code indicating the date of manufacture for any consumer product subject to section 235-3.6(b)(1) of this Part, an explanation of the modified code must be submitted to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) before any products displaying the modified code are sold, supplied, or offered for sale in The State of New York.

(3) No person shall erase, alter, deface, or otherwise remove or make illegible any date or code indicating the date of manufacture from any regulated product container without the express authorization of the manufacturer.

(4) Date code explanations for codes indicating the date of manufacture are public information and may not be claimed as confidential. (Note: If a manufacturer believes there is something in the date code explanation related to something other than the date of manufacture that the manufacturer believes to be confidential, then the manufacturer should modify the explanation prior to submitting it to the Department so that the date code explanation only includes non-confidential date code information.)

(c) *Most restrictive limit*.

(1) Products manufactured before January 1, 2010, and FIFRA-registered insecticides manufactured before January 1, 2011. Notwithstanding the definition of product category as defined in section 235-2.1[(ec)] (ea) of this Part, if anywhere on the principal display panel of any consumer product manufactured before January 1, 2010, or any FIFRA registered insecticide manufactured before January 1, 2011, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC content limit is specified in

section 235-3.1(a) of this Part, then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners, antiperspirant/deodorant products and insecticide foggers.

(2) Products manufactured on or after January 1, 2010, and FIFRA-registered insecticides manufactured on or after January 1, 2011. Notwithstanding the definition of 'product category' in section 235- 2.1[(ec)] (ea) of this Part, if anywhere on the container or packaging of any consumer product manufactured on or after January 1, 2010, or any FIFRA-registered insecticide manufactured on or after January 1, 2011, or on any sticker or label affixed thereto, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC limit is specified in section 235-3.1(a) of this Part, then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners, antiperspirant/deodorant products and insecticide foggers.

(d) Additional labeling requirements for aerosol adhesives, adhesive removers, electronic cleaner, electrical cleaner, energized electrical cleaner, and contact adhesives.

(1) In addition to the requirements specified in subdivisions (a) and (c) of this section, and Subpart 235-7 of this Part, both the manufacturer and responsible party for each aerosol adhesive, adhesive removers, electronic cleaner, electrical cleaner, energized electrical cleaner, and contact adhesive product subject to this Part shall ensure that all products clearly display the following information on each product container which is manufactured on or after January 1, 2010:

(i) the product category as specified in section 235-3.1(a) of this Part or an abbreviation of the category shall be displayed;

(ii) *(a)* the applicable VOC content limit for the product that is specified in section 235-3.1(a) of this Part, except for energized electrical cleaner, expressed as a percentage by weight, shall be displayed unless the product is included in an alternative control plan approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), as provided in Subpart 235-11 of this Part, and the product exceeds the applicable VOC content limit;

(b) if the product is included in an alternative control plan approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), and the product exceeds the applicable VOC content limits specified in section 235-3.1(a) of this Part, the product shall be labeled with the term ACP or ACP Product;

(iii) if the product is classified as a special purpose spray adhesive, the applicable substrate and/or application or an abbreviation of the substrate/application that qualifies the product as special purpose shall be displayed; and

(iv) if the manufacturer or responsible party uses an abbreviation as allowed by this subdivision, an explanation of the abbreviation must be filed with the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) before the abbreviation is used.

(2) The information required in paragraph (1) of this subdivision, shall be displayed on the product container such that it is readily observable without removing or disassembling any portion of the product container or packaging. For the purposes of this Subpart,

information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.

(3) No person shall remove, alter, conceal, or deface the information required in paragraph (1) of this subdivision prior to final sale of the product.

Section 235-7.1 Reporting requirements.

(a) Upon 90 days written notice, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) may require any responsible party to report information for any consumer product or products the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) may specify including, but not limited to, all or part of the following information:

(1) the company name of the responsible party and the party's address, telephone number, and designated contact person;

(2) any claim of confidentiality made pursuant to applicable New York State confidentiality requirements;

(3) the product brand name for each consumer product and the product label;

(4) the product category to which the consumer product belongs;

(5) the applicable product form(s) listed separately;

(6) an identification of each product brand name and form as a household product, i&i product, or both;

(7) separate New York State sales in pounds per year, to the nearest pound, and the method used to calculate New York State sales for each product form;

(8) for information submitted by multiple companies, an identification of each company which is submitting relevant data separate from that submitted by the responsible party. All information from all companies shall be submitted by the date specified in this subdivision;

(9) for each product brand name and form, the net percent by weight of the total product, less container and packaging, comprised of the following, rounded to the nearest 0.1 percent:

(i) total Table B compounds;

(ii) total LVP-VOCs that are not fragrances;

(iii) total all other carbon-containing compounds that are not fragrances;

(iv) total all non-carbon-containing compounds;

(v) total fragrance;

(vi) for products containing greater than two percent by weight fragrance:

(*a*) the percent of fragrance that are LVP-VOCs; and

(*b*) the percent of fragrance that are all other carbon-containing compounds;

(vii) total paradichlorobenzene;

(10) for each product brand name and form, the identity, including the specific chemical name and associated Chemical Abstract Services (CAS) number, of the following:

(i) each Table B compound;

(ii) each LVP-VOC that is not a fragrance;

(11) if applicable, the weight percent comprised of propellent for each product; and

(12) if applicable, an identification of the type of propellent (Type A, Type B, Type C, or a blend of the different types).

If the responsible party does not have or does not provide the information requested by the director, Division of

Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), the director may require the reporting of this information by the person who has the information, including, but not limited to, any formulator, manufacturer, supplier, parent company, private labeler, distributor, or repackager.

(b) In addition to the requirements of paragraph (a)(10) of this section, the responsible party shall report or shall arrange to have reported to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) the net percent by weight of each ozone-depleting compound which is:

(1) listed in section 235-3.1(i) of this Part; and

(2) contained in a product subject to reporting under subdivision (a) in any amount greater than 0.1 percent by weight.

(c) All information submitted by any person pursuant to this Subpart shall be handled in accordance with the procedures specified in applicable New York State (OTC STATE) confidentiality requirements.

(d) Special reporting requirements for consumer products that contain perchloroethylene or methylene chloride.

(1) The requirements of this Subpart shall apply to all responsible parties for consumer products that are subject to section 235-3.1(a) of this Part and contain perchloroethylene or methylene chloride and energized electrical cleaners as defined in section 235-2.1(bf) of this Part, that contain perchloroethylene or methylene chlorid. For the purposes of this Subpart, a product contains perchloroethylene or methylene chloride if the product contains 1.0 percent or more by weight (exclusive of the container or packaging) of either perchloroethylene or methylene chloride.

(2) For each consumer product that contains perchloroethylene or methylene chloride, the responsible party shall report the following information for products sold in the State of New York (OTC STATE) during each calender year, beginning with the year 2005, and ending with the year 2010:

(i) the product brand name and a copy of the product label with legible usage instructions;

(ii) the product category to which the consumer product belongs;

(iii) the applicable product form(s) (listed separately);

(iv) for each product form listed in subparagraph (iii) of this paragraph, the total sales in the State of New York (OTC STATE) during the calendar year, to the nearest pound (exclusive of the container or packaging), and the method used for calculating the New York State (OTC STATE) sales; and

(v) the weight percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the consumer product;

(3) The information specified in paragraph (2) of this subdivision shall be reported for each calendar year by March 1st of the following year. The first report shall be due on March 1, 2006, for calendar year 2005. A new report is due on March 1st of each year thereafter, until March 1, 2011, when the last report is due.

Section 235-8.1 Variances.

(a) Any person who cannot comply with the requirements set forth in Subpart 235-3 of this Part, because of extraordinary reasons beyond the person's reasonable control may apply in writing to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) for a variance. When approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), the variance will be submitted to the United States Environmental Protection Agency as a State Implementation Plan revision for approval. The variance application shall set forth:

(1) the specific grounds upon which the variance is sought;

(2) the proposed date(s) by which compliance with the provisions of Subpart 235-3 of this Part will be achieved; and

(3) a compliance report reasonably detailing the method(s) by which compliance will be achieved.

(b) No variance shall be granted unless all of the following findings are made:

(1) that, because of reasons beyond the reasonable control of the applicant, requiring compliance with Subpart 235-3 of this Part would result in extraordinary economic hardship;

(2) that the public interest in mitigating the extraordinary hardship to the applicant by issuing the variance outweighs the public interest in avoiding any increased emissions of air contaminants which would result from issuing the variance; and

(3) that the compliance report proposed by the applicant can reasonably be implemented, and will achieve compliance as expeditiously as possible.

(c) Any variance order shall specify a final compliance date by which the requirements of Subpart 235-3 of this Part will be achieved. Any variance order shall contain a condition that specifies increments of progress necessary to assure timely compliance, and such other conditions that the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) finds necessary to carry out the purposes of applicable New York State health and safety laws and Part 621 of this Title and the procedures therein.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(d) Upon the application of any person, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) may review, and for good cause, modify or revoke a variance from requirements of Subpart 235-3 of this Part in accordance with Part 621 of this Title and the procedures therein and applicable New York State (OTC STATE) health and safety laws.

Section 235-9.1 Test methods.

(a) Testing to determine compliance with the requirements of this Part, shall be performed using CARB Test Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products (see Table 1, section 200.9 of this Title). For the purposes of this Subpart, CARB Test Method 310 reference to Executive Officer will be replaced by director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY). Alternative methods which are shown to accurately determine the concentration of VOCs in a subject product or its emissions may be used upon approval of the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY). When approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), the alternative test method will be submitted to the United States Environmental Protection Agency as a State Implementation Plan revision for approval. Information submitted to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) may be claimed as confidential; such information will be handled in accordance with the confidentiality procedures specified in applicable New York State (OTC STATE) laws and regulations.

(b) *VOC content determinations using product formulation and records*. Testing to determine compliance with the requirements of this Part may also be demonstrated through calculation of the VOC content from records of the amounts of constituents used to make the product pursuant to the following criteria:

(1) Compliance determinations based on these records may not be used unless the manufacturer of a consumer product keeps accurate records for each day of production of the amount and chemical composition of the individual product constituents. These records must be kept for at least three years.

(2) If product records appear to demonstrate compliance with the VOC content limits, but these records are contradicted by product testing performed using CARB Test Method 310 (see Table 1, section 200.9 of this Title), the results of CARB Test Method 310 shall take precedence over the product records and may be used to establish a violation of the requirements of this Part.

(c) *Determination of liquid or solid*. Testing to determine whether a product is a liquid or solid shall be performed using ASTM D 4359-90 (2000)el (see Table 1, section 200.9 of this Title).

(d) *Compliance determinations for charcoal lighter material products*. Testing to determine compliance with the certification requirements for charcoal lighter material shall be performed using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (see Table 1, section 200.9 of this Title).

(e) Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM D 86-90 (September 28, 1990) (see Table 1, section 200.9 of this Title).

(f) No person shall create, alter, falsify, or otherwise modify records in such a way that the records do not accurately reflect the constituents used to manufacture a product, the chemical composition of the individual product, and any other test, processes, or records used in connection with product manufacture.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Section 235-10.1 Severability

Each part of this Part shall be deemed severable, and in the event that any part of this Part is held to be invalid, the remainder of this Part shall continue in full force and effect.

Section 235-11.1 Alternative control plan for consumer products.

The purpose of this Subpart is to provide an alternative method to comply with the Table of Standards specified in section 235-3.1 (a) of this Part. This alternative is provided by allowing responsible ACP parties the option of voluntarily entering into separate alternative control plans for consumer products, as specified in this Subpart and Subparts 235-1 through 235-11 of this Part. Only responsible ACP parties for consumer products may enter into an ACP. When approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), the Alternative Control Plan (ACP) will be submitted to the United States Environmental Protection Agency as a State Implementation Plan for approval.

(a) Any manufacturer of consumer products which have been granted an ACP agreement by the CARB under the provisions in sections 94540-94555 of title 17 of the California Code of Regulations (see Table 1, section 200.9 of this Title) shall be exempt from the Table of Standards in section 235-3.1(a) of this Part for the period of time that the CARB ACP agreement remains in effect provided that all ACP products within the CARB ACP agreement are contained in the Table of Standards in section 235-3.1(a) of this Part. Any manufacturer claiming such an ACP agreement on this basis must submit to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) a copy of the CARB ACP decision (*i.e.*, the Executive Order), including all conditions established by CARB applicable to the exemption.

(b) Manufacturers of consumer products that have been granted an ACP agreement under the ACP provision in sections 94540-94555 of title 17 of the California Code of Regulations (see Table 1, section 200.9 of this Title) based on California specific data, or that have not been granted an exemption by the CARB may seek an ACP agreement in accordance with subdivisions (c) through (m) of this section.

(c) *Requirements and process for approval of an ACP*.

(1) To be considered by the director, Division of Air Resources, Department of Environmental Conservation for approval, an application for a proposed ACP shall be submitted in writing to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) by the responsible ACP party and shall contain all of the following:

(i) an identification of the contact persons, phone numbers, names and addresses of the responsible ACP party which is submitting the ACP application and will be implementing the ACP requirements specified in the ACP agreement;

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(ii) a statement of whether the responsible ACP party is a small business or a one-product business, as defined in section 235-2.1[(ey)] (ex) and [(dr)] (dp) of this Part;

(iii) a listing of the exact product brand name, form, available variations (flavors, scents, colors, sizes, etc.), and applicable product category(ies) for each distinct ACP product that is proposed for inclusion in the ACP;

(iv) for each proposed ACP product identified in subparagraph (iii) of this paragraph, a demonstration to the satisfaction of the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) that the enforceable sales records to be used by the responsible ACP party for tracking product sales meet the minimum criteria specified in clause(*e*) of this Subparagraph. To provide this demonstration, the responsible ACP party shall do all of the following:

(*a*) provide the contact persons, phone numbers, names, street and mail addresses of all persons and businesses who will provide information that will be used to determine the enforceable sales;

(*b*) determine the enforceable sales of each product using enforceable sales records as defined in section 235-2.1(bg) of this Part;

(*c*) demonstrate, to the satisfaction of the director, Division of Air Resources, Department of Environmental Conservation, the validity of the enforceable sales based on enforceable sales records provided by the contact persons or the responsible ACP party;

(*d*) calculate the percentage of the gross New York State (OTC STATE) sales, as defined in section 235-2.1[(dm)] (dl) of this Part which is comprised of enforceable sales; and

(*e*) determine which ACP products have enforceable sales which are 75 percent or more of the gross New York State (OTC STATE) sales. Only ACP products meeting this criteria shall be allowed to be sold in the State of New York (OTC STATE) under an ACP.

(v) for each of the ACP products identified in clause(iv)(*e*) of this paragraph, the inclusion of the following:

(*a*) legible copies of the existing labels for each product;

(*b*) the VOC content and LVP content for each product. The VOC content and LVP content shall be reported for two different periods, as follows:

(*1*) the VOC and LVP contents of the product at the time the application for an ACP is submitted; and

(*2*) any VOC and LVP contents of the product, which have occurred at any time within the four years prior to the date of submittal of the application for an ACP, if either the VOC or LVP contents have varied by more than plus/minus ten percent (+ 10.0 percent) of the VOC or LVP contents reported in subclause (*1*) of this clause;

(vi) a written commitment obligating the responsible ACP party to date-code every unit of each ACP product approved for inclusion in the ACP. The commitment shall require the responsible ACP party to display the date-code on each ACP product container or package no later than five working days after the date an ACP agreement approving an ACP is signed by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY);

(vii) an operational plan covering all the products identified under clause (iv)(*e*) of this paragraph for each compliance period that the ACP will be in effect. The operational plan shall contain all of the following:

(*a*) an identification of the compliance periods and dates for the responsible ACP party to report the information required by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) in the ACP agreement approving an ACP. The length of the compliance period shall be chosen by the responsible ACP party provided, however, that no compliance period shall be longer than 365 days. The responsible ACP party shall also choose the dates for reporting information such that all required VOC content and enforceable sales data for all ACP products shall be reported to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) at the same time and at the same frequency;

(*b*) an identification of specific enforceable sales records to be provided to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) for enforcing the provisions of this Part and the ACP agreement approving an ACP. The enforceable sales records shall be provided to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) no later than the compliance period dates specified in clause (*a*) of this subparagraph;

(*c*) for a small business or a one-product business which will be relying to some extent on surplus trading to meet its ACP limits, a written commitment from the responsible ACP party(ies) that they will transfer the surplus reductions to the small business or one-product business upon approval of the ACP;

(*d*) for each ACP product, all VOC content levels which will be applicable for the ACP product during each compliance period. The plan shall also identify the specific method(s) by which the VOC content will be determined and the statistical accuracy and precision (repeatability and reproducibility) calculated for each specified method;

(*e*) the projected enforceable sales for each ACP product at each different VOC content for every compliance period that the ACP will be in effect;

(*f*) a detailed demonstration showing the combination of specific ACP reformulations or surplus trading (if applicable) that is sufficient to ensure that the ACP emissions will not exceed the ACP limit for each compliance period that the ACP will be in effect, the approximate date within each compliance period that such reformulations or surplus trading

are expected to occur, and the extent to which the VOC contents of the ACP products will be reduced (*i.e.*, by ACP reformulation). This demonstration shall use the equations specified in Subparts 235-2 and 235-3 of this Part for projecting the ACP emissions and ACP limits during each compliance period. This demonstration shall also include all VOC content levels and projected enforceable sales for all ACP products to be sold in the State of New York (OTC STATE) during each compliance period;

(*g*) a certification that all reductions in the VOC content of a product will be real, actual reductions that do not result from changing product names, mischaracterizing ACP product reformulations that have occurred in the past, or any other attempts to circumvent the provisions of this Part;

(*h*) written explanations of the date-codes that will be displayed on each ACP product's container or packaging;

(*i*) a statement of the approximate dates by which the responsible ACP party plans to meet the applicable VOC content limit for each product in the ACP;

(*j*) an operational plan (reconciliation of shortfalls plan) which commits the responsible ACP party to completely reconcile any shortfalls in any and all cases, even, to the extent permitted by law, if the responsible ACP party files for bankruptcy protection. The plan for reconciliation of shortfalls shall contain all of the following:

(*1*) a clear and convincing demonstration of how shortfalls of up to 5 percent, 10 percent, 15 percent, 25 percent, 50 percent, 75 percent and 100 percent of the applicable ACP limit will be completely reconciled within 90 working days from the date the shortfall is determined;

(*2*) a listing of the specific records and other information that will be necessary to verify that the shortfalls were reconciled as specified in this clause; and

(*3*) a commitment to provide any record or information requested by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) to verify that the shortfalls have been completely reconciled;

(viii) a declaration, signed by a legal representative for the responsible ACP party, which states that all information and operational plans submitted with the ACP application are true and correct.

(2)

(i) In accordance with the time periods specified in subdivision (d) of this section, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall issue an ACP agreement approving an ACP which meets the requirements of this Part. The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall specify such terms and conditions as are necessary to ensure that the emissions from the ACP

products do not exceed the emissions that would have occurred if the ACP products subject to the ACP had met the VOC content limits specified in section 235-3.1 (a) of this Part. The ACP shall also include:

(*a*) only those ACP products for which the enforceable sales are at least 75 percent of the gross New York State (OTC STATE) sales, as determined in clause (iv)(*e*) of this paragraph;

(*b*) a reconciliation of shortfalls plan meeting the requirements of this Part; and

(*c*) operational terms, conditions, and data to be reported to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) to ensure that all requirements of this Part are met.

(ii) The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall not approve an ACP submitted by a responsible ACP party if the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) determines, upon review of the responsible ACP party's compliance history with past or current ACPs or the requirements for consumer products in this Subpart and Subparts 235-1 through 235-10 of this Part, that the responsible ACP party has a recurring pattern of violations and has consistently refused to take the necessary steps to correct those violations.

(d) *ACP approval time frames*.

(1) The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall take appropriate action on an ACP within the following time periods:

(i) Within 30 working days of receipt of an ACP application, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall inform the applicant in writing that either:

(*a*) the application is complete and accepted for filing; or

(*b*) the application is deficient, and identify the specific information required to make the application complete;

(ii) Within 30 working days of receipt of additional information provided in response to a determination that an ACP application is deficient, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall inform the applicant in writing that either:

(*a*) the additional information is sufficient to make the application complete, and the application is accepted for filing; or

(*b*) the application is deficient, and identify the specific information required to make the application complete;

(iii) If the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) finds that an application meets the requirements of subdivision (c) of this section, then he or she shall issue an ACP

agreement in accordance with the requirements of this section. The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall act to approve or disapprove a complete application within 90 working days after the application is deemed complete.

(2) Before the end of each time period specified in this Subpart, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) and the responsible ACP party may mutually agree to a longer time period for the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) to take the appropriate action.

(e) *Recordkeeping and availability of requested information*.

(1) All information specified in the ACP agreement approving an ACP shall be maintained by the responsible ACP party for a minimum of three years after such records are generated. Such records shall be clearly legible and maintained in good condition during this period.

(2) The records specified in paragraph (1) of this subdivision shall be made available to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) or his or her authorized representative:

(i) immediately upon request, during an on-site visit to a responsible ACP party;

(ii) within five working days after receipt of a written request from the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY); or

(iii) within a time period mutually agreed upon by both the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) and the responsible ACP party.

(f) *Violations*.

(1) Any person who commits a violation of this Part is subject to the penalties specified in applicable New York State (OTC STATE) laws and regulations. Failure to meet any requirement of this Part or any condition of an applicable ACP agreement shall constitute a single, separate violation of this Part for each day until such requirement or condition is satisfied, except as otherwise provided in paragraphs (2) through (8) of this subdivision.

(2) False reporting of any information contained in an ACP application, or any supporting documentation or amendments thereto, shall constitute a single, separate violation of the requirements of this Part for each day that the approved ACP is in effect.

(3) Any exceedance during the applicable compliance period of the VOC content specified for an ACP product in the ACP agreement approving an ACP shall constitute a single, separate violation of the requirements of this Part for each ACP product which exceeds the specified VOC content that is sold, supplied, offered for sale, or manufactured for use in the State of New York (OTC STATE).

(4) Any of the following actions shall each constitute a single, separate violation of the requirements of this Part for each day after the applicable deadline until the requirement is satisfied:

(i) failure to report data (*i.e*., missing data) or failure to report data accurately (*i.e*., inaccurate data) in writing to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) regarding the VOC content, LVP content, enforceable sales, or any other information required by any deadline specified in the applicable ACP agreement;

(ii) false reporting of any information submitted to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) for determining compliance with the ACP requirements;

(iii) failure to completely implement the reconciliation of shortfalls plan that is set forth in the ACP agreement, within 30 working days from the date of written notification of a shortfall by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY); and

(iv) failure to completely reconcile the shortfall as specified in the ACP agreement, within 90 working days from the date of written notification of a shortfall by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY).

(5) False reporting or failure to report any of the information specified in subparagraph (g)(2)(ix) of this section, or the sale or transfer of invalid surplus reductions, shall constitute a single, separate violation of the requirements of this Part for each day during the time period for which the surplus reductions are claimed to be valid.

(6) Except as provided in paragraph (7) of this subdivision, any exceedance of the ACP limit for any compliance period that the ACP is in effect shall constitute a single, separate violation of the requirements of this Part for each day of the applicable compliance period. The director, division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall determine whether an exceedance of the ACP limit has occurred as follows:

(i) if the responsible ACP party has provided all required information for the applicable compliance period specified in the ACP agreement approving an ACP, then the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall determine whether an exceedance has occurred using the enforceable sales records and VOC content for each ACP product, as reported by the responsible ACP party for the applicable compliance period;

(ii) if the responsible ACP party has failed to provide all the required information specified in the ACP agreement for an applicable compliance period, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall determine whether an exceedance of the ACP limit has occurred as follows:

(*a*) for the missing data days, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall calculate the total maximum historical emissions, as specified in section 235-2.1(fl) of this Part;

(*b*) for the remaining portion of the compliance period which are not missing data days, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall calculate the emissions for each ACP product using the enforceable sales records and

VOC content that were reported for that portion of the applicable compliance period;

(*c*) the ACP emissions for the entire compliance period shall be the sum of the total maximum historical emissions, determined pursuant to clause (*a*) of this subparagraph, and the emissions determined pursuant to clause (*b*) of this subparagraph;

(*d*) the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall calculate the ACP limit for the entire compliance period using the VOC content limit applicable to each ACP product and the enforceable sales records specified in clause (*b*) of this subparagraph. The enforceable sales for each ACP product during missing data days, as specified in clause (*a*) of this subparagraph, shall be zero;

(*e*) an exceedance of the ACP limit has occurred when the ACP emissions, determined pursuant to clause 235-11.1 (*c*) of this subparagraph, exceeds the ACP limit, determined pursuant to clause (*d*) of this subparagraph.

(7) If a violation specified in this subdivision occurs, the responsible ACP party may, pursuant to this paragraph, establish the number of violations as calculated according to the following equation:

NEV = (ACP Emissions - ACP Limit) × 1 Violation/40 Pounds

where,

NEV = number of ACP limit violations

ACP Emissions = the ACP emissions for the compliance period

ACP Limit = the ACP limit for the compliance period

The responsible ACP party may determine the number of ACP limit violations pursuant to this paragraph only if it has provided all required information for the applicable compliance period, as specified in the ACP agreement approving the ACP. By choosing this option, the responsible ACP party waives any and all legal objections to the calculation of the ACP limit violations pursuant to this paragraph.

(8) In assessing the amount of penalties for any violation occurring pursuant to paragraphs (1) through (7) of this subdivision, the circumstances identified in applicable New York State health and safety laws and regulations shall be taken into consideration.

(9) A cause of action against a responsible ACP party under this Subpart shall be deemed to accrue on the date(s) when the records establishing a violation are received by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY).

(10) The responsible ACP party is fully liable for compliance with the requirements of this Part, even if the responsible ACP party contracts with or otherwise relies on another person to carry out some or all of the requirements of this Part.

(g) *Surplus reductions and surplus trading*.

(1) The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall issue surplus reduction certificates which establish and quantify, to the nearest pound of VOC reduced, any surplus reductions achieved by a responsible ACP party operating under an ACP. The surplus reductions can be bought from, sold to, or transferred to a responsible ACP party operating under an ACP, as provided in paragraph (2) of this subdivision. All surplus reductions shall be calculated by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) at the end of each compliance period within the time specified in the approved ACP. Surplus reduction certificates shall not constitute instruments, securities, or any other form of property.

(2) The issuance, use, and trading of all surplus reductions shall be subject to the following provisions:

(i) for the purposes of this Part, VOC reductions from sources of VOCs other than consumer products subject to the VOC content limits specified in section 235-3.1(a) of this Part may not be used to generate surplus reductions;

(ii) surplus reductions are valid only when generated by a responsible ACP party, and only while that responsible ACP party is operating under an approved ACP;

(iii) surplus reductions are valid only after the director, Division of Air Resources, Department of Environmental Conservation has issued an ACP agreement pursuant to paragraph (1) of this subdivision;

(iv) any surplus reductions issued by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) may be used by the responsible ACP party who generated the surplus until the reductions expire, are traded, or until the ACP is canceled pursuant to subdivision (k) of this section;

(v) surplus reductions cannot be applied retroactively to any compliance period prior to the compliance period in which the reductions were generated;

(vi) except as provided in clause (vii)(*b*) of this paragraph, only small or one-product businesses selling products under an approved ACP may purchase surplus reductions. An increase in the size of a small business or one-product business shall have no effect on surplus reductions purchased by that business prior to the date of the increase;

(vii) while valid, surplus reductions can be used only for the following purposes:

(*a*) to adjust either the ACP emissions of either the responsible ACP party who generated the reductions or the responsible ACP party to which the reductions were traded, provided the surplus reductions are not to be used by any responsible ACP party to further lower its ACP emissions when its ACP emissions are equal to or less than the ACP limit during the applicable compliance period; or

(*b*) to be traded for the purpose of reconciling another responsible ACP party's shortfalls, provided such reconciliation is part of the reconciliation of shortfalls plan approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) pursuant to clause (c)(1)(vii)(*j*) of this section;

(viii) a valid surplus reduction certificate shall be in effect starting five days after the date of issuance by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), for a continuous period equal to the number of days in the compliance period during which the surplus reduction was generated. The surplus reduction shall then expire at the end of its effective period;

(ix) at least five working days prior to the effective date of transfer of surplus reductions, both the responsible ACP party which is selling surplus reductions and the responsible ACP party which is buying the surplus reductions shall, either together or separately, notify the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) in writing of the transfer. The notification shall include all of the following:

(*a*) the date the transfer is to become effective;

(*b*) the date the surplus reductions being traded are due to expire;

(*c*) the amount (in pounds of VOCs) of surplus reductions that are being transferred;

(*d*) the total purchase price paid by the buyer for the surplus reductions;

(*e*) the contact persons, names of the companies, street and mail addresses, and phone numbers of the responsible ACP parties involved in the trading of the surplus reductions; and

(*f*) a copy of the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY)-issued surplus reductions certificate, signed by both the seller and buyer of the certificate, showing transfer of all or a specified portion of the surplus reductions. The copy shall show the amount of any remaining non-traded surplus reductions, if applicable, and shall show their expiration date. The copy shall indicate that both the buyer and seller of the surplus reductions fully understand the conditions and limitations placed upon the transfer of the surplus reductions and accept full responsibility for the appropriate use of such surplus reductions as provided in this Subpart;

(x) surplus reduction certificates shall only be traded between ACP product(s) for consumer products.

(3) Limited-use surplus reduction certificates for early reformulations of ACP products.

(i) For the purposes of this paragraph, *early reformulation* means an ACP product which is reformulated to result in a reduction in the product's VOC content, and which is sold, supplied, or offered for sale in the State of New York (OTC STATE) for the first time during the one-year (365 day) period immediately prior to the date on which the application for a proposed ACP is submitted to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY). *Early reformulation* does not include any reformulated ACP products which are sold, supplied, or offered for sale in the State of New York (OTC STATE) more than one year prior to the date on which the ACP application is submitted to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY).

(ii) If requested in the application for a proposed ACP, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall, upon approval of the ACP, issue surplus reduction certificates for early reformulation(s) of ACP product(s), provided that all of the following documentation has been provided by the responsible ACP party to the satisfaction of the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY):

(*a*) accurate documentation showing that the early reformulation(s) reduced the VOC content of the ACP product(s) to a level which is below the pre-ACP VOC content of the product(s), or below the applicable VOC content limit(s) specified in section 235-3.1(a) of this Part, whichever is the lesser of the two;

(*b*) accurate documentation demonstrating that the early reformulated ACP product(s) was sold in the State of New York (OTC STATE) retail outlets within the time period specified in subparagraph (i) of this paragraph;

(*c*) accurate sales records for the early reformulated ACP product(s) which meet the definition of enforceable sales records in section 235-2.1(bh) of this Part, and which demonstrate that the enforceable sales for the ACP product(s) are at least 75.0 percent of the gross New York State (OTC STATE) sales for the product(s), as specified in subparagraph (c)(1)(iv) of this section;

(*d*) accurate documentation for the early reformulated ACP product(s) which meets the requirements specified in subparagraphs (c)(1)(iii) through (iv) of this section, clause (c)(1)(vii)(*g*) through (*h*) of this section, and subparagraph (c)(1)(viii) of this section, and which identifies the specific test methods for verifying the claimed early reformulation(s) and the statistical accuracy and precision of the test methods as specified in clause (c)(1)(vii)(*i*) of this section.

(iii) Surplus reduction certificates issued pursuant to this paragraph shall be calculated separately for each early reformulated ACP product by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) according to the following equation:

$$SR = \text{Enforceable Sales} \times ((\text{VOC Content})_{initial} - (\text{VOC Content})_{final})/100$$

where,

SR = surplus reductions for the ACP product, expressed to the nearest pound,

Enforceable Sales = the enforceable sales for the early reformulated ACP product, expressed to the nearest pound of ACP product,

$\text{VOC Content}_{initial}$ = the pre-ACP VOC content of the ACP product, or the applicable VOC content limit specified in section 235-3.1 of this Part, whichever is the lesser of the two, expressed to the nearest 0.1 pounds of VOC per 100 pounds of ACP product,

VOC Content$_{final}$ = the VOC content of the early reformulated ACP product after the early reformulation is achieved, expressed to the nearest 0.1 pounds of VOC per 100 pounds of ACP product.

(iv) The use of surplus reduction certificates issued pursuant to this paragraph shall be subject to all of the following provisions:

(*a*) surplus reduction certificates shall be used solely to reconcile the responsible ACP party's shortfalls, if any, generated during the first compliance period occurring immediately after the issuance of the ACP agreement approving an ACP, and shall not be used for any other purpose;

(*b*) surplus reduction certificates shall not be transferred to, or used by, any other responsible ACP party;

(*c*) except as provided in this paragraph, surplus reduction certificates shall be subject to all requirements applicable to surplus reductions and surplus trading, as specified in paragraphs (1) and (2) of this subdivision.

(h) *Reconciliation of shortfalls*.

(1) At the end of each compliance period, the responsible ACP party shall make an initial calculation of any shortfalls occurring in that compliance period, as specified in the ACP agreement approving the ACP. Upon receipt of this information, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall determine the amount of any shortfall that has occurred during the compliance period, and shall notify the responsible ACP party of this determination.

(2) The responsible ACP party shall implement the reconciliation of shortfalls plan as specified in the ACP agreement approving the ACP, within 30 working days from the date of written notification of a shortfall by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY).

(3) All shortfalls shall be completely reconciled within 90 working days from the date of written notification of a shortfall by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), by implementing the reconciliation of shortfalls plan specified in the ACP agreement approving the ACP.

(4) All requirements specified in the ACP agreement approving an ACP, including all applicable ACP limits, shall remain in effect while any shortfalls are in the process of being reconciled.

(i) *Notification of modifications to an ACP by the responsible ACP party.*

(1) Modifications that do not require director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) pre-approval: The responsible ACP party shall notify the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), in writing, of any change in an ACP product's:

(i) product name;
(ii) product formulation;
(iii) product form;
(iv) product function;

(v) applicable product category(ies);
(vi) VOC content;
(vii) LVP content;
(viii) date-codes; or

(ix) recommended product usage directions, no later than 15 working days from the date such a change occurs. For each modification, the notification shall fully explain the following:

(*a*) the nature of the modification;

(*b*) the extent to which the ACP product formulation, VOC content, LVP content, or recommended usage directions will be changed;

(*c*) the extent to which the ACP emissions and ACP limit specified in the ACP agreement will be changed for the applicable compliance period; and

(*d*) the effective date and corresponding date-codes for the modification.

(2) Modifications that require director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) pre-approval: The responsible ACP party may propose modifications to the enforceable sales records or reconciliation of shortfalls plan specified in the ACP agreement approving the ACP. Any such proposed modifications shall be fully described in writing and forwarded to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY). The responsible ACP party shall clearly demonstrate that the proposed modifications will meet the requirements of this Part. The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall act on the proposed modifications using the procedure set forth in subdivision (d) of this section. The responsible ACP party shall meet all applicable requirements of the existing ACP until such time as any proposed modification(s) is approved in writing by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY).

(3) Other modifications: Except as otherwise provided in paragraphs (1) and (2) of this subdivision, the responsible ACP party shall notify the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), in writing, of any information learned of by the responsible ACP party which may alter any of the information submitted pursuant to the requirements of subdivision (c) of this section. The responsible ACP party shall provide such notification to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) no later than 15 working days from the date such information is known to the responsible ACP party.

(j) Modification of an ACP by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY).

(1) If the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) determines that:

(i) the enforceable sales for an ACP product are no longer at least 75 percent of the gross New York State (OTC STATE) sales for that product;

(ii) the information submitted pursuant to the approval process set forth in subdivision (c) of this section is no longer valid; or

(iii) the ACP emissions are exceeding the ACP limit specified in the ACP agreement approving an ACP, then the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall modify the ACP as necessary in accordance with Part 621 of this Title and the procedures therein to ensure that the ACP meets all requirements of this Part and that the ACP emissions will not exceed the ACP limit.

(2) If any applicable VOC content limits specified in section 235-1(a) of this Part are modified by the Department of Environmental Conservation (OTC STATE AGENCY) in a future rule making, the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall modify the ACP limit specified in the ACP agreement approving an ACP to reflect the modified VOC content limits as of their effective dates.

(k) Cancellation of an ACP.

(1) An ACP shall remain in effect until:

(i) the ACP reaches the expiration date specified in the ACP agreement;

(ii) the ACP is modified by the responsible ACP party and approved by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), as provided in subdivision (i) of this section;

(iii) the ACP is modified by the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY), as provided in subdivision (j) of this section;

(iv) the ACP includes a product for which the VOC content limit specified in section (a) of this Part is modified. The ACP will terminate on the effective date(s) of the modified standard; or

(v) the ACP is cancelled pursuant to paragraph (2) of this subdivision.

(2) The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall cancel an ACP if any of the following circumstances occur:

(i) the responsible ACP party demonstrates to the satisfaction of the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) that the continuation of the ACP will result in an extraordinary economic hardship;

(ii) the responsible ACP party violates the requirements of the approved ACP, and the violation(s) results in a shortfall that is 20 percent or more of the applicable ACP limit (*i.e.*, the ACP emissions exceed the ACP limit by 20 percent or more);

(iii) the responsible ACP party fails to meet the requirements of subdivision (h) (reconciliation of shortfalls) of this section within the time periods specified in subdivision (h) of this section; and

(iv) the responsible ACP party has demonstrated a recurring pattern of violations and has consistently failed to take the necessary steps to correct those violations.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(3) The responsible ACP party for an ACP which is canceled pursuant to this Subpart and who does not have a valid ACP to immediately replace the canceled ACP shall meet all of the following requirements:

(i) all remaining shortfalls in effect at the time of ACP cancellation shall be reconciled in accordance with the requirements of subdivision (h) of this section; and

(ii) all ACP products subject to the ACP shall be in compliance with the applicable VOC content limits in section 235-3.1(a) of this Part immediately upon the effective date of ACP cancellation.

(4) Any violations incurred pursuant to subdivision (f) of this Subpart shall not be cancelled or in any way affected by the subsequent cancellation or modification of an ACP pursuant to subdivision (i), (j), or (k) of this section.

(l) Treatment of information. The information required by subparagraphs(c)(1)(i) through (ii) of this section and subparagraph (g)(2)(ix) of this section is public information which may not be claimed as confidential. All other information submitted to the director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) to meet the requirements of this Part shall be handled in accordance with the procedures specified in applicable New York State laws and regulations.

(m) Other applicable requirements. A responsible ACP party may transfer an ACP to another responsible ACP party, provided that all of the following conditions are met:

(1) The director, Division of Air Resources, Department of Environmental Conservation (OTC STATE AGENCY) shall be notified, in writing, by both responsible ACP parties participating in the transfer of the ACP and its associated ACP agreement. The written notifications shall be postmarked at least five working days prior to the effective date of the transfer and shall be signed and submitted separately by both responsible parties. The written notifications shall clearly identify the contact persons, business names, mail and street addresses, and phone numbers of the responsible parties involved in the transfer.

(2) The responsible ACP party to which the ACP is being transferred shall provide a written declaration stating that the transferee shall fully comply with all requirements of the ACP agreement approving the ACP and this Part.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Draft OTC Model Rule for Large Above Ground VOC Storage Tanks

This model rule was developed by the Ozone Transport Commission (OTC) as part of a regional effort to attain and maintain the National Ambient Air Quality Eight-Hour Ozone Standard (NAAQS).

Notes:

1. States opting to promulgate rules based on this model rule must comply with State specific administrative requirements and procedures.

2. Underlined text (additions) and ~~strikeouts~~ (deletions) are changes made to the original OTC model rule dated March 6, 2001.

3. "XXXX" is a placeholder for Section numbers and title numbers.

4. The term (OTC State) or (OTC State Agency) is a placeholder for individual State names.

*5. **BOLD** text are references to agencies outside the OTC states, section titles, and for special points of interest.*

Name of rule here: Large Above Ground VOC Storage Tanks

Table of Contents here:

1.1 Definitions

"Aboveground storage tank" or **"AST"** means any storage tank that is not an underground storage tank.

"AP-42" means the January 1995, 5th edition of the manual entitled "Compilation of Air Pollutant Emission Factors," which is published by the EPA, including supplements A through G and any subsequent revisions, as supplemented or amended and incorporated herein by reference. The manual may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, 22161, (703) 487-4650; or from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, (202) 783-3228. In addition, the manual can be accessed electronically through the EPA Technology Transfer Network CHIEF site at http://www.epa.gov/ttn/chief/ap42/index.html.

"Applicable VOC" means any VOC which has a vapor pressure or sum of partial pressures of organic substances of 0.02 pounds per square inch (1.0 millimeters of mercury) absolute or greater at standard conditions.

"Authorized inspector" means a person authorized by the tank owner or operator to conduct floating roof inspections. This person may be an employee of the tank owner or operator or a contractor.

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"Capacity" means the volume of liquid that is capable of being stored in a vessel, determined by multiplying the vessel's internal cross-sectional area by the internal height of the shell.

"Clean produced water" means water containing less than 35 milligrams of VOC per liter, as determined by the Diesel Range Organics option under EPA SW-846 Method 8015B or NJDEP Method OQA-QAM-025, Revision 6, and/or, if necessary, EPA SW-846 Test Method 8260, as supplemented or amended, and incorporated herein by reference. Hydrocarbons heavier than C14, as determined by Test Method ASTM E 260-85, as supplemented or amended and incorporated herein by reference, may be excluded from the total concentration. This term will be used within the context of tank degassing and cleaning operations. EPA SW-846 Method 8015B and EPA SW-846 Test Method 8260 are available from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161; phone number 1-800-553-6847. NJDEP Method OQA-QAM-025 Reference 6 is available on the Department's website at www.nj.gov/dep/oqa/bboard.html. Test Method ASTM E 260-85 is available from the American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959 or from its website at www.astm.org.

"Cleaning material" means, with respect to a surface coating operation or graphic arts operation, a substance that contains VOCs and that is used for the purpose of removing dirt, grease, oil, or other contaminants from the surfaces of equipment used for the application of surface coatings.

"Crude oil" means petroleum extracted from the earth and that has not been processed in a refining operation.

"Deck fitting" means a functional or operational device on a tank floating roof that substantially closes or seals a penetration in the deck of the floating roof including, but not limited to, any access hatch, fixed roof support column and well, gauge float, gauge hatch, sample port, guidepole, ladder and well, rim vent, roof drain, roof leg, and vacuum breaker, and excluding the rim seal system.

"Degassing" means the process of removing organic vapors from a storage tank in preparation for human entry.

"Domed roof" means a self-supporting fixed roof attached to the top of an external floating roof tank to reduce evaporative losses.

"External floating roof" means a movable roof in an otherwise open top storage vessel consisting of a floating deck resting on the surface of the liquid contents, a continuous seal supported against the inner surface of the tank shell, and an envelope closing the gap between the floating deck and the seal, the entire deck-seal-envelope combination free to rise and fall with the surface of the liquid during filling and emptying of the storage vessel.

"Federally enforceable" means all limitations and conditions on operation, production, or emissions that can be enforced by EPA. The foregoing limitations and conditions that can be enforced by EPA include, but are not limited to, those established in:

1. Any standards of performance for new stationary sources (NSPS) promulgated at 40 CFR 60;

2. Any national emission standard for hazardous air pollutants (NESHAP) promulgated at 40 CFR 61;

3. Any provision of an applicable SIP;

4. Any permit issued pursuant to requirements established at 40 CFR 51, Subpart I; 40 CFR 52.21; 40 CFR 70; or 40 CFR 71; or

5. Any permit or order issued pursuant to the *State Air Pollution Control Act, Statute Citation*, or this chapter.

"Fixed roof tank" means a tank with a roof that is permanently affixed to the shell of the tank.

"Gasoline" means any petroleum distillate or petroleum distillate/oxygenated blend having a Reid vapor pressure of four pounds per square inch (207 millimeters of mercury) absolute or greater, and commonly or commercially known or sold as gasoline.

"Gauge float" means a device to indicate the level of the liquid within a tank. The float rests on the liquid surface inside a gauge well in the tank.

"Gauge hatch/sample ports" means a port that consists of a pipe sleeve equipped with a self-closing gasketed cover (to reduce evaporative losses) and allows hand-gauging or sampling of the stored liquid. The gauge hatch/sample port is usually located beneath the gauger's platform, which is mounted on top of the tank shell. A cord may be attached to the self-closing gasketed cover so that the cover can be opened from the platform.

"Guidepole" means an anti-rotation device that is fixed to the top and bottom of a tank, passing through a well in a floating roof. A guidepole may be solid or be equipped with slots or holes for gauging purposes provided the guidepole is equipped with an appropriate sealing device that prevents openings that expose the stored liquid to the atmosphere.

"Hot work" means riveting, welding, flame cutting or other fire or spark-producing operation.

"In-service roof landing" means a roof landing in which the tank is not taken out of service.

"Internal floating roof" means floating roof located inside a vessel with a fixed roof.

"Ladder and well" means a ladder that passes through a well, and is used to access the top of the internal floating roof.

"Leak" means a gaseous leak or a liquid leak of applicable VOC.

"Leak-free" means a condition that exists when the reading on a portable hydrocarbon analyzer is less than 500 ppm, expressed as methane, above background, measured using EPA Method 21, as identified in 40 CFR Part 60, Appendix A, Determination of Volatile Organic Compounds Leaks, incorporated herein by reference.

"Liquid mounted primary seal" means a primary seal that is mounted in full contact with the liquid in the annular space between the tank shell and the floating roof.

"Maximum operating level" means the highest achievable level of fluid within a tank, as determined by the structural design of the tank. In the absence of tank specific design information, the maximum operating level is equal to tank capacity.

"Mechanical shoe seal" means a metallic sheet (the shoe) that is held vertically against the vertical tank wall. The shoe is connected by braces to the floating roof and is held tightly against the wall by springs or weighted levers. A flexible coated fabric (envelope) is suspended from the shoe seal to the floating roof to form a vapor barrier over the annular space between the roof and the primary seal.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

"Non-contact floating roof" means a roof that is located inside an internal floating roof tank that is supported on pontoons several inches above the liquid surface.

"Oily wastewater" means wastewater generated during the refinery process and which contains oil, emulsified oil, or other hydrocarbons. Oily wastewater originates from a variety of refinery processes including cooling water, condensed stripping steam, tank draw-off, and contact process water.

"Operating certificate" means a "Certificate to Operate Control Apparatus or Equipment" issued by the Department pursuant to the Air Pollution Control Act of 1954, specifically N.J.S.A. 26:2C-9.2, which is valid for a period of five years from the date of issuance, unless sooner revoked by the Department.

"Operating permit" means the permit described in Title V of the Federal Clean air Act, 42 U.S.C. §§7661 et seq., and in xxxxxx. This term shall include a general operating permit which is applicable facility wide, but does not include a general operating permit which applies only to a part of a facility. Where a general operating permit applies only to a part of a facility, the general operating permit shall be incorporated into the operating permit. This term also includes an operating permit issued for a temporary facility; for a facility subject to a MACT or GACT standard pursuant to xxxxxx; or for a component of a facility pursuant to xxxxx.

"Organic liquid" means any liquid that contains volatile organic compounds (VOCs) including, but not limited to, crude oils and petroleum distillates.

"Out-of-service" means any container, pipe, or equipment from which all liquid and sludge has been removed, all connecting lines and piping have been disconnected and blanked off, all valves (except for ventilation valves) have been closed and locked, and on which conspicuous signs have been posted that state that it is out of service and note the date of removal from service.

"Petroleum distillate" means any mixture of VOC produced by condensing vapors of petroleum during distillation, including, but not limited to, naphthas, aviation gasoline, motor gasoline, kerosene, diesel oil, domestic fuel oil, and petroleum solvents.

"Pole float" means a float located inside a guidepole that floats on the surface of the stored liquid. The rim of the float has a wiper or seal that extends to the inner surface of the pole.

"Pole sleeve" means a device that extends from either the cover or the rim of an opening in a floating roof deck to the outer surface of a pole that passes through the opening.

"Pole wiper" means a seal that extends from either the cover or the rim of an opening in a floating roof deck to the outer surface of a pole that passes through the opening.

"Pressure vessel" means a tank, reservoir, or container that is capable of maintaining working pressures sufficient to prevent organic liquid loss or VOC loss to the atmosphere at all times**.**

"Primary seal" means a seal mounted below a secondary seal of a rim seal system that consists of two seals. A primary seal, which is in contact with the floating roof tank shell, can be either mechanical shoe, resilient filled, or wiper type.

"Psia" means pounds per square inch absolute.

"Receiving vessel" means any vessel into which an applicable VOC is introduced including, but not limited to, storage tanks, delivery vessels, and manufacturing process vessels.

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"Reid vapor pressure" or "RVP" means the absolute vapor pressure of a petroleum product in pounds per square inch (or kilopascals) at 100 degrees Fahrenheit (^{o}F) (37.8 degrees Celsius (^{o}C)) as measured by "Method 3- Evacuated Chamber Method" promulgated at 40 CFR 80, Appendix E; or any other equivalent test method approved in advance in writing by the Department and the EPA.

"Resilient filled primary seal" means an envelope filled with resilient foam (non-metallic polyurethane) mounted at the rim of the floating roof that makes contact with the shell. A resilient filled nonmetallic primary seal can be liquid-mounted or vapor-mounted.

"Resilient-toroid-type" seal means a core of open-cell foam encapsulated in a coated fabric that is attached to a mounting on the deck perimeter, and is continuous around the floating roof circumference.

"Rim mounted secondary seal" means a secondary seal mounted on the rim of the floating roof of a storage tank. Rim mounted secondary seals are effective at reducing losses from the primary seal fabric.

"Rim seal system" means a closure device between the shell of the storage tank and the floating roof edge. A rim seal system may consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

"Rim vent" means a vent used on tanks equipped with a seal design, such as a mechanical shoe seal, that creates a vapor pocket in the seal and rim area. The vent is used to release excess pressure or vacuum that is present in the vapor space bounded by the primary-seal shoe, the floating roof rim, the primary seal fabric, and the liquid level. A rim vent usually consists of a weighted pallet that rests on a gasketed cover.

"Roof drain" means a drain that permits the removal of rainwater from the surface of external floating roofs. A roof drain may be a closed drainage system that carries rainwater from the surface of the floating roof to the outside of the tank, or an open drainage system consisting of an open pipe that extends a short distance below the bottom of the deck allowing rainwater to drain from the surface of the floating roof into the organic liquid contents of the tank.

"Roof landing" means an event where the liquid level in a floating roof tank is lowered to the point where the floating roof is resting on its legs or is supported from above by cables or hangers, and is no longer floating on the surface of the stored liquid.

"Roof leg" means an adjustable or fixed leg that is attached to the floating roof deck to support or hold the floating roof deck at a predetermined distance off the tank bottom to prevent damage to the fittings located underneath the deck and to allow for tank cleaning or repair. For adjustable legs, the load-carrying element passes through a well or sleeve in the deck.

"Roof opening" means any opening through a floating roof of a storage tank for any deck fitting.

"Secondary seal" means a seal mounted above the primary seal of a rim seal system that consists of two seals. Secondary seals can be shoe mounted or rim-mounted.

"Shoe mounted secondary seal" means a secondary seal mounted on the primary mechanical shoe. Shoe mounted secondary seals are effective at reducing vapor losses from the gaps between the shoe and the tank shell.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

"Slop Oil" means the floating oil and solids that accumulate on the surface of an oil-water separator.

"Standard conditions" means 70 degrees Fahrenheit (^{o}F) (21.1 degrees Celsius (^{o}C)) and one atmosphere pressure (14.7 pounds per square inch absolute or 760.0 millimeters of mercury).

"Storage tank" means any tank, reservoir, or vessel which is a container for liquids or gases, wherein:

1. No manufacturing process, or part thereof, other than filling or emptying takes place; and

2. The only treatment carried out is that necessary to prevent change from occurring in the physical condition or chemical properties of the liquids or gases deposited into the container. Such treatment may include recirculating, agitating, maintaining the temperature of the stored liquids or gases, or replacing air in the vapor space above the stored liquids or gases with an inert gas in order to inhibit the occurrence of chemical reaction.

"Submerged fill pipe" means a fill pipe whose point of discharge into the receiving vessel is entirely submerged when the liquid level is no more than 6 inches (15.2 centimeters) above the vessel bottom or, in the case of a top or side-entering fill pipe, when the liquid level is no more than three times the inside radius of the fill pipe plus 5 inches (12.7 centimeters), but no more than 42 inches (106.7 centimeters), above the vessel bottom.

"Tank" means any container whose walls are constructed of material which is rigid and self-supporting.

"Tank battery" means, for crude oil production facilities, an aggregation of two or more tanks where the tanks are located so that no one tank is more than 150 feet from another tank as measured from the closest tank edges, and the tanks are located in the same crude oil production field. "Tank battery" means, for non-crude oil production facilities, an aggregation of two or more tanks located within the same facility, regardless of the distance of the tanks from each other.

"Thermal oxidizer" means a type of control apparatus which reduces the emission of air contaminants by subjecting the gases being emitted to elevated temperatures which cause the air contaminant molecules to decompose within an enclosed space. For the purposes of this subchapter, this term includes catalytic and non-catalytic thermal oxidizers.

"Tileboard" means an interior wall paneling product made of hardwood that is designed for use in high moisture areas, such as kitchens and bathrooms.

"True vapor pressure" or **"TVP"** means the equilibrium partial vapor pressure exerted by an organic liquid at actual storage temperature.

"Vacuum breaker" means a device used to equalize the pressure of the vapor space across the floating roof deck as the deck is either being landed on or floated off its legs.

"Vapor control system" means a system for preventing the emission of organic vapors into the outdoor atmosphere.

"Vapor-mounted primary seal" means a seal-envelope combination which is mounted so that underneath the seal there is an annular vapor space which is bounded by the bottom of the seal, the vessel wall, the liquid surface, and the floating roof.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

"Vapor pressure" means the pressure of the vapor phase of a substance, or the sum of the partial pressures of the vapor phases of individual substances in a mixture of substances, when in equilibrium with the non-vapor phase of the substance or substances.

"Visible gap" means a gap of a deck fitting or roof opening of more than 1/8 inch (0.32 centimeters) between any gasket or seal and the opening that it is intended to seal.

"Volatile organic compound" or **"VOC"** means a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

"Wiper primary seal" means a continuous annular blade of flexible material (for example, rubber, urethane, or foam filled) fastened to a mounting bracket on the deck perimeter that spans the annular rim space and contacts the tank shell. A wiper seal system may consist of a single primary seal, or dual (multiple) seals where one seal is mounted above the other.

1.2 Stationary storage tanks

(a) The provisions of this section shall apply to any stationary storage tank that stores only VOC, or that stores VOC and non-VOC, except as set forth in (e) and (f) below.

(b) No person shall cause, suffer, allow, or permit the following:

1. The storage of any applicable VOC in any stationary storage tank that has a maximum capacity of 2,000 gallons (7,570 liters) or greater and is exposed to the rays of the sun unless**:**

   i. The external surface of the tank is painted and maintained white, except that this provision shall not apply to words and logograms applied to the external surface of the storage tank for purposes of identification provided such symbols do not cover more than 20 percent of the external surface area of the tank's sides and top or more than 200 square feet (18.6 square meters), whichever is less ; and

   ii. An equivalent method of emission control approved by the Department is used; or

2. The storage of any applicable VOC in any stationary storage tank having a maximum capacity of 40,000 gallons (37,850 liters) or greater unless, in addition to meeting the requirement in (b)1 above, such stationary storage tank is equipped with control apparatus as determined in accordance with the procedures for using Table 2A or as approved by the Department as being equally or more effective in preventing the emission of a VOC into the outdoor atmosphere.

Procedure for Using Table 2A

Step 1: Determine the vapor pressure at standard conditions in pounds per square inch absolute of the VOC to be stored.

Step 2: Select the appropriate line in Table 2A for the vapor pressure determined in Step 1.

Step 3: Determine the maximum tank capacity in thousands of gallons.

Step 4: Determine if the maximum tank capacity is greater than or equal to the value corresponding to the vapor pressure

Step 5: If the capacity is greater than or equal to the value corresponding to the vapor pressure, the tank is a Range III tank and a floating roof or an equivalent control method approved by the Department is required

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

TABLE 2A

DETERMINANTS IF CONTROL APPARATUS (FLOATING ROOF OR APPROVED EQUIVALENT) IS REQUIRED FOR STORAGE OF VOLATILE ORGANIC COMPOUNDS

VAPOR PRESSURE IN PSIA @ 70°F	**TANK CAPACITY IN THOUSANDS OF GALLONS**	
Greater than	**But not Greater than**	**Greater than**
*0.02	0.03	14,000
0.03	0.04	11,000
0.04	0.06	8,000
0.06	0.08	6,000
0.08	0.10	4,500
0.10	0.15	3,500
0.15	0.2	2,500
0.2	0.3	1,600
0.3	0.4	1,250
0.4	0.5	1,075
0.5	0.6	900
0.6	0.7	750
0.7	0.8	650
0.8	1.0	550

VAPOR PRESSURE IN PSIA @ 70°F	**TANK CAPACITY IN THOUSANDS OF GALLONS**	
Greater than	**But not Greater than**	**Greater than**
1.0	1.2	475
1.2	1.4	400
1.4	1.6	350
1.6	1.8	300
1.8	2.1	260
2.1	2.4	225
2.4	2.7	200
2.7	3.0	180
3.0	3.5	160
3.5	4.0	145
4.0	4.5	130
4.5	5.0	115
5.0	5.5	105
5.5	6.0	95
6.0	6.5	85
6.5	7.0	75
7.0	7.5	70

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

VAPOR PRESSURE **IN PSIA @ 70°F**	**TANK CAPACITY IN** **THOUSANDS OF GALLONS**	
Greater than	**But not Greater than**	**Greater than**
7.5	8.0	65
8.0	8.5	60
8.5	9.5	55
9.5	10.5	50
10.5	11.5	45
11.5	13.0	40

*Any VOC which has a vapor pressure of 0.02 pounds per square inch absolute at standard conditions is included in this line.

(c) No person shall cause, suffer, allow, or permit the storage of any VOC having a vapor pressure of greater than 13.0 pounds per square inch absolute (672 millimeters of mercury) at the actual temperature existing at or near the liquid surface in any stationary storage tank having a maximum capacity of 1,000 gallons (3,785 liters) or greater unless such tank is equipped with a vapor control system to reduce the rate of VOC emissions to the outdoor atmosphere by at least 90 percent by weight of the uncontrolled VOC emissions from the tank.

(d) No person shall cause, suffer, allow, or permit the storage of any VOC in any stationary storage tank subject to the provisions of either (b) above or (c) above and equipped with gauging and/or sampling systems unless such systems are vapor-tight.

(e) The provisions of (c) above shall not apply to a stationary storage tank that is not in Range III and is located underground at a depth of no less than eight inches (20.3 centimeters) below the surface measured to the highest point of the tank shell, or installed in other manner approved by the Department as being equally or more effective in preventing the emission of any VOC into the outdoor atmosphere.

(f) The following exemptions apply:

1. The provisions of (b) above shall not apply to a stationary storage tank, if the tank is:

   i. Maintained under a controlled elevated temperature; or

ii. Equipped with a vapor control system reducing by at least 98 percent the weight of VOC emissions to the outdoor atmosphere; or

iii A pressurized storage tank designed to operate in excess of 15 pounds per square inch gauge (psig) without any emissions to the atmosphere except under emergency conditions.

2. Any of the following tanks shall be exempt from (q) below:

i. Any fixed roof storage tank having a capacity of less than 40,000 gallons;

ii. Any fixed roof storage tank less than 125,000 gallons whose contents has a vapor pressure of less than or equal to 2 psia at standard conditions; and

iii. Any storage tank not in Range III equipped with a floating roof.

3. Any external floating roof tank in Range III that was in existence on (the day before the operative date of these amendments), and that is not degassed and emptied within 120 days after (the operative date of these amendments) shall be temporarily exempt from complying with (*l*)1i below if the operator has demonstrated to the Department that in order to properly bolt the covers for access hatches and gauge float wells, a flange or other comparable device must be welded to the fitting or other hot- work must be performed. The operator shall use equivalent means, such as clamping, to secure the covers during the interim period. However, the owner or operator must comply with (*l*)1i below the first time the tank is degassed and emptied after 120 days after (the operative date of these amendments).

4. Any external floating roof tank that contains more than 97 percent by volume crude oil or more than 97 percent by volume oily wastewater and/or slop oil regulated by 40 C.F.R. Part 60, Subpart QQQ, incorporated herein by reference, shall be exempt from xxxxx (*l*)4 below, but shall comply with all other applicable requirements of this subchapter.

5. Any floating-roof tank shall not be required to meet the gap seal requirements at (*l*)3i through x below while the roof is resting on its legs during the processes of draining, degassing or refilling the tank.

6. Any floating roof tank subject to a Federally enforceable condition limiting its annual in-service roof landing VOC emissions to less than five tons as calculated by AP-42, Chapter 7, may be exempt from (p) below, at the owner or operator's discretion, provided that the owner or operator shall maintain the records of these calculations pursuant to (s) below and the tank's Operating Permit or Preconstruction Permit, as applicable.

7. Any floating roof tank subject to a Federally enforceable condition in its Operating Permit or Preconstruction Permit, as applicable, limiting the vapor pressure of its contents to less than 1.5 psia at standard conditions, shall be exempt from (p) below only if the tank's records, maintained pursuant to (s)1 below, show that the vapor pressure of the tank's contents is less than 1.5 psia under standard conditions**.**

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

9. Any tank at (b) above is exempt from the vapor-tight condition at (d) above when gauging or sampling is taking place. In addition, a floating roof tank, is exempt from the vapor-tight condition at (d) above when the condition at (n)1 or (o)1 below, as applicable, below is met during refilling.

(g) (Reserved)

(h) No person shall cause, suffer, allow, or permit the storage of any VOC in any stationary storage tank in Range III as determined by Table 2A equipped with an external floating roof, unless any such storage tank containing a VOC having a vapor pressure of 1.0 pounds per square inch absolute (50 millimeters of mercury) or greater at standard conditions and having a maximum capacity of 20,000 gallons (75,700 liters) or greater is equipped with a double seal-envelope combination or equipment approved by the Department as being equally or more effective in preventing the emission of any VOC into the outdoor atmosphere. For the secondary seal, the gap area of gaps exceeding one-eighth inch (0.32 centimeters) in width between the seal and the tank wall shall not exceed 1.0 square inch per foot (6.5 square centimeters per 0.3 meters) of tank diameter. Any secondary seal shall be intact, with no visible holes, tears or other openings. The requirements of this subsection shall remain in effect for any such tank until the rim seal system requirements at (*l*)3 below become effective for that tank.

(i) (Reserved)

(j) Any delivery vessel that contains any applicable VOC and is located at a facility and is vented to the atmosphere for more than 30 consecutive days shall be considered a stationary storage tank for the purposes of this section.

(k) (Reserved)

(*l*) No person shall cause, suffer, allow, or permit the storage of any VOC in any stationary storage tank unless the provisions of this subsection are met.

1. The owner or operator of an external floating roof tank in Range III shall, no later than (120 days after the operative date of these amendments) or the first time the tank is emptied and degassed, whichever occurs first, if the tank was in existence on (the day before the operative date of these amendments), or on initial fill if the tank is constructed on or after (the operative date of these amendments): ***States without external floating roof tanks can state that all applicable tanks shall be equipped with domes or internal floating roofs, and transfer the deck fitting requirements, as appropriate, to l(5) (existing domed tanks) and l(7) (internal floating roof tanks).***

   i. Equip each access hatch with a cover that is gasketed and bolted. Equip each gauge float well with a cover that is either gasketed and weighted or gasketed and bolted. The cover shall be closed at all times, with no visible gaps, except when the hatch or well must be opened for access;

   ii. Equip each gauge hatch/sample well with a cover that is gasketed. The cover shall be closed at all times, with no visible gaps, except when the hatch or well must be opened for access;

iii. Gasket or cover each adjustable roof leg with a VOC impervious sock at all times when the roof is floating;

iv. Gasket each rim vent. Rim vents shall be closed at all times, with no visible gaps, when the roof is floating; and shall be set to open only when the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting;

v. Gasket each vacuum breaker. Vacuum breakers shall be closed at all times, with no visible gaps, when the roof is floating; and shall be set to open only when the roof is being floated off or is being landed on the roof leg supports;

vi. Equip each open floating roof drain with a slotted membrane fabric cover or other device with an equivalent control efficiency that covers at least 90 percent of the area of the opening. The fabric cover shall be impermeable if the liquid is drained into the contents of the tank;

vii. Equip each unslotted guidepole well with a gasketed sliding cover and a flexible fabric sleeve or wiper;

viii. Equip each unslotted guidepole with a gasketed cover at the end of the pole. The cover shall be closed at all times, with no visible gaps, except when gauging or sampling;

ix. Equip each slotted guidepole with a gasketed cover, a pole wiper and a pole sleeve. The pole sleeve shall be extended into the stored liquid;

x. Equip each slotted guidepole having a pole float with a gasketed cover, a pole wiper, and a pole float wiper. The wiper or seal of the pole float shall be at or above the height of the pole wiper;

xi. Cover each slotted guidepole opening with a gasketed cover at all times, with no visible gaps, except when the cover must be opened for access;

xii. Maintain the pole float in a condition such that it floats within the guidepole at all times except when it must be removed for sampling or when the tank is empty;

xiii. Except for vacuum breakers and rim vents, ensure that each opening in the external floating roof shall provide a projection below the liquid surface; and

xiv. Except for vacuum breakers, rim vents, roof drains, and leg sleeves, equip all other openings in the roof with a gasketed cover or seal that is closed at all times, with no visible gaps, except when the cover or seal must be opened for access.

2. In lieu of complying with the requirement of no visible gap at (*l*)1i, ii, iv, v, viii, xi and xiv above, the owner or operator of an external floating roof tank in Range III may, no later than (120 days after the operative date of these amendments) if the tank was in existence on (the day before the operative date of these amendments), or on initial fill if

the tank is constructed on or after (the operative date of these amendments), maintain all roof openings in a leak-free condition at all times except during preventive maintenance, repair, or inspection periods specified at (r) below. ***States without external floating roof tanks can omit l(2).***

3. The owner or operator of an external floating roof tank in Range III shall equip the tank with a rim seal system meeting the following requirements prior to the initial fill if the tank was constructed on or after (the operative date of these amendments), or prior to the date the tank is refilled after being degassed for the first time after (the operative date of these amendments), but no later than May 1, 2020 if the tank was in existence on (the day before the operative date of these amendments): ***States without external floating roof tanks can state that all applicable tanks shall be equipped with domes or internal floating roofs, and transfer the seal requirements, as appropriate, to l(5) (existing domed tanks) and l(7) (internal floating roof tanks). In this case, the requirements would have to be revised to incorporate the exceptions for domed/internal floating roof tanks in l(5)ii and l(7)iv.***

   i. The primary seal shall be a mechanical shoe or liquid mounted;

   ii. The secondary seal shall be rim mounted and shall not be attached to the primary seal;

   iii. Gaps between the tank shell and the primary seal shall not exceed 1.3 centimeters (1/2 inch) for a cumulative length of 30 percent of the circumference of the tank, and 0.32 centimeters (1/8 inch) for 60 percent of the circumference of the tank. No gap between the tank shell and the primary seal shall exceed 3.8 centimeters (1-1/2 inches). No continuous gap between the tank shell and the primary seal greater than 0.32 centimeters (1/8 inch) shall exceed 10 percent of the circumference of the tank;

   iv. Gaps between the tank shell and the secondary seal shall not exceed 0.32 centimeters (1/8 inch) for a cumulative length of 95 percent of the circumference of the tank. No gap between the tank shell and the secondary seal shall exceed 1.3 centimeters (1/2 inch);

   v. Mechanical shoe primary seals shall be installed so that one end of the shoe extends into the stored organic liquid and the other end extends a minimum vertical distance of 61 centimeters (24 inches) above the stored organic liquid surface;

   vi. The geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than doubled the gap allowed by the seal gap criteria specified in (*l*)3iii above for a length of at least 46 centimeters (18 inches) in the vertical plane above the liquid surface;

   vii. The primary seal envelope shall be made available for unobstructed inspection by the Department, upon request, along its circumference. In the case of riveted tanks with resilient filled primary seals, at least eight such locations shall be made available; for all other types of seals, at least four such locations shall be made available. If the Department deems it necessary, further unobstructed

inspection of the primary seal may be required to determine the seal's condition along its entire circumference;

viii. The secondary seal shall be installed in a way that permits probes up to 3.8 centimeters (1-1/2 inches) in width to be inserted to measure gaps in the primary seal;

ix. There shall be no holes, tears or openings in the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal; and

x. Except during preventive maintenance, repair, or inspection periods specified at (r) below that do not exceed 72 hours, both the primary seal and the secondary seal shall cover the annular space between the floating roof and the wall of the storage tank in a continuous fashion, as required at (*l*)3iii and iv above.

4. If an external floating roof tank in Range III stores any VOC with vapor pressure three pounds per square inch absolute or greater at standard conditions, the tank shall be equipped with a domed roof before the tank is refilled after the first time the tank is degassed after (the operative date of these amendments), but no later than ten years after the operative date of these amendments if the tank was in existence on (the day before the operative date of these amendments), or on initial fill if the tank is constructed on or after (the operative date of these amendments). ***States without external floating roof tanks can state that all applicable tanks shall be equipped with domes or internal floating roofs, and omit l(4).***

5. The owner or operator of a domed external floating roof tank in Range III that is already in operation as of (the operative date of these amendments) shall, prior to the date the tank is refilled after being degassed the first time after (the operative date of these amendments), but no later than ten years after the operative date of these amendments:

i. Comply with (*l*)1i through xiv above;

ii. Equip the tank with a rim seal system consisting of either

(1) A liquid-mounted primary seal meeting the requirements for primary seals at (*l*)3iii, vii, and x above and having no tears or openings, or

(2) A primary and a secondary seal meeting the requirements at (*l*)3 i through x above, including compliance dates, except that:

(A) A mechanical shoe primary seal required at (*l*)3v above shall have one end extend a minimum vertical distance of 15 centimeters (six inches) above the stored organic liquid surface and the other end extend into the liquid a minimum of 10 centimeters (four inches) instead of meeting the requirement at (*l*)3v above; and

(B) A vapor-mounted wiper primary seal may be used on a tank with a shell that has riveted or lap-welded horizontal seams instead of

the liquid mounted or mechanical shoe primary seal required at (*l*)3i above; and

iii. Ensure that the concentration of organic vapor in the vapor space above the domed external floating roof does not exceed 30 percent of its lower explosive limit.

6. If, on or after (the operative date of these amendments), the owner or operator adds a domed roof to an external floating roof tank in Range III, at the time the owner or operator adds the domed roof the owner or operator shall:

   i. Equip the tank with a rim seal system consisting of primary and secondary seals meeting the specifications and compliance dates listed at (*l*)3 above; and

   ii. Ensure that the concentration of organic vapor in the vapor space above the domed external floating roof does not exceed 30 percent of its lower explosive limit.

7. On or before the date an internal floating roof tank in Range III is refilled after being degassed for the first time after (the operative date of these amendments), but no later than ten years after the operative date of these amendments, if the tank was in existence on (the day before the operative date of these amendments), or on initial fill if the tank is constructed on or after (the operative date of these amendments) the owner or operator of the tank shall:

   i. Equip each fixed roof support column and well with a sliding cover that is gasketed or with flexible fabric sleeves;

   ii. Equip each ladder well with a gasketed cover. The cover shall be closed at all times, with no visible gaps, except when the well must be opened for access;

   iii. Equip and maintain other roof openings according to the specifications at (*l*)1 or 2 above;

   iv. Equip the tank with a rim seal system consisting of either

      (1) A liquid-mounted primary seal meeting the requirements for primary seals at (*l*)3iii, vii, and x above and having no tears or openings, or

      (2) A primary and a secondary seal meeting the requirements at (*l*)3 i through x above, including compliance dates, except that:

         (A) A mechanical shoe primary seal required at (*l*)3v above shall have one end extend a minimum vertical distance of 15 centimeters (six inches) above the stored organic liquid surface and the other end extend into the liquid a minimum of 10 centimeters (four inches) instead of meeting the requirement at (*l*)3v above; and

(B) A vapor-mounted wiper primary seal may be used on a tank with a shell that has riveted or lap-welded horizontal seams instead of the liquid mounted or mechanical shoe primary seal required at (*l)*3i above;

v. For an internal floating roof installed prior to July 23, 1984, ensure that the concentration of organic vapor in the vapor space above the internal floating roof shall not exceed 50 percent of its lower explosive limit; and

vi. For an internal floating roof installed after July 23, 1984, ensure that the concentration of organic vapor in the vapor space above the internal floating roof shall not exceed 30 percent of its lower explosive limit.

8. By (ten years after the operative date of these amendments) if a Range III fixed-roof tank without an internal floating roof was in existence on (the day before the operative date of these amendments), or by the initial fill if a tank is constructed on or after (the operative date of these amendments), and if the fixed roof tank has a capacity of 40,000 gallons or greater storing any VOC with a vapor pressure of 0.5 pounds per square inch absolute or greater at standard conditions, the owner or operator shall:

i. Equip any gauging or sampling device on the tank with a leak-free cover which shall be closed at all times, with no visible gaps, except during gauging or sampling;

ii. Maintain the fixed roof in a leak-free condition with no holes, tears or uncovered openings; and

iii. Install and maintain each roof opening in a leak-free condition at all times.

9. No person shall cause, suffer, allow, or permit the storage of any VOC in any stationary storage tank not in Range III as determined by Table 2A equipped with an external floating roof, unless any such storage tank containing a VOC having a vapor pressure of 1.0 pounds per square inch absolute (50 millimeters of mercury) or greater at standard conditions and having a maximum capacity of 20,000 gallons (75,700 liters) or greater is equipped with a double seal-envelope combination or equipment approved by the Department as being equally or more effective in preventing the emission of any VOC into the outdoor atmosphere. For the secondary seal, the gap area of gaps exceeding one-eighth inch (0.32 centimeters) in width between the seal and the tank wall shall not exceed 1.0 square inch per foot (6.5 square centimeters per 0.3 meters) of tank diameter. Any secondary seal shall be intact, with no visible holes, tears or other openings. ***States without external floating roof tanks can state that all applicable tanks shall be equipped with domes or internal floating roofs and omit l(9)***

10. No person shall cause, suffer, allow, or permit the storage of any VOC in any stationary storage tank equipped with an external floating roof unless all openings in such roof, excluding emergency roof drains, are covered when not in active use. The tank shall be exempt from this paragraph if the tank meets the exemption criteria at (f)8 above. ***States without external floating roof tanks can state that all applicable tanks shall be***

equipped with domes or internal floating roofs and omit l(10).

(m) If a tank is equipped with an external or internal floating roof, the roof shall float on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled.

(n) When performing a roof landing of an external floating roof tank: ***States without external floating roof tanks can state that all applicable tanks shall be equipped with domes or internal floating roofs and omit (n)***

1. When the roof is resting on the leg supports or suspended by cables or hangers, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible; and

2. Any in-service roof landing shall be with the landed height of the floating roof at its minimum setting.

(o) When performing a roof landing of an internal floating roof tank:

1. When the roof is resting on its leg supports or suspended by cables or hangers, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible; and

2. After the tank is refilled after being degassed for the first time after the operative date of these amendments, any in-service roof landing shall be with the landed height of the floating roof at its minimum setting.

(p) The owner or operator of any floating roof tank, not exempt pursuant to (f)6 or (f)7 above, used to store a VOC shall:

1. Submit a complete facility-wide tank VOC control plan to the Department for approval at the address listed at (v) below as follows:

   i. For any floating roof tank not exempt pursuant to (f)6 above, and existing as of (the operative date of these amendments), submit to the Department in writing the complete facility-wide tank VOC control plan by December 1, 2009; or

   ii. For any new tank, excluding a tank exempt pursuant to (f)6 above, added to a facility, submit to the Department in writing a new or updated complete facility-wide tank VOC control plan by 120 days after the installation of the newly constructed tank(s);

2. Include in the facility-wide tank VOC control plan, for all floating roof tanks, except those floating roof tanks exempt pursuant to (f)6 above, the information in (p)2i and ii below or (p)2i and iii below, as applicable:

   i. A list of each tank at the facility and the following for each tank:

      (1) The tank type;
      (2) The tank volume;

(3) The tank diameter;
(4) The tank contents;
(5) The permit activity number;
(6) Any other identifying numbers; and
(7) The Bureau of Release Prevention schedule for tank inspection.

ii. A schedule to implement one or more of the following emission controls, which must be implemented by (10 years after the operative date of these amendments). This schedule shall be consistent with the facility's schedule for tank removal from service for normal inspection and maintenance and with the facility's schedule for the installation of any new tank(s):

(1) A tank configuration such that the bottom of the roof deck can be lowered to one foot or less from the top-most point of the surface of the tank floor;

(2) A method that routes all vapors from the tank to a vapor control device with a control efficiency of at least 90 percent, from the time the roof is landed until it is within 10 percent by volume of being refloated; or

(3) Other measures approved by the Department as being equally or more effective in preventing VOC emissions to the outdoor atmosphere.

iii. An emissions averaging plan to operate all Range III floating roof tanks that store gasoline, except those tanks exempt pursuant to (f)6 above, such that their average annual in-service roof landing VOC emissions, as calculated in accordance with Chapter 7.1.3.2.2 "Roof Landings" of AP-42, as supplemented or amended and incorporated herein by reference, or as calculated using another method approved by the Department in accordance with (v) below, and after applying any applicable control efficiencies, is less than:

(1) Five tons per tank per calendar year from 2011 through 2013;

(2) Four tons per tank per calendar year from 2014 through 2016;

(3) Three tons per tank per calendar year from 2017 through 2019; and

(4) Two tons per tank per calendar year in 2020 and subsequent years.

(q) On and after ten years after the operative date of these amendments, any part of a degassing and cleaning operation of a stationary storage tank performed during the period May 1 through September 30 shall be performed only as follows:

1. The owner or operator shall degas a tank storing a VOC with a vapor pressure equal to or greater than 0.5 psia at standard conditions as follows:

i. Empty the tank of the VOC liquid;

ii. Minimize VOC vapors in the tank vapor space by one of the following methods:

(1) Exhaust VOCs contained in the tank vapor space to a vapor control system rated at a minimum 95 percent efficiency until the organic vapor concentration is 5,000 parts per million by volume (ppmv) or less as methane, or is 10 percent or less of the lower explosive limit, whichever is less;

(2) Displace VOCs contained in the tank vapor space to a vapor control system rated at a minimum 95 percent efficiency by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia; or

(3) If the tank is a free-water knockout tank, a person may degas the tank vapor space by restricting the outflow of water and floating off the oilpad, such that at least 90 percent of the tank volume is displaced;

iii. Discharge or displace the VOC vapors contained in the tank vapor space to a vapor control system that is vapor-tight and free of liquid leaks; and

iv. As appropriate, temporarily remove for no longer than one hour, a suitable tank fitting, such as a manway, to facilitate connection to an external vapor control system.

2. The owner or operator shall clean a tank storing a VOC with vapor pressure equal to or greater than 0.5 psia at standard conditions only if:

i. At least one of the following cleaning agents is used:

(1) Diesel fuel;

(2) A solvent with an initial boiling point of greater than 302 degrees Fahrenheit;

(3) A solvent with a vapor pressure less than 0.5 psia;

(4) A solvent with 50 grams per liter VOC content or less; or

(5) Some other Department-approved cleaning agent; or

ii. Steam cleaning is performed.

3. The owner or operator shall control emissions from the sludge removed from a tank that stores a VOC with a vapor pressure equal to or greater than 1.5 psia at standard conditions by:

i. During sludge removal, controlling emissions from the receiving vessel by operating a vapor control system that reduces VOC emissions by at least 95 percent;

ii. Transporting removed sludge in containers that are vapor-tight and free of liquid leaks; and

iii. Storing removed sludge, until final disposal, in containers that are vapor-tight and free of liquid leaks, or in tanks that comply with (b) above.

(r) The owner or operator of a VOC stationary storage tank in Range III shall have an inspection performed by an authorized inspector and maintain the tank as follows:

1. The findings of any tank inspection, whether completed or not, shall be recorded on the Inspection Form at xxxx Appendix II, incorporated herein by reference, in accordance with the rule's requirements. If an inspection is stopped before completion, indicate the reason for this action in section J "Comments" of the Inspection Form;

2. During the inspection, the authorized inspector performing the inspection must have a copy of the relevant portions of the Preconstruction Permit or the Operating Permit pertinent to the tank being inspected. The authorized inspector shall compare the permit to the existing tank and actual operating conditions of the tank. The authorized inspector shall record any discrepancies between the permit equipment description and the existing tank, or the permit conditions and the actual operating conditions of the tank, as verified during an inspection, in section J "Comments" of the Inspection Form;

3. Annually inspect the ground level periphery of each tank for possible leaks in the tank shell. Complete section D "Ground Level Inspection" of the Inspection Form;

4. Annually complete all necessary calculations and record all required data accordingly in the Inspection Form and Fugitive Emissions Form at xxxx Appendix II;

5. For an external floating roof tank in Range III, demonstrate compliance with (*l*)1 through 3 above, as applicable, by: ***States without external floating roof tanks can omit state that all applicable tanks shall be equipped with domes or internal floating roofs, move the requirements of r(5)iii and r(5)iv to r(6) (section on existing domed external floating roof tanks), and omit r(5)***

i. Annually, from the platform, visually inspecting the roof to check for permit and rule violations, and visually checking the roof for unsealed roof legs, open hatches, open emergency roof drains, or open vacuum breakers. Indicate presence of any tears in the fabric of the visible seal. Record the findings under section F of the Inspection Form;

ii. Annually, inspecting the deck fittings for visible gaps using the 1/8 inch probes, or inspecting the deck fittings for a leak-free condition using EPA Method 21 set forth at 40 CFR Part 60 Appendix A, as supplemented or amended and incorporated herein by reference or, instead of EPA Method 21, using another method approved by the Department. Record any leaks above 500 ppm in the Fugitive Emissions Form;

iii. Annually, inspecting the entire secondary seal for the gap requirements at (*l*)3iv above using the 1/8 inch, 1/2 inch , and 1-1/2 inch probes. Record the gap data in section F(4) of the Inspection Form. Record all cumulative gaps between 1/8 inch and 1/2 inch, between 1/2 inch and 1-1/2 inch, and in excess of 1-1/2 inches, in section G of the Inspection Form. Measure all secondary seal gaps greater than 1/2 inch for length and width, and record in section J "Comments" of the Inspection Form; and

iv. Every five years and each time the tank is degassed, inspecting the entire primary seal for the gap requirements at (*l*)3iii above using the 1/8 inch, 1/2 inch and 1-1/2 inch probes. The primary seal shall be inspected by holding back the secondary seal. Record the gap data in section F(5) of the Inspection Form. Record all cumulative gaps between 1/8 inch and 1/2 inch; between 1/2 inch and 1-1/2 inch; and in excess of 1-1/2 inches, in section G of the Inspection Form;

6. For a domed external floating roof tank in Range III existing as of the operative date of these new rules, demonstrate compliance with (*l*)5 above, by:

i. Annually, using an explosimeter, by measuring the organic vapor concentration in the vapor space above the floating roof in terms of the lower explosive

limit (LEL), and recording the reading in section E of the Inspection Form;

ii. Annually, from an opening in the domed or fixed roof, visually inspecting the roof to check for permit and rule violations, and visually checking the roof for unsealed roof legs, open hatches, open emergency roof drains, or open vacuum breakers. Indicate presence of any tears in the fabric of the visible seal. Record the findings under section F of the Inspection Form; and

iii. Each time the tank is degassed, but no less than once every 10 years, performing the requirements at (r)5ii (excluding EPA Method 21), iii and iv above;

7. For a domed external floating roof tank in Range III that had a dome installed after the operative date of these new rules, demonstrate compliance with (*l*)6 above, by performing the requirements at (r)6 above; ***States without external floating roof tanks can state that all applicable tanks shall be equipped with domes or internal floating roofs and omit r(7)***

8. For an internal floating roof tank in Range III, demonstrate compliance with (*l*) above, by performing the requirements at (r)6 above;

9. For a fixed roof tank in Range III that is subject to (*l*)8 above, annually demonstrate compliance with (*l*)9 above by inspecting the fittings located on the roof, piping, pressure relief valves and all other valves, to ensure they are leak-free using EPA Method 21 set forth at 40 CFR Part 60 Appendix A incorporated herein by reference, or using another method approved by the Department. Record any readings in excess of 500 ppm in the Fugitive Emissions Form;

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

10. The owner or operator of any VOC stationary storage tank in Range III shall repair or replace any piping, valve, vent, seal, gasket, or cover of a roof opening that:

    i. Is defective;

    ii. Has a visible gap or is not leak-free; or

    iii. Does not meet any applicable requirement of this section; and

11. The owner or operator of a VOC stationary storage tank in Range III shall perform the repair or replacement at (r)10 above:

    i. If the tank is already degassed, prior to filling; or

    ii. If the tank is not degassed, within 45 days after discovery of the needed repair or replacement. If a repair cannot be completed and the vessel cannot be emptied within 45 days, the owner or operator may use up to two extensions of up to 30 additional days each. Documentation of the owner or operator's decision to use an extension shall include a description of the failure, shall document that alternative storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be completely emptied as soon as practicable.

(s) The owner or operator shall maintain on-site, for each tank, for the time period specified at xxxx, unless another time period is specified below:

1. Records that specify each VOC stored and the vapor pressure of each VOC at standard conditions;

2. For the owner or operator of a floating roof tank, records of the roof landing emission information required at (EMISSION STATEMENT RULE);

3. If the owner or operator of a floating roof tank has not implemented all control measures pursuant to the tank VOC control plan submitted pursuant to (p) above, or if a floating roof tank is exempt pursuant to (f)6 above, the records of each floating roof landing event including, but not limited to, tank contents before landing and after refilling; landed height of the floating roof; height of any liquid remaining in the bottom of the tank after landing; duration of landing; landing emissions calculated using AP-42, Chapter 7 methodology, and any other records needed to create the "Floating Roof Landing Emission Summary Report" required at (EMISSION STATEMENT RULE);

4. Records relating to the installation of vapor control devices described at (t) below;

5. For the lifetime of the tank, all inspection reports required pursuant to (r) above;

6. Records of all tank degassing, cleaning and sludge removal activities performed pursuant to (q) above; and

7. Records of all tank integrity testing schedules for Range III tanks that xxxx requires to be included in the "Discharge, Prevention, Containment and Countermeasure Plan."

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

8. Repair and replacement documentation required at (r)11ii above.

(t) On and after (the operative date of these amendments), the owner or operator of any floating roof stationary storage tank that installs a vapor control device in accordance with (p)2ii above shall record operating parameters as follows:

1. For a thermal oxidizer, the owner or operator shall record the following on a continuous basis or at a frequency approved by the Department:

   i. The operating temperature at the exit of the combustion chamber;

   ii. The carbon monoxide concentration in the flue gas emitted to the outdoor atmosphere; and

   iii. Upon request of the Department, any other operating parameter relevant to the prevention or control of air contaminant emissions from the tank or the oxidizer;

2. For a vapor control system that uses carbon or other adsorptive material, the owner or operator shall record the following on a continuous basis or at a frequency approved in writing by the Department:

   i. The concentration of the total applicable VOCs in the flue gas emitted to the outdoor atmosphere; or

   ii. Provided that the owner or operator confirms daily that the automatic switching between carbon beds is functioning in accordance with permit conditions, the date of carbon bed replacement; and, upon request of the Department, any other operating parameter relevant to the prevention or control of air contaminant emissions from the tank or the adsorber; and

3. For any other vapor control device, upon request of the Department, any operating parameter relevant to the prevention or control of air contaminant emissions from the tank or that vapor control device.

(u) If, during an inspection required at (r) above, or at any other time, the owner or operator determines that a tank does not comply with (*l*) above, the owner or operator shall submit a written report to the Department including the cause of the non-compliance, corrective actions to achieve compliance and measures taken to prevent a re-occurrence of the non-compliance. If the facility has an operating permit, in accordance with xxxx, the owner or operator shall include this report as part of the periodic compliance reports required at xxxx. If the facility does not have an operating permit, the owner or operator shall submit this report to the Department within three business days after becoming aware of the non-compliance.

(v) An owner or operator that seeks Department approval for an alternate method for calculating a tank's roof landing emissions pursuant to (p)2iii above shall:

1. Prepare an application that includes:

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

i. A description of the proposed alternate method;

ii. The parameters in the alternate method; and

iii. Supporting documentation that justifies the use of the alternate method; and

2. Submit a complete application in writing to the Department at:

xxxx,

xxxx

xxxx

xxxx

xxxx

xxxx

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

APPENDIX XXXXINSPECTIONS

Equipment Needed:

Organic Vapor Analyzer (OVA) calibrated with methane in accordance with EPA Method 21, as supplemented or amended and incorporated herein by reference; explosimeter calibrated with methane (for internal floating roof tanks); liquid resistant measuring tape or device; tank probe (to measure gaps in tank seals - 1/8 inch, 1/2 inch, 1-1/2 inch); explosivity meter; flashlight.

Inspection Procedures (Model rule.2(r)):

A. Any inspection shall be performed by an authorized inspector.

B. The findings of any tank inspection, whether completed or not, shall be recorded on the Inspection Form at Model Rule, Appendix , prescribed by the Department in accordance with the rule's requirements. If an inspection is stopped before completion, indicate the reason for this action in section J “Comments” of the Inspection Form.

C. During the inspection, the person(s) conducting the inspection must have a copy of the relevant portions of the Preconstruction Permit or the Operating Permit pertinent to the tank being inspected. Any discrepancies between the permit equipment description and the existing tank or the permit conditions and the actual operating conditions of the tank as verified during an inspection must be recorded in section J “Comments” of the Inspection Form.

D. Inspect the ground level periphery of each tank for possible leaks in the tank shell. Complete section D “Ground Level Inspection” of the Inspection Form.

E. For external floating roof tanks: ***States without external floating roof tanks can state that all applicable tanks shall be equipped with domes or internal floating roofs and omit E***

1. From the platform, visually inspect the roof and check for permit or rule violations. Record the information as shown under section F of the Inspection Form.

2. During visual inspection of the roof, check for unsealed roof legs, open hatches, open emergency roof drains or vacuum breakers and record the findings on the Inspection Form accordingly. Indicate presence of any tears in the fabric of both seals.

3. Inspect the roof fittings using the 1/8 inch probes or conduct a EPA Method 21 inspection, as supplemented or amended and incorporated herein by reference, of the roof fittings for a leak-free condition. Record any leaks above 500 ppm in the Fugitive Emissions Form.

4. Inspect the entire secondary seal using the 1/8 inch and 1/2 inch probes. Record the gap data in section F(4) of the Inspection Form.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

5. When required (which is every five years), inspect the entire primary seal using the 1/8 inch, 1/2 inch, and 1-1/2 inch probes. Inspect the primary seal by holding back the secondary seal. Record the gap data in section F(5) of the Inspection Form.

6. Record all cumulative gaps between 1/8 inch and 1/2 inch; between 1/2 inch and 1-1/2 inch; and in excess of 1-1/2 inches, for both primary and secondary seals in section G of the Inspection Form. Secondary seal gaps greater than 1/2 inch should be measured for length and width, and recorded in section J "Comments" of the Inspection Form.

F. For internal floating roof and domed tanks:

1. Using an explosimeter, measure the concentration of the vapor space above the internal floating roof in terms of lower explosive limit (LEL), and record the reading in section E of the Inspection Form.

2. Visually inspect the deck fittings and the visible seal of the rim seal system, and record findings in section E of the Inspection Form.

3. Conduct gap measurements of the deck fittings and rim seal system each time the tank is emptied and degassed but no less than once every 10 years.

G. For fixed roof tanks:

1. Inspect the pressure relief valves, piping, valves and fittings located on the roof for leak-free condition. Record any readings in excess of 500 ppm in the Fugitive Emissions Form.

H. Complete all necessary calculations and record all required data accordingly in the Inspection Form and Fugitive Emissions Form.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

INSPECTION FORM

PLEASE COMPLETE FORM LEGIBLY IN BLACK INK

Program Interest No. _____ Permit Activity No. _____ Tank ID No. E _____

Inspection Date _____ Time_____

Is this a Follow-up Inspection? No ☐ Yes ☐ If yes, Date of Previous Inspection _____

A. COMPANY INFORMATION:

Company Name_____

Location Address_____City _____Zip _____

Mailing Address_____ City _____ Zip _____

Contact Person_____ Title _____

Phone_____

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

B. INSPECTION CONDUCTED BY:

Name_____ Title _____

Company Name_____ Phone_____

Mailing Address_____City_____ Zip_____

C. TANK INFORMATION:

Capacity _____ (gals) Installation Date _____ Tank Diameter _____ (ft) Tank Height _____ (ft)

Product Type _____ Product Vapor Pressure_____ (psia)

Type of Tank: Riveted ☐ Welded ☐ Other ☐(describe) _____

Color of Shell _____ Color of Roof _____

Roof Type: Pontoon ☐ Double Deck ☐ Other ☐(describe) _____

External floating roof ☐ Internal floating roof or domed tank ☐

D. GROUND LEVEL INSPECTION:

1) Product Temperature _____ ° F 2) Product level _____ (ft)

3) List type and location of leaks found in tank shell.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

_____

4) List any discrepancies between the existing equipment and the equipment description on the Permit.

_____

5) Is tank in compliance with Permit conditions? No ☐ Yes ☐ If no, explain _____

_____

_____

E. INTERNAL FLOATING ROOF OR DOMED TANK:

1) Check vapor space between floating roof and fixed roof with explosimeter. _____Percent LEL.

2) Conduct visual inspection of roofs and the visible seal of the rim seal system.

3) Are all roof openings covered? No ☐ Yes ☐ If no, explain in Comments section (J) and proceed to part (H)(6).

F. EXTERNAL FLOATING ROOF TANK (or DOMED TANK AND INTERNAL FLOATING ROOF TANK when needed)

1) On the diagram (below) indicate the location of the ladder, roof drain(s), anti-rotation device(s), platform, gauge well, and vents or other appurtenances. *Note information in relation to North (to the top of the worksheet)*.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

2) Describe any uncovered openings found on the roof in the Comments section (J).

3) Identify any tears in the seal fabric. Describe and indicate on diagram (below):

4) Secondary Seal Inspection

a. Type of Secondary Seal:

_____

b. Does 1/2" probe drop past seal? No ☐ Yes ☐ If yes, measure length(s) and show on diagram.

c. Does 1/8" probe drop past seal? No ☐ Yes ☐ If yes, measure length(s) and show on diagram.

d. Record dimensions of gap for gaps

> 1/8" _____

> 1/2" _____

NOTE: Record the actual width and cumulative length of gaps in feet and inches.

(Do not include gaps > 1/2" in 1/8" measurements)

5) Primary Seal Inspection

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

a) Type of Primary Seal: ☐ Shoe; ☐ Tube; ☐ Other

_____

b) Shoe seal: Does 1-1/2" probe drop past seal? No ☐ Yes ☐ If yes, measure length(s) and show on diagram.

c) Shoe seal: Does 1/2" probe drop past seal? No ☐ Yes ☐ If yes, measure length(s) and show on diagram.

d) Tube seal: Does 1/2" probe drop past seal? No ☐ Yes ☐ If yes, measure length(s) and show on diagram.

e) All seal types: Does 1/8" probe drop past seal? No ☐ Yes ☐ If yes, measure length(s) and show on diagram.

f) Record dimensions of gaps for gaps

> 1/8"

_____

> 1/2"

_____

>1-1/2"

_____

NOTE: Record the actual width and cumulative length of gaps in feet and inches. (Do not include gaps > 1/2" in 1/8" measurements, or gaps > 1-1/2" in 1/2" measurements)

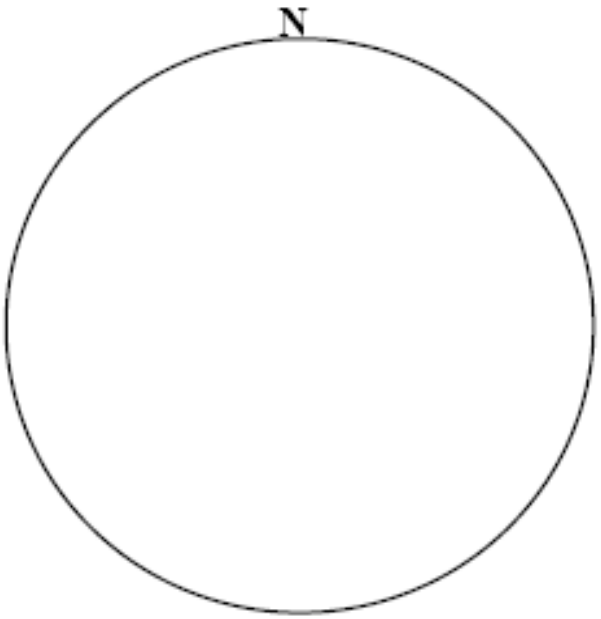
6) Deck Fitting Inspection

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

(Circle one) Does 1/8" probe drop past gasket seal or does seal fail EPA Method 21?

No ☐ Yes ☐ If yes, identify fitting.

NOTE: Show defects using symbols. Show seal gaps and lengths.



Legend

Equipment

AD	Antirotational device
GW	Gauge well
⊤	Leg stand
RD	Roof drain
*	Emergency roof drain
∞	Vacuum breaker
▲	Vent
PL	Platform & ladder

Defects

LT	Leg top
╫	Leg pin
OH	Open hatch
V\	Torn seal
|-P-|	Primary seal gap
|-S-|	Secondary seal gap

IF INTERNAL FLOATING ROOF OR DOMED TANK, PROCEED TO PART H(6) WHEN APPROPRIATE:

G. CALCULATIONS - complete all applicable portions of the following:

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Record dimensions of indicated gaps (from F(4)(d), F(5)(b), and F(5)(f)). Record in feet and inches.

Gaps in primary seal between 1/8 and 1/2 inch:

_____

Gaps in primary seal between 1/2 and 1-1/2 inch:

_____

Gaps in primary seal greater than 1-1/2 inches:

_____

Gaps in secondary seal between 1/8 and 1/2 inch:

_____

Gaps in secondary seal greater than 1/2 inch:

_____

Multiply diameter (ft) of tank to determine appropriate gap limits:

5 percent circumference = diameter X 0.157 = ____60 percent circ. = diam. X 1.88 = _____

10 percent circumference = diameter X 0.314 = ____ 90 percent circ. = diam. X 2.83 = _____

30 percent circumference = diameter X 0.942 = ____95 percent circ. = diam. X 2.98 = _____

H. DETERMINE COMPLIANCE STATUS OF TANK:

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

1) Were any openings found on the roof? No ☐ Yes ☐

2) Were any tears in the seals found? No ☐ Yes ☐

3) Is the product level lower than the level at which the roof would be floating?

No ☐ Yes ☐

4) Secondary Seal:

Did 1/2" probe drop between shell and seal? No ☐ Yes ☐

Did cumulative 1/8"- 1/2" gap exceed 95percent circumference length?

No☐ Yes☐

5) Primary Seal:

Shoe: Did 1-1/2" probe drop between shell and seal? No ☐ Yes ☐

Did cumulative 1/2" - 1-1/2" gap exceed 30 percent circumference length, and did cumulative 1/8 - 1/2" gap exceed 60 percent circumference length?

No☐ Yes☐

Did any single continuous 1/8" - 1-1/2" gap exceed 10 percent circumference. length? No ☐ Yes ☐

Tube: Did 1/2" probe drop between shell and seal No ☐ Yes ☐

Did cumulative 1/8"- 1/2" gap exceed 95 percent circumference length?

No☐ Yes☐

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

6) Internal floating roof (installed before 6/1/84):

Did percent LEL exceed 50 percent? No ☐ Yes ☐

(installed after 6/1/84) or domed tank: Did percent LEL exceed 30 percent?

No ☐ Yes ☐

7) Does tank have permit conditions? No ☐ Yes ☐

Does tank comply with these conditions? No ☐ Yes ☐

I. IF THE INSPECTION WAS TERMINATED PRIOR TO COMPLETION FOR ANY REASON, PLEASE EXPLAIN:

_____

_____

J. COMMENTS:

Use this section to complete answers to above listed items and to describe repairs made to the tank; include date and time repairs were made.

_____

_____

_____

_____

_____

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

_____

_____

_____

_____

_____

_____

_____

_____

_____

K. Certifications

"I certify under penalty of law that I believe the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information."

Authorized inspector who completed the inspection:

_____Date: _____(Signature)

Individual with Direct Knowledge:

_____Date: _____(Signature of person with direct knowledge of, and responsibility for, the information on this form)

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Model Rule.2(s) requires all inspection reports required pursuant to Model Rule.2(r) to be maintained on-site for the lifetime of the tank.

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

FUGITIVE EMISSIONS FORM

Company Information							
Program Interest No.							
Company Name							
Address							
Contact/Phone Number							
Permit Activity Number				Report Date			
Tank ID	Type	Fitting	Date	Leak Concen-tration	Type of Repair	Date	Post-Repair Leak Concen-tration

NOTE: The measures discussed in this document represent possible controls the OTC is evaluating for potential NOx and VOC emission reductions. No decision has yet been made by the OTC states to pursue these measures for inclusion in a state implementation plan.

Model Rule.2(s) requires all inspection reports required pursuant to Model Rule.2(r) to be maintained on-site for the lifetime of the tank.