Title 40 —Protection of Environment
Chapter I —Environmental Protection Agency
Subchapter C —Air Programs
Part 59 —National Volatile Organic Compound Emission Standards for Consumer and Commercial Products

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Subpart C—National Volatile Organic Compound Emission Standards for Consumer Products

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§ 59.201 Applicability and designation of regulated entity.

(a) The provisions of the subpart apply to consumer products manufactured or imported on or after December 10, 1998 for sale or distribution in the United States.

(b) The regulated entity is: the manufacturer or importer of the product; and any distributor that is named on the product label. The manufacturer or importer of the product is a regulated entity for purposes of compliance with the volatile organic compounds (VOC) content or emission limits in § 49.203, regardless of whether the manufacturer or importer is named on the label or not. The distributor, if named on the label, is the regulated entity for purposes of compliance with all sections of this part except for § 59.203. Distributors whose names do not appear on the label are not regulated entities. If no distributor is named on the label, then the manufacturer or importer is responsible for compliance with all sections of this part.

(c) The provisions of this subpart do not apply to consumer products that meet the criteria specified in paragraph (c)(1) through (c)(7) of this section.

(1) Any consumer product manufacturer in the United States for shipment and use outside of the United States.

(2) Insecticides and air fresheners containing at least 98-percent paradichlorobenzene or at least 98-percent naphthalene.

(3) Adhesives sold in containers of 0.03 liter (1 ounce) or less.

(4) Bait station insecticides. For the purpose of this subpart, bait station insecticides are containers enclosing an insecticidal bait that does not weigh more than 14 grams (0.5 ounce), where bait is designed to be ingested by insects and is composed of solid material feeding stimulants with less than 5-percent by weight active ingredients.

(5) Air fresheners whose VOC constituents, as defined in §§ 59.202 and 59.203(f), consist of 100-percent fragrance.

(6) Non-aerosol moth proofing products that are principally for the protection of fabric from damage by moths and other fabric pests in adult, juvenile, or larval forms.

(7) Flooring seam sealers used to join or fill the seam between two adjoining pieces of flexible sheet flooring.

§ 59.202 Definitions.

The terms used in this subpart are defined in the Clean Air Act (Act) or in this section as follows:

Administrator means the Administrator of the United States Environmental Protection Agency (EPA) or an authorized representative.

Aerosol cooking spray means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be directly applied on food for the purpose of reducing sticking on cooking and baking surfaces, or both.

Aerosol product means a product characterized by a pressurized spray system that dispenses product ingredients in aerosol form by means of a propellant (i.e., a liquefied or compressed gas that is used in whole or in part, such as a co-solvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container) or mechanically induced force. “Aerosol product” does not include pump sprays.

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 that are intended for:

(1) Household use;

(2) Use in structural pest control; or

(3) Institutional use.

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. This does not include products that are used on the human body, products that function primarily as cleaning 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. It 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.

All other forms means all consumer product forms for which no form-specific VOC standard is specified. Unless specified otherwise by the applicable VOC standard, "all other forms" include, but are not limited to, solids,liquids, wicks, powders, crystals, and cloth or paper wipes (towelettes).

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.

Bathroom and tile cleaner means a product designed to clean tile or surfaces in bathrooms. "Bathroom and tile cleaner" does not include products specifically designed to clean toilet bowls or toilet tanks.

Carburetor and choke cleaner means a product designed to remove dirt and other contaminants from a carburetor or choke. "Carburetor and choke cleaner" does not include products designed to be introduced directly into the fuel lines or fuel storage tank prior to introduction into the carburetor, or solvent use regulated under 40 CFR part 63, subpart T (halogenated solvent national emission standards for hazardous air pollutants (NESHAP)).

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; and

(4) Propane.

Construction and panel adhesive means any one-component household adhesive having gap-filling capabilities that distributes stress uniformly throughout the bonded area resulting in a reduction or elimination of mechanical fasteners.

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” of that product.

Consumer product means any household or institutional product (including paints, coatings, and solvents), or substance, or article (including any container or packaging) held by any person, the use, consumption, storage, disposal, destruction, or decomposition of which may result in the release of VOC. For the purposes of this subpart, consumer product means any product listed in tables 1 or 2 of this subpart.

Contact adhesive means any household adhesive that:

(1) When applied to two substrates, forms an instantaneous, nonrepositionable bond;

(2) When dried to touch, exhibits a minimum 30-minute bonding range; and

(3) Bonds only to itself without the need for reactivation by solvents or heat.

Container or packaging means the part or parts of the consumer product that serve only to contain, enclose, incorporate, deliver, dispense, wrap, or store the chemically formulated substance or mixture of substances that is solely responsible for accomplishing the purposes for which the product was designed or intended. “Container or packaging” includes any article onto or into which the principal display panel is incorporated, etched, printed, or attached.

Crawling bug insecticide means any insecticide product that is designed for use against crawling arthropods including, but not limited to, ants, cockroaches, mites (but not house dust mites), silverfish, or spiders. “Crawling bug insecticide” does not include products for agricultural use or products designed to be used exclusively on humans or animals.

Distributor means any person to whom a consumer product is sold or supplied for the purposes of resale or distribution in commerce.

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

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 products that consist entirely of compressed gases for use in electronic or other specialty areas.

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. “Engine degreaser” does not include any solvent used in parts washing equipment, or any solvent use regulated under 40 CFR part 63, subpart T (halogenated solvent NESHAP).

Fabric protectant means 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 water into the fabric's fibers. “Fabric protectant” does not include silicone-based products whose function is to provide water repellency, or products designed for use solely on fabrics that are labeled “dry clean only.”

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

Flexible flooring material means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl, and vinyl composite flooring.

Floor polish or wax means a wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed 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 strippers, products designed for unfinished wood floors, and coatings subject to 40 CFR part 59, subpart D—National Volatile Organic Compound Emission Standards for Architectural Coatings.

Floor seam sealer means any low viscosity specialty adhesive used in small quantities for the sole purpose of bonding adjoining rolls of installed flexible sheet flooring or to fill any minute gaps between and adjoining rolls.

Flying bug insecticide means any insecticide product that is designed for use against flying insects including, but not limited to, flies, mosquitoes, and gnats. "Flying bug insecticide" does not include "wasp and hornet insecticide" or products that are designed to be used exclusively on humans or animals or their bedding.

Fragrance means a substance or mixture of aroma chemicals, natural essential oils, and other functional components that is added to a consumer product to impart an order or scent, or to counteract a malodor.

Furniture maintenance product means a wax, polish, conditioner, or any other product designed for the product designed for the purpose of polishing, protecting, or enhancing finished wood surfaces other than floors. Furniture maintenance product" does not include dusting aids, products designed solely for the purpose of cleaning, and products designed to leave a permanent finish such as stains, sanding sealers, and lacquers.

Gel means a colloid in which the dispersed phase has combined with the continuous phase to produce a semisolid material, such as jelly.

General purpose adhesive means any nonaerosol household adhesive designed for use on a variety of substrates. General purpose adhesives do not include contact adhesives or construction and panel adhesives.

General purpose cleaner means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. "General purpose cleaner" includes products designed for general floor cleaning, kitchen or countertop cleaning, and cleaners designed to be used on a variety of hard surfaces.

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.

Hair mousse means a hairstyling foam designed to facilitate styling of a coiffure and provide limited holding power.

Hair styling gel means 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.

Hairspray means a consumer product designed primarily for the purpose of dispensing droplets of a resin on and into a hair coiffure to impart sufficient rigidity to the coiffure to establish or retain the style for a period of time.

High-volatility organic compound or HVOC means any organic compound that exerts a vapor pressure greater than 80 millimeters of mercury when measured at 20 degrees Celsius.

Household adhesive means any household product that is used to bond one surface to another by attachment. "Household adhesive" does not include products used on humans or animals, adhesive tape, contact paper, wallpaper shelf liners, or any other product with an adhesive incorporated onto or in an inert substrate.

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

Household use means use of a product in a home or its immediate environment.

Importer means any person who brings a consumer product that was manufactured, filled, or packaged at a location outside of the United States into the United States for sale or distribution in the United States.

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.

Insecticide means a pesticide product that is designed for use against insects or other arthropods, excluding any product that is:

(1) For agricultural use; or

(2) A restricted use pesticide.

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. Foggers may target a variety of pests including (but not limited to) fleas and ticks, crawling insects, lawn and garden pests, and flying insects. Foggers are not subject to the specific VOC limitations or other categories of insecticides list in table 1 of this subpart.

Institutional product means a consumer product that is designed for use in the maintenance or operation of an establishment that manufactures, transports, or sells goods or commodities, or provides services for profit; or 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 that are produced by the establishment.

Institutional use means use within the confines of or on property necessary for the operation of buildings' including, but not limited to, government agencies, factories, sanitariums, prisons, restaurants, hotels, stores, automobile service and parts centers, health clubs, theaters, transportation companies, hospitals, schools, libraries, auditoriums, and office complexes.

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 package for purposes of branding, identifying, or giving information with respect to the product or to the contents of the package.

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.

Laundry starch product means a product that is designed for application to a fabric, either during or after laundering, to impart and prolong a crisp look and may also facilitate ironing of the fabric. "Laundry starch product" includes, but it not limited to, fabric finish, sizing, and starch.

Lawn and garden insecticide means an insecticide product designed primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods.

Liquid means a substance or mixture of substances that flows readily, but, unlike a gas, does not expand indefinitely (i.e., a substance with constant volume but not constant shape). "Liquid" does not include powders or other materials that are composed entirely of solid particles.

Manufacturer means any person who manufacturers or processes a consumer product. Manufacturers include:

(1) Processors who blend and mix consumer products,

(2) Contract fillers who develop formulas and package these formulas under a distributor's label;

(3) Contract fillers who manufacture products using formulas provided by a distributor; and

(4) Distributors who specify formulas to be used by a contract filler or processor.

Nail polish remover means a product designed to remove nail polish or coatings from fingernails or toenails.

Nonagricultural pesticide means and includes any substance or mixture of substances that is a pesticide as defined in section 2(u) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136-136y).

Nonresilient flooring means floor of a mineral content that is not flexible. "Nonresilient flooring" includes, but is not limited to, terrazzo, marble, slate, granite, brick, stone, ceramic tile, and concrete.

Oven cleaner means any cleaning product designed to clean and to remove dried food deposits from oven interiors.

Person means an individual corporation, partnership, association, State, any agency, department, or instrumentality of the United States, and any officer, agent, or employee thereof.

Principal display panel(s) 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."

Product category means that applicable category which best describes the product as listed in tables 1 or 2 of this subpart and which appears on the product's principal display panel.

Product form means the form that most accurately describes the product's dispensing from including aerosols, gels, liquids, pump sprays, and solids.

Pump spray means a packaging system in which the product ingredients are expelled only while a pumping action is applied to a button, trigger, or other actuator. Pump spray product ingredients are not under pressure.

Representative consumer product means a consumer product that is subject to the same VOC limit in § 59.203 as the innovative product.

Restricted use pesticide means a pesticide that has been classified for restricted use under the provisions of section 3(d) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136-136y).

Shaving cream means an aerosol product that 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 body hair.

Single-phase aerosol air freshener means an aerosol air freshener with liquid contents in a single homogeneous phase that does not require that the product container be shaken before use.

Solid means a substance or mixture of substances that does not flow or expand readily (i.e., a substance with constant volume such as the particles constituting a powder). "Solid" does not include liquids or gels.

Spray buff product means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.

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-181 (Type 1, Grade A), and MIL-A-4605 (Type A, Grade A and Grade C).

Underarm antiperspirant means any aerosol product 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.

Underarm deodorant means any aerosol product that is intended by the manufacturer to be used minimize odor in the human axilla by retarding the growth of bacteria that cause the decomposition of perspiration.

United States means the United States of America, including the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

Usage directions means the text or graphics on the consumer product's label or accompanying literature that describes to the end user how and in what quantity the product is to be used.

Volatile organic compound or VOC means any compound that meets the definition of a VOC, as defined under 40 CFR part 51, subpart F, and in subsequent amendments.

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 a high-volume directed stream or burst from a safe distance at the intended pest or its hiding place.

Wax means an organic mixture or compound with low melting point and high molecular weight, which is solid at room temperature. Waxes are generally similar in composition to fats and oils except that they contain no glycerides. "Wax" includes, but is not limited to, substances such as carnauba wax, lanolin, and beeswax derived from the secretions of plants and animals; substances of a mineral origin such as ozocerite, montan, and paraffin; and synthetic substances such as chlorinated naphthalenes and ethylenic polymers.

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

[63 FR 48815, Sept. 11, 1998; 63 FR 52319, Sept. 30, 1998]

§ 59.203 Standards for consumer products.

(a) The manufacturer or importer of any consumer product subject to this subpart small ensure that the VOC content levels in table 1 of this subpart and HVOC content levels in table 2 of this subpart are not exceeded for any consumer product manufactured or imported on or after December 10, 1998, except as provided in paragraphs (b) and (c) of this section, or in §§ 59.204 or 59.206.

(b) For consumer products for which the label, packaging, or accompanying literature specifically states that the product should be diluted prior to use, the VOC content limits specified in paragraph (a) of this section shall apply to the product only after the minimum recommended dilution has taken place. For purposes of this paragraph, "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.

(c) For those consumer products that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. section 136-136y) (FIFRA), the compliance date of the VOC standards specified in paragraph (a) of this section is December 10, 1999.

(d) The provisions specified in paragraphs (d)(1) through (d)(4) of this section apply to charcoal lighter materials.

(1) No person shall manufacture or import any charcoal lighter material after December 10, 1998 that emits, on average, greater than 9 grams of VOC per start, as determined by the procedures specified in § 59.208.

(2) The regulated entity for a charcoal lighter material shall label the product with usage directions that specify the quantity of charcoal lighter material per pound of charcoal that was used in the testing protocol specified in § 59.208 for that product unless the provisions in either paragraph (e)(2)(i) or (e)(2)(ii) of this section apply.

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

(ii) The charcoal lighter material is already incorporated into the charcoal, such as certain "bag light," "instant light," or "match light" products.

(3) Records of emission testing results for all charcoal lighter materials must be made available upon request to the Administrator for enforcement purposes within 30 days of receipt of such requests.

(4) If a manufacturer or importer has submitted records of emission testing of a charcoal lighter material to a State or local regulatory agency, such existing records may be submitted under paragraph (d)(3) of this section in lieu of new test data, provided the product formulation is unchanged from that which was previously tested. Such previous testing must have been conducted in accordance with the test protocol described in § 59.208 or a test protocol that is approved by the Administrator as an alternate.

(e) Fragrances incorporated into a consumer product up to a combined level of 2 weight-percent shall not be included in the weight-percent VOC calculation.

(f) The VOC content limits in table 1 of this subpart shall not include any VOC that:

(1) Has a vapor pressure of less than 0.1 millimeters of mercury at 20 degrees Celsius; or

(2) Consists of more than 12 carbon atoms, if the vapor pressure is unknown; or

(3) Has a melting point higher than 20 degrees Celsius and does not sublime (i.e., does not change directly from a solid into a gas without melting), if the vapor pressure is unknown.

(g) The requirements of paragraph (a) of this Section shall not apply to those VOC in antiperspirants or deodorants 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 millimeters of mercury or less at 20 degrees Celsius.

(h) a manufacturer or importer may use the vapor pressure information provided by the raw material supplier as long as the supplier uses a method to determine vapor pressure that is generally accepted by the scientific community.

(i) For hydrocarbon solvents that are complex mixtures of many different compounds and that are supplied on a specification basis for use in a consumer product, the vapor pressure of the hydrocarbon blend may be used to demonstrate compliance with the VOC content limits of this section. Identification of the concentration and vapor pressure for each such component in the blend is not required for compliance with this subpart.

§ 59.204 Innovative product provisions.

(a) Upon notification to the Administrator, a consumer product that is subject to this subpart may exceed the applicable limit in table 1 or 2 of this subpart if the regulated entity demonstrates that, due to some characteristic of the product formulation, design, delivery systems, or other factors, the use of the product will result in equal or less VOC emissions that specified in paragraph (a)(1) or (a)(2) of this section.

(1) The VOC emissions from a representative consumer product, as described in § 59.202, that complies with the VOC standards specified in § 59.203(a); or

(2) The calculated VOC emissions from a noncomplying representative product, if the product had been reformulated to comply with the VOC standards specified in § 59.203(a). The VOC emissions shall be calculated by using Equation 1.

$$E_R = E_{NC} \times \frac{VOC_{STD}}{VOC_{NC}} \qquad \text{Equation 1}$$

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 standard specified in § 59.203(a).

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

(b) If a regulated entity demonstrates to the satisfaction of the Administrator that the equation in paragraph (a)(2) of the this section yields inaccurate results due to some characteristic of the product formulation or other factors, an alternate method that accurately calculates emissions may be used upon approval of the Administrator.

(c) A regulated entity shall notify the Administrator in writing of its intent to enter into the market an innovative product meeting the requirements of paragraph (a) of this section. The Administrator must receive the written notification by the time the innovative product is available for sale or distribution to consumers. Notification shall include the information specified in paragraph (c)(1) and (c)(2) of this section.

(1) Supporting documentation that demonstrates the emissions from the innovate product, including the actual physical test methods used to generate the data and, if necessary, the consumer testing undertaken to document product usage;

(2) Any information necessary to enable the Administrator to establish enforceable conditions for the innovative product, including the VOC content of the innovative product expressed as a weight-percentage, and test methods for determining the VOC content.

(d) At the option of the regulated entity, the regulated entity may submit a written request for the Administrator's written concurrence that the innovative product fulfills the requirements of paragraph (a) of this section. If such a request is made, the Administrator will respond as specified in paragraphs (d)(1) through (d)(3) of this section.

(1) The Administrator will determine within 30 days of receipt whether the documentation submitted in accordance with paragraph (d) of this section is complete.

(2) The Administrator will determine whether the innovative product shall be exempt from the requirements of § 59.203(a) within 90 days after an application has been deemed complete. The applicant and the Administrator 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 Administrator will 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 (a) of this section, and that such emissions reductions can be enforced.

(3) If an applicant has been granted an exemption to a State or local regulation for an innovative product by a State or local agency whose criteria for exemption meet or exceed those provided for in this section, the applicant may submit the factual basis for such an exemption as part of the documentation required under paragraph (d) of this section. In such case, the Administrator will make the determination required under this paragraph within 45 days after the applications is considered complete.

(e) In granting an exemption for a product, the Administrator will establish conditions that are enforceable. These conditions may include the VOC content of the innovative product, dispensing rates, application rates, and any other parameters determined by the Administrator to be necessary. The Administrator will also specify the test methods for determining conformance to the conditions established, including criteria for reproducibility, accuracy, and sampling and laboratory procedures.

(f) For any product for which an exemption has been granted pursuant to this section, the regulated entity to whom the exemption was granted shall notify the Administrator in writing within 30 days after any change in the product formulation or recommended product usage directions, and shall also notify the Administrator within 30 days after the regulated entity learns of any information that would alter the emissions estimates submitted to the Administrator in support of the exemption application.

(g) If lower VOC content limits are promulgated for a product category through any subsequent rulemaking, all exemptions granted under this section for products in the product category shall no longer apply unless the innovative product has been demonstrated to have VOC emissions less than the applicable revised VOC content limits.

(h) If the Administrator determines that a consumer product for which an exemption has been granted no longer meets the VOC emissions criteria specified in paragraph (a) of this section for an innovative product, the Administrator may modify or revoke the exemption as necessary to assure that the product will meet these criteria. The Administrator will not modify or revoke an exemption without first affording the applicant an opportunity for a public hearing to determine if the exemption should be modified or revoked.

[63 FR 48815, Sept. 11, 1998; 63 FR 52319, Sept. 30, 1998]

§ 59.205 Labeling.

(a) The container or package of each consumer product that is subject to this subpart shall clearly display the day, month, and year on which the product was manufactured, or a code indicating such date. The requirements of this provision shall not apply to products that are offered to consumers free of charge for the purposes of sampling the product.

(b) In addition, the container or package for each charcoal lighter material that is subject to this subpart shall be labeled according to the provisions of § 59.203(d)(2).

§ 59.206 Variances.

(a) Any regulated entity who cannot comply with the requirements of this subpart because of extraordinary circumstances beyond reasonable control may apply in writing to the Administrator for a variance. The variance application shall include the information specified in paragraph (a)(1) through (a)(3) of this section.

(1) The specific grounds up on which the variance is sought,

(2) The proposed date(s) by which compliance with the provisions of this subpart will be achieved. Such date(s) shall be no later than 5 years after the issuance of a variance; and

(3) A compliance plan detailing the method(s) by which compliance will be achieved.

(b) Upon receipt of a variance application containing the information required in paragraph (a) of this section, the Administrator will publish a notice of such application in the FEDERAL REGISTER and, if requested by any party, will hold a public hearing to determine whether, under what conditions, and to what extent, a variance from the requirements of this subpart is necessary and will be granted. If requested, a hearing will be held no later than 75 days after receipt of a variance application. Notice of the time and place of the hearing will be sent to the applicant by certified mail not less than 30 days prior to the hearing. At least 30 days prior to the hearing, the variance application will be made available to the public for inspection. Information submitted to the Administrator by a variance applicant may be claimed as confidential. The Administrator may consider such confidential information in reaching a decision on a variance application. Interested members of the public will be allowed a reasonable opportunity to testify at the hearing.

(c) The Administrator will grant a variance if the criteria specified in paragraphs (c)(1) and (c)(2) of this section are met.

(1) If there are circumstances beyond the reasonable control of the applicant so that complying with the provisions of this subpart by the compliance date would not be technologically or economically feasible, and

(2) The compliance plan proposed by the applicant can be implemented and will achieve compliance as expeditiously as possible.

(d) Any variance order will specify a final compliance date by which the requirements of this subpart will be achieved and increments of progress necessary to assure timely compliance.

(e) A variance shall cease to be effective upon failure of the regulated entity to comply with any term or condition of the variance.

(f) Upon the application of any party, the Administrator may review, and for good cause, modify or revoke a variance after holding a public hearing in accordance with the procedures described in paragraph (b) of this section.

§ 59.207 Test methods.

Each manufacturer or importer subject to the provisions of § 59.203(a) shall demonstrate compliance with the requirements of this subpart through calculation of the VOC content using records of the amounts of constituents used to manufacture the product.

§ 59.208 Charcoal lighter material testing protocol.

(a) Each manufacturer or importer of charcoal lighter material subject to this subpart shall demonstrate compliance with the applicable requirements of § 59.203(d) using the procedures specified in this section. Any lighter material that has received certification from California South Coast Air Quality Management District (SCAQMD) under their Rule 1174, Ignition Method Compliance Certification Testing Protocol, will be considered as having demonstrated compliance with the applicable requirements of this subpart using the procedures in this section.

(b) The manufacturer or importer shall obtain from the testing laboratory conducting the testing, a report of findings, including all raw data sheets/charts and laboratory analytical data. The testing must demonstrate that VOC emissions resulting from the ignition of the barbecue charcoal are, on average, less than or equal to 9 grams per start. The manufacturer or importer shall maintain the report of findings.

(c) When a charcoal lighter material does not fall within the testing guidelines of this protocol, the protocol may be modified following a determination by the Administrator that the modified protocol is an acceptable alternative to the method described in this section and written approval of the Administrator.

(d) ***Meteorological and environmental criteria.***

(1) Testing shall be conducted under the following conditions:

(i) Inlet combustion air temperature is 16 to 27 degrees Celsius (60 to 80 degrees Fahrenheit) with a relative humidity of 20 to 80 percent;

(ii) The charcoal and lighter material are stored 72 hours before testing in a location with a relative humidity between 45 and 65 percent, and a temperature between 18 and 24 degrees Celsuis (65 to 75 degrees Fahrenheit); and

(iii) The outside wind speed, including gusts, may be no more than 16 kilometers per hour (10 miles per hour) if the test stack is exhausted outdoors, or, if the test stack is exhausted indoors, indoor air must be stagnant.

(2) Temperature and relative humidity of the combustion air shall be continuously monitored during the test. Temperature and relative humidity of the place where the charcoal and lighter material are stored prior to the test shall be monitored and recorded during the 72 hours immediately prior to the test. If the stack is exhausted outdoors, the continuous outdoor wind speed monitor shall be observed or recorded continuously during testing. If the wind speed monitor is manually observed rather than electronically recorded, the maximum wind speed observed during the test shall be recorded.

(e) ***Definitions.*** For the purposes of this test protocol, the following definitions shall apply:

(1) ***Baseline VOC emissions*** (E_b) means the 3.6 grams (0.008 pounds) per start of subject VOC mass emissions (calculated as CH_2) resulting from the ignition of charcoal by electric probe.

(2) ***Emission limit for VOC*** means 9 grams per start of resultant VOC emissions (E_r), (expressed as CH_2).

(3) ***Equivalent*** means equipment that has been demonstrated to meet or exceed the performance, design, and operation specifications of the prescribed equipment. A demonstration that equipment or a test method is a suitable alternative requires written approval from the Administrator prior to compliance testing, based on an evaluation of comparative performance specifications and/or actual performance test data.

(4) ***Ignition*** means the ready-to-cook condition of the charcoal determined by the temperature above the charcoal, the organic vapor concentration measured by the continuous organic emission monitor, and percent ash.

(5) ***Ignition VOC emissions*** (e_l)—means the grams (pounds) per start of total subject VOC mass emissions (expressed as CH_2) resulting from the ignition of charcoal by the lighter material undergoing evaluation, including both charcoal and lighter material emissions.

(6) ***labeled directions*** means those directions affixed to the charcoal lighter material which specify:

(1) The amount of lighter material to use per kilogram (or pound) of charcoal, unless the lighter material is already impregnated or treated in the charcoal;

(2) How to use or apply the lighter material; and

(3) How and when to light the lighter material.

(7) ***Percent ash*** means a qualitative observation of the ratio of visible charcoal surface area ignited (grayish/white ash) to total charcoal surface area times 100.

(8) ***Reference VOC emissions*** (E_{ep})—means the grams (pounds) per start of subject VOC mass emissions (calculated as CH_2) resulting from the ignition of charcoal by the reference electric probe during the testing.

(9) ***Resultant VOC emissions*** (E_r)—means the ignition VOC emission (E_l) less the reference VOC emissions (E_ep) plus baseline emissions (E_b).

(10) ***Start*** means a 25-minute period commencing from the instant that emissions may be released from the lighter material, either by evaporation or combustion, and further characterized such that by the end of said 25-minute period, ignition is achieved.

(f) *Test structure, equipment specifications, and reference materials.*

(1) The test structure is to be located in a building or fabricated total enclosure (i.e., with enclosed sides and top). The enclosure shall be such that there are no constant or intermittent air flows within it that cause fluctuations in the stack velocity and/or disruptions of air flow patterns within the test chamber containing the reference grill . (WARNING: If the stack is vented into the building enclosure, caution must be taken to avoid carbon monoxide poisoning and the reduction of oxygen.)

(2) Test structure components. The following test structure components, as shown in figures 1 and 2 of Appendix A of this subpart, shall be used:

(i) Test chamber—Standard large, prefabricated fireplace manufactured by Marco$^{\Delta}$,[1] Model No. C41CF, with flue damper removed; or a fabricated structure with the same dimensions. Spacers are required at the rear of the test chamber to ensure a constant 5-centimeter (2-inch) distance between the reference grill and the rear wall of the test chamber.

(ii) Test stack—25-centimeter (10-inch) diameter galvanized steel ducting with velocity traverse port holes located approximately 8 diameters downstream from the stack outlet of the fireplace chamber and sampling ports located approximately $2^{1}/_{2}$ diameters downstream of the velocity traverse ports.

(iii) Fan—25-centimeter (10-inch) diameter axial fan (duct fan) capable of maintaining an air velocity of 140 ±9 meters per minute (450 ±30 feet per minute) and located in the stack approximately 3 diameters downstream of the sampling ports.

(iv) Test stack insulation—The stack shall be insulated with fiberglass blanket insulation (or equivalent) with a minimum R-value of 6.4, that totally surrounds the stack from the top of the fireplace to the level of the blower which minimizes temperature gradients in the stack and prevents hydrocarbons from condensing on the stack wall.

(v) Stack mounts—Supports for fixing in position the stack velocity measurement device for measuring reference point velocity readings and the continuous organic emission monitor probe/meter.

(vi) Blower speed control—A rheostat for controlling voltage to the fan.

(3) Test equipment and materials. The following test equipment and materials shall be used:

(i) Continuous recording device—A YEW$^{\Delta}$ model 4088 dot matrix, roster scanning chart recorder, Omega strip recorder with a Strawberry Tree Data Acquisition System, or equivalent, shall be used to continuously (6-second cycle) record temperatures, velocity, and continuous organic emission monitor output signals. The recording may be done manually, recording temperature using a digital potentiometer (20-second intervals), reference point velocity with a Pitot tube (20-second intervals), and continuous organic emission monitor readings with the analyzer's meter (10-second intervals).

[1] NOTE: Mention of trade names or specific products does not constitute endorsement by the EPA.

(ii) Grill temperature probe—A type "K" thermocouple silver soldered to a 7.6 centimeter (3-inch) square brass plate 0.083-centimeter (0.033 inches) thick painted flat black using high temperature (>370 degrees Celsius [>700 degrees Fahrenheit]) paint; set on an adjustable stand to maintain 11 centimeters (4.5 inches) above the maximum height of the briquette pile and made such that it can be removed and replaced within the chamber.

(iii) Stack temperature probe—The KurzΔ digital air velocity meter or a type "K" thermocouple shall be used.

(iv) Stack velocity measurement device—The velocity in meters (feet) per minute for the reference point using a KurzΔ digital air velocity meter, DavisΔ DTA 4000 vane anemometer, or equivalent to method 1A of 40 CFR part 60, appendix A.

(v) Continuous organic emissions monitor—CenturyΔ Model 128 Organic Vapor Analyzer, RatfischΔ RS55 total hydrocarbon analyzer, or equivalent, with response in parts per million (ranges 0 to 10 parts per million, 0 to 100 parts per million, 0 to 1,000 parts per million).

(vi) Temperature and humidity monitor—A chart recorder type with humidity accuracy of ±3 percent from 15 to 85 percent.

(vii) Wind speed and direction monitor—A wind speed and direction device meeting a tolerance of ±10 percent.

(viii) Analytical balance—An electronic scale with a resolution of a ±2 grams.

(ix) Charcoal stacking ring—Rigid metal cylinder 21.6 centimeters (8.5 inches) in diameter with indicators to determine that the pile of briquettes does not exceed 12.7 centimeters (5 inches) in height.

(x) Camera—To document ignition condition of charcoal at the end of each start.

(xi) Particulate filter—NuproΔ inline filter, Catalog Number SS-4FW-2 with 0.64 centimeter ($^{1}/_{4}$-inch) Swagelok inlet and outlet or equivalent.

(xii) Barbecue Grill—The charcoal shall be ignited in a WeberΔ "Go Anywhere" barbecue grill (Model Number #121001), 39.4 centimeters × 24 centimeters × 12.7 centimeters (15.5 inch × 9.5 inch × 5.0 inch) with the grate 4.4 centimeters (1.75 inches) above the bottom of the grill, or another grill that meets these specifications. The grill shall be set on its bottom when placed in the test chamber and all grill air vents shall be in full open position.

(xiii) Electric probe—A 600-watt electric probe shall be used for electric probe ignition tests.

(xiv) Untreated charcoal—The laboratory conducting the testing shall purchase "off the shelf" untreated charcoal from a retail outlet. Charcoal shall not be provided by the manufacturer of the charcoal lighter material to be tested or by the charcoal manufacturer. The charcoal to be used is KingsfordΔ "Original Charcoal Briquets." All untreated charcoal used in the certification testing of a single ignition source is to come from the same lot as indicated by the number printed on the bag.

(xv) Treated or impregnated charcoal—If the charcoal lighter material to be tested is a substance used to treat or impregnate charcoal, the regulated entity shall provide to the laboratory conducting the tests a sample of impregnated charcoal. The sample shall be impregnated or

treated barbecue charcoal that is ignited either outside of package or ignited by the package. If commercially available, the independent testing laboratory conducting the test shall purchase “off the shelf” from a retail outlet.

(g) ***Sampling and analytical methods.***

(1) Gas volumetric flow rate. Conduct a full velocity traverse using the stack velocity measurement device as shown in figure 3 of this Appendix A to this Subpart, or use Method 1A of 40 CFR part 60, appendix A. Continuously record a velocity reference point reading during each test run using a chart recorder or once every 20 seconds if using Method 1A. Calculate the volumetric flow rate using the gas velocity, moisture content, and the stack cross-sectional area. For the purposes of this protocol, the static pressure shall be assumed to be atmospheric, the molar density correction factor in the stack to be 1.0, and the moisture content to be 2 percent.

(2) Integrated VOC sample. Collect integrated VOC gas samples at the sampling port in the exhaust stack using a 40 CFR part 60, appendix A, Method 25 Total Combustion Analysis (TCA) sampling apparatus consisting of two evacuated 9-liter tanks, each equipped with flow controllers, vacuum gauges, and probes, as shown in figure 4 of Appendix A of this Subpart. Use 40 CFR part 60, appendix A, Method 25, SCAQMD Method 25.1 (incorporated by reference—§ 59.213 of this subpart), or equivalent, for analysis. Carbon monoxide, carbon dioxide, methane, and non-methane organic carbon are analyzed by the TCA and TCA/Flame Ionization Detector (FID) methods. Oxygen content is determined by gas chromatography using a thermal conductivity detector. Clean particulate filters between use by heating to 760 degrees Celsius (1400 degrees Fahrenheit) while using compressed air as a carrier for cleaning and purging.

(3) Continuous organic emissions monitor. A continuous organic emissions monitor which uses a continuous FID shall be used for each test run to measure the real time organic concentration of the exhaust as methane. Record the emission monitor response in parts per million continuously during the sampling period using a chart recorder or at least once every 10 seconds. The VOC analyzer shall be operated as prescribed in the manufacturer's directions unless otherwise noted in this protocol.

(h) ***Pretest procedure.***

(1) Charcoal lighter material—charcoal. Before each test run, remove charcoal from a sealed bag that has been stored for at least 72 hours in a humidity and temperature controlled room which satisfies the requirements of paragraph (d)(1) of this section and weight out 0.9 kilograms (2 pounds) of charcoal briquettes, to the nearest whole briquette over 0.9 kilograms (2 pounds), of uniform shape with no broken pieces using an analytical balance. Reseal the bag. Charcoal must be ignited within 10 minutes after removal from bag. A sealed or resealed bag of charcoal cannot be stored at the test site for greater than 45 minutes. It must be returned to a humidity and temperature controlled room from 72 hours. The lighter material must be purchased, stored, weighed, and handled the same as the barbecue charcoal.

(i) For the reference VOC emission tests using an electric probe, place a single layer of charcoal, slightly larger than the area/circle of the electric probe heating element, onto the grate. Place the heating element on top of this first layer and cover the heating element with the remaining charcoal briquettes.

(ii) For the ignition VOC emissions tests, arrange the briquettes on the barbecue grate in the manner specified by the ignition manufacturer's directions. If these manufacturer's directions do not specify a stacking arrangement for the briquettes, randomly stack the briquettes in a pile using the stacking ring described in paragraph (f)(3)(ix) of this section.

(2) Charcoal lighter material—or impregnated charcoal. Store, handle, weigh, and stack barbecue charcoal that is designed to be lit without the packaging, the same as in paragraph (h)(1) of this section. For those products which require both the package and charcoal be lit, weigh the whole package—do not remove charcoal. Weigh an empty package (not the same one to be used during the test). Subtract the package weight from the overall weight of the package and charcoal. The full package and empty package must be stored, handled, and weighed the same as in paragraph (h)(1) of this section. If the difference (the charcoal weight) is between 0.7 to 1.4 kilograms (1.5 to 3.0 pounds), the test may proceed. The emissions measured (E) in Equation 5 of paragraph (k)(7) of this section must be adjusted to a 0.9 kilogram (2-pound) charge. Place packaged barbecue charcoal on the grate in the manner specified by the manufacturer's directions.

(3) Initial meteorological and environmental criteria in paragraph (d) shall be complied with.

(4) The stack velocity must be set before each day of testing at 140 ±9 meters per minute (450 ±30 feet per minute) by performing a velocity traverse as specified in paragraph (g)(1) of this section. The velocity will be attained by adjusting the axial fan speed using a rheostat.

(5) The fireplace shall be conditioned at the start of each day before sampling tests by using a grill ignited by the electric probe. If a time period of over 60 minutes between sampling test runs occur, the condition step must be repeated.

(6) Before each test run, leak check the continuous organic emissions monitor by blocking the flow to the probe. Allow the instrument to warm up for the duration specified by the manufacturer's directions. Select the 0 to 100 parts per million range. Check the battery level and hydrogen pressure. Zero with hydrocarbon-free air (<0.1 parts per million hydrocarbons as methane) span with 90 parts per million methane in ultra pure air. Zero and span another instrument selection range if needed for test purposes.

(7) Before the testing program begins, establish a point of average concentration of organics in the stack by using a continuous organic emissions monitor and a grill with charcoal ignited by the electric probe 40 minutes after initial release of emissions. Record the continuous organic emissions monitor traverse data.

(8) Prepare the integrated VOC sampling equipment and perform the required leak checks. Fit the probes with nozzles housing two micron particulate filters. Insert the probes and nozzles into the sampling port to draw a sample of the exhaust gas from the point of average organic concentration as determined from the continuous organic emissions monitor sample traverse described in paragraph (h)(4) of this section. Also, position the nozzles such that they point downstream in the stack. Obtain the samples concurrently and continuously over the test run.

(9) Insert the continuous organic emissions monitor probe into the sampling port to draw a sample of the exhaust gas from the point of average organic concentration as determined from the continuous organic emissions monitor sample traverse described in paragraph (h)(7) of this section.

(i) ***Test procedure.*** The labeled directions, as defined in paragraph (e) of this section, shall be followed throughout the course of the testing. In cases where the directions are incompatible with this protocol, circumvent the intent of this protocol, or are unclear (subject to different interpretations) and inadequate,

the Administrator must be informed in writing of the nature of the conflict, as well as the proposed resolution, prior to commencing testing. When the labeled directions for a charcoal lighter material do not fall within the testing guidelines of this protocol, the protocol may only be modified upon written approval of the Administrator.

(1) Place the bottom of the barbecue grill on the floor of the fireplace, 5 centimeters (2 inches) from the rear wall. Ignite charcoal as specified by manufacturer's labeled directions.

(2) For electric probe ignition, carefully remove probe without disturbing charcoal after 10 minutes of operation.

(3) For fluid ignition, simultaneously match light fluid on charcoal and fluid that has fallen to the bottom of the grill.

(4) Place the grill temperature probe 11 centimeters (4.5 inches) above the top of the charcoal immediately after the charcoal lighter material flame goes out, or before, if the lighter material does not flame.

(5) Conduct at least six test runs for both the electric probe ignition and for the lighter material being evaluated. Alternate these lighter material for all 12 runs. All runs must be conducted over 3 consecutive days or less. Alternatively, baseline emissions testing (using the electric probe) may be applied to other test runs provided the test runs occur within 4 months of the baseline testing. Integrated VOC sampling and continuous organic emissions monitoring begin for each test run when the charcoal lighter material and/or materials start to generate/release organics (this will be the time of pouring for lighter fluids and the time of ignition for most other ignition sources). Option: Because the manufacturer of treated or impregnated charcoal supplies both the lighter material and barbecue charcoal, they may apply the 9 grams VOC per start emission limit as an absolute value without an adjustment for the VOC emissions from an electric probe.

(6) Sampling ends for each test run when all the following conditions are met:

(i) The temperature 11 centimeters (4.5 inches) above the maximum height of the briquette pile, using the grill temperature probe described in paragraph (d)(3)(ii) of this section, is at least 93 degrees Celsius (200 degrees Fahrenheit);

(ii) The continuous organic emissions monitor is reading below 30 parts per million for at least 2 minutes;

(iii) The test sampling has continued for 25 minutes (but not more) and

(iv) The charcoal surface is 70 percent covered with ash (to be documented with photograph on top and 60 degrees above the horizon).

(7) During the sampling test runs, temperatures (excluding ambient) and continuous organic emission monitor readings shall be recorded and shall comply with the requirements in paragraph (b) of this section. Humidity, wind speed, and ambient temperature readings shall be monitored and shall comply with the requirements in paragraph (b) of this section.

(8) Collect one blank sample for VOC and one ambient air sample during one run of each day per paragraph (k) of this section.

(j) ***Post-run procedure.***

(1) Record temperatures (including ambient), humidity, wind speed, and continuous organic emissions monitor reading.

(2) Record the drift using zero and span gases. Leak check and span the continuous organic emissions monitor as described in paragraph (h)(6) of this section for the next run.

(3) Leak check and disassemble the integrated VOC sampling equipment as described in Method 25 of 40 CFR part 60, appendix A or SCAQMD Method 25.1 (incorporated by reference—see § 59.213 of this subpart), or equivalent.

(4) Thoroughly clean grill surfaces of all residue before conducting next ignition run.

(k) ***Calculations.*** Calculations shall be carried out to at least one significant digit beyond that of the acquired data, and then rounded off after final calculation to two significant digits for each run. All rounding off of numbers should be in accordance with the American Society for Testing and Materials (ASTM) E 380-93, Standard Practice for Use of the SI International System of Units, procedures (incorporated by reference—see § 59.213 of this subpart).

(1) Calculate the average stack reference point temperature during sampling (t_{sr}).

(2) Calculate the average measured velocities (in meters per minute [feet per minute]): Traverse (u_t), traverse reference point (u_{tr}), and reference point during sampling (u_{sr}).

(3) Calculate the corrected average sampling velocity (u_s) by applying Equation 2:

$$u_s = u_{sr} \frac{u_t}{u_{tr}} \qquad \text{Equation 2}$$

(4) Calculate the average flow rate (Q_s) in cubic meters per minute (cubic feet per minute) by applying Equation 3:

$$Q_s = u_s A \qquad \text{Equation 3}$$

Where

A = Duct cross-sectional area, (square meters [square feet]

(5) Correct the flow rate to dry standard conditions (Q_{ds}) by applying Equation 4. Assume the static pressure to be atmospheric and the molar density correction factor to be 1.0

$$Q_{ds} = \frac{T_s}{(T_S + t_{sr})} (1 - H)\, Q_s \qquad \text{Equation 4}$$

Where

T_s = 289 K (520 R)

T_S = 273 K (460 R)

H = Percent moisture-100

= 0.02

(6) Calculate the average total gaseous non-methane organic carbon for each duplicate sample run analyzed.

(7) Calculate the grams (pounds) of VOC as CH_2 emitted per start (normalized to 0.9 kilograms [2 pounds] of charcoal) for each run using Equation 5:

$$E = \frac{A}{B} * \frac{C}{10^6} * D * d * \frac{N}{M} Q_{ds} \quad \text{Equation 5}$$

Where

E = Emissions of VOC per start for each test run (grams VOC/start [pounds VOC/start])

A = Hydrocarbon molecular weight

= 14.0268 grams per gram-mole (14.0268 pounds per pound-mole)

B = Carbon number

= 1

C = Average concentration for each duplicate run of total gaseous nonmethane organic compounds as CO_2 (parts per million, from lab analysis sheet)

D = Sampling duration

= 25 minutes

d = Molar density of gas at standard conditions

= 42.33 gram-mole per cubic meter (0.0026353 pound-mole per cubic foot)

N = Normalized mass (0.9 kilograms [2 pounds])

M = Mass of charge (kilograms [pounds])

(8) Calculate the average VOC emissions for each lighter material tested. Identify and discard statistical outliers. Note a minimum of five valid results are required for a determination. This procedure for eliminating an outlier may only be performed once for each lighter material tested.

(9) Using Equation 6, calculate the resultant VOC emissions per start (E_r) and determine if it is less than or equal to the 9 grams VOC per start emission limit.

$$E_r = e_i - e_{ep} + E_b \quad \text{Equation 6}$$

Where

e_i = Average emissions of VOC per start from the charcoal lighter material being evaluated (grams VOC/start [pounds VOC/start] expressed as CH_2)

e_{ep} = Average reference VOC emissions per start from the ignition by electric probe (grams VOC/start [pounds VOC/start] expressed as CH_2)

= 0 grams VOC/start (0 pounds VOC/start) for treated or impregnated charcoal

E_b = Standard baseline VOC emissions per start from the ignition by electric probe (expressed as CH_2)

= 0 grams VOC/start (0 pounds VOC/start) for treated or impregnated charcoal

= 3.6 grams VOC/start (0.008 pounds VOC/start) for all other charcoal lighter material

(l) ***Recordkeeping.*** A record of the following charcoal lighter material compliance test information shall be kept for at least 5 years:

(1) Real time temperature and continuous organic emissions monitor readings from continuous chart recorder and/or manual reading of temperatures and the continuous organic emissions monitor output.

(2) A description of quality assurance/quality control (QA/QC) procedures followed for all measuring equipment and calibration test data.

(3) A description of QA/QC procedures followed for all sampling and analysis equipment and calibration test data.

(4) Time and quantity of blanks and ambient air samples.

(5) Chain of custody for samples.

(6) Labeled directions.

(7) Field notes and data sheets.

(8) Calculation/averaging sheets/printouts.

(9) Sample (in its normal package from the same lot) of barbecue charcoal and lighter material used for testing.

(10) Formulation of lighter material tested (indicate if the information is to be handled confidentially).

(11) Photographs documenting charcoal surface ash coverage.

(m) ***Quality Assurance/Quality Control (QA/QC) Requirements.*** The QA/QC guidelines in the EPA's Quality Assistance Handbook (EPA 600.4-77-027b) shall be followed. In addition, the following procedures shall be used:

(1) A blank sample for VOC shall be performed once each day, during the start period of one of the lighter materials, using the integrated VOC sampling apparatus.

(2) An ambient air sample for VOC shall be taken once each day, during the start period of one of the lighter materials, using the integrated VOC sampling apparatus with NuproΔ 2 micron filters.

(3) Traceability certificates shall be provided for all calibration gases used for the continuous organic emissions monitor and integrated VOC analysis.

(4) Grill temperature probe shall be calibrated using the procedures in ASTM Method E220-86 (incorporated by reference as specified in United States § 59.213).

(5) Supply documentation for place of purchase (or origin if experimental) and chain of custody for lighter material tested. Documentation to be included for both treated and impregnated charcoal.

(6) Supply documentation for place of purchase and chain of custody for untreated charcoal.

[63 FR 48815, Sept. 11, 1998; 63 FR 52319, Sept. 30, 1998]

§ 59.209 Recordkeeping and reporting requirements.

(a) The distributor that is named on the product label shall maintain the records specified in paragraphs (a)(1) and (a)(2) of this section, unless the manufacturer or importer has submitted to the Administrator a written certification that the manufacturer or importer will maintain the records for the distributor in accordance with paragraph (a)(3) of this section. If no distributor is named on the label, the manufacturer or importer must maintain the specified records. The records must be retained for at least 3 years and must be in a form suitable and readily available for inspection and review.

(1) Records or formulations being manufactured or imported on or after December 10, 1998 for all consumer products subject to § 59.213(a), or December 10, 1999 for all consumer products subject to § 59.203(c) and

(2) Accurate records for each batch of production, starting on December 10, 1998 for all consumer products subject to § 59.203(a) or December 10, 1999 for all consumer products subject to § 59.203(c), of the weight-percent and chemical composition of the individual product constituents.

(3) By providing this written certification to the Administrator, the certifying manufacturer accepts responsibility for compliance with the recordkeeping requirements in paragraphs (a)(1) and (a)(2) of this section with respect to any products covered by the written certification. Failure to maintain the required records may result in enforcement action by the EPA against the certifying manufacturer in accordance with the enforcement provisions applicable to violations of these provisions by regulated entities. The certifying manufacturer may revoke the written certification by sending a written statement to the Administrator and the regulated entity giving at least 90 days notice that the certifying manufacturer is rescinding acceptance of responsibility for compliance with the recordkeeping requirements listed in this paragraph. Upon expiration of the notice period, the regulated entity must assume responsibility for maintaining the records specified in this paragraph. Written certifications and revocation statements, to the Administrator from the certifying manufacturer shall be signed by the responsible official of the certifying manufacturer, provide the name and address of the certifying manufacturer, and be sent to the appropriate EPA Regional Office at the addresses listed in § 59.210 of this subpart. Such written certifications are not transferable by the manufacturer.

(b) If requested by the Administrator, product VOC content must be demonstrated to the Administrator's satisfaction to comply with the VOC content limits presented in § 59.203(a).

(c) Each manufacturer or importer subject to the provisions of § 59.203(d) shall maintain records specified in either paragraph (c)(1) or (c)(2) of this section for each charcoal lighter material.

(1) Test report from each certification test performed as specified in § 59.208(b) and all information and data specified in § 59.208(l); or

(2) Records of emission testing, which was performed by a method determined by the Administrator to be an acceptable alternative to that described in § 59.208, previously submitted to a State or local regulatory agency.

(d) The distributor that is named on the product label, or if no distributor is named on the label, the manufacturer or importer, shall submit by the applicable compliance date, or within 30 days after becoming a regulated entity, a one-time Initial Notification Report including the information specified in paragraphs (d)(1) through (d)(5) of this section.

(1) Company name;

(2) Name, title, phone number, address, and signature or certifying company official;

(3) A list of product categories and subcategories subject to § 59.203 for which the company is currently the regulated entity;

(4) A description of date coding systems, clearly explaining how the date of manufacture is marked on each sales unit of subject consumer products; and

(5) The name and location of the designated recordkeeping agent, if the records specified in paragraphs (a)(1) and (a)(2) are to be maintained by the manufacturer.

(e) If a regulated entity changes the date coding system reported according to paragraph (d)(4) of this section, the regulated entity shall notify the Administrator of such changes within 30 days following the change.

(f) If requested by the Administrator, the following information shall be made available within 30 days after receiving the request:

(1) Location of facility(ies) manufacturing, importing, or distributing subject consumer products;

(2) A list of product categories and subcategories, as found in tables 1 and 2 of this subpart, that are manufactured, imported, or distributed at each facility; and

(3) Location where VOC content records are kept for each subject consumer product.

(g) Each manufacturer or importer subject to the innovative product provisions in § 49.204 shall submit notifications as indicated in § 59.204(d) and (e).

§ 59.210 Addresses of EPA Regional Offices.

All requests, reports, submittals, and other communications to the Administrator pursuant to this regulation shall be submitted to the Regional Office of the EPA which serves the State or territory in which the corporate headquarters of the regulated entity resides. These areas are indicated in the following list of EPA Regional Offices:

> EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont) Director, Enforcement and Compliance Assurance Division, U.S. EPA Region I, 5 Post Office Square—Suite 100 (04-2), Boston, MA 02109-3912, Attn: Air Compliance Clerk.
>
> EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Division of Environmental Planning and Protection, 290 Broadway, New York, NY 10007.

EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air, Radiation, and Toxics Division, 841 Chestnut Building, Philadelphia, PA 19107.

EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air, Pesticides, and Toxics Management Division, 61 Forsyth Street, Atlanta, GA 30303.

EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas), Director, Enforcement and Compliance Assurance Division, 1201 Elm Street, Suite 500, Mail Code 6ECD, Dallas, Texas 75270-2102.

EPA Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air and Waste Management Division, 11201 Renner Boulevard, Lenexa, Kansas 66219.

EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming), Director, Office of Pollution Prevention, State, and Tribal Assistance, 999 18th Street, Suite 500, Denver, Colorado 80202-2466.

EPA Region IX (Arizona, California, Hawaii and Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau), Director, Air Division, 75 Hawthorne Street, San Francisco, CA 94105.

EPA Region X (Alaska, Oregon, Idaho, Washington), Director, Office of Air Quality, 1200 Sixth Avenue, Seattle, WA 98101.

[63 FR 48831, Sept. 11, 1998, as amended at 75 FR 69349, Nov. 12, 2010; 76 FR 49672, Aug. 11, 2011; 78 FR 37976, June 25, 2013; 84 FR 34068, July 17, 2019; 84 FR 44229, Aug. 23, 2019]

§ 59.211 State authority.

(a) The provisions in this regulation shall not be construed in any manner to preclude any State or political subdivision thereof from:

(1) Adopting and enforcing any emission standard or limitation applicable to a regulated entity.

(2) Requiring the regulated entity to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of a facility for manufacturing a consumer product.

(b) [Reserved]

§ 59.212 Circumvention.

No regulated entity subject to these standards shall alter, destroy, or falsify any record or report to conceal what would otherwise be noncompliance with these standards. Such concealment includes, but is not limited to refusing to provide the Administrator access to all required records and date-coding information, altering the percent VOC content of a product batch, or altering the results of any required performance tests.

§ 59.213 Incorporations by reference.

(a) The materials listed in this section are incorporated by reference in the paragraphs noted in § 59.207. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of the approval, and notice of any changes in these materials will be published in the FEDERAL REGISTER. The materials are available for purchase at the corresponding addresses noted below, and all are available for inspection at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M St., SW., Washington, DC 20460, the EPA Library (MD-35), U.S. EPA, Research Triangle Park, NC 27711, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

(b) The materials listed below are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA, 19103; SCAQMD Subscription Services, P.O. Box 4932; 21865 Copley Drive, Diamond Bar, CA 91765-0932; or University Microfilms International, 300 North Zeeb Road, Ann Arbor MI, 48106.

(1) ASTM Method E220-86 Standard Method for Calibration of Thermocouples by Comparisons Techniques, incorporation by reference (IBR) approved for § 59,208(m)(4).

(2) ASTM Method E380-82 Metric Practice, IBR approved for § 59.208(k).

(3) SCAQMD Method 25.1, March 1989 Determination of Total Gaseous Non-Methane Organic Emissions as Carbon (amended February 26, 1991) IBR approved for § 59.208(g)(2).

[63 FR 48831, Sept. 11, 1998, as amended at 69 FR 18803, Apr. 9, 2004]

§ 59.214 Availability of information and confidentiality.

(a) Availability of information. Specific reports or records required by this subpart are not available to the public. The Administrator will, upon request, provide information as to the compliance status of a product or regulated entity.

(b) Confidentiality. All confidential business information entitled to protection under section 114(c) of the CAA that must be submitted or maintained by a regulated entity pursuant to this section shall be treated in accordance with 40 CFR part 2, Subpart B.

Table 1 to Subpart C of Part 59—VOC Content Limits by Product Category

Product category	VOC content limit (weight-percent VOC)
Air fresheners:	
Single-phase	70
Double-phase	30
Liquids/pump sprays	18
Solids/gels	3
Automotive windshield washer fluid	35
Bathroom and tile cleaners:	
Aerosols	7

Product category	VOC content limit (weight-percent VOC)
All other forms	5
Carburetor and choke cleaners	75
Cooking sprays—aerosol	18
Dusting aids:	
Aerosols	35
All other forms	7
Engine degreasers	75
Fabric protectants	75
Floor polishes/waxes:	
Products for flexible flooring materials	7
Products for nonresilient flooring	10
Wood floor wax	90
Furniture maintenance products-aerosol	25
General purpose cleaners	10
Glass cleaners:	
Aerosols	12
All other forms	8
Hairsprays	80
Hair mousses	16
Hair Styling gels	6
Household adhesives:	
Aerosols	75
Contact	80
Construction and panel	40
General purpose	10
Structural waterproof	15
Insecticides:	
Crawling bug	40
Flea and tick	25
Flying bug	35
Foggers	45
Lawn and Garden	20
Laundry prewash:	
Aerosols/solids	22
All other forms	5
Laundry starch products	5
Nail polish removers	85
Oven cleaners:	
Aerosols/pump	8
Liquids	5

Product category	VOC content limit (weight-percent VOC)
Shaving creams	5

Table 2 to Subpart C of Part 59—HVOC[1] Content Limits for Underarm Deodorants and Underarm Antiperspirants

Product category	Percent HVOC content limit (weight-percent HVOC)
Underarm antiperspirants—aerosol	60
Underarm deodorants—aerosol	20

[1] High-volatility organic compound (HVOC) are VOC with vapor pressure greater than 80 millimeters of mercury at 20 degrees Celsius.

Appendix A to Subpart C of Part 59—Figures

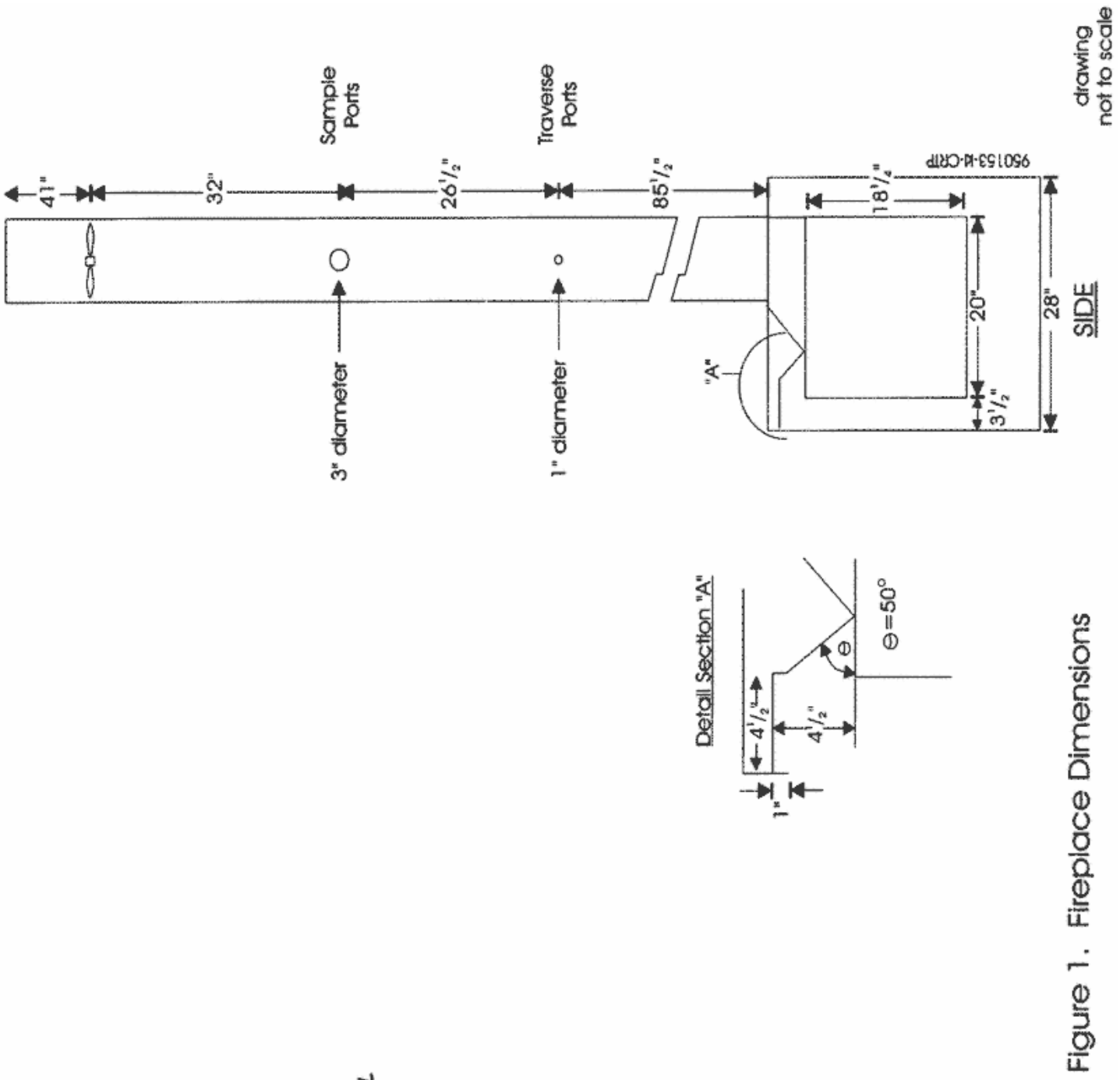
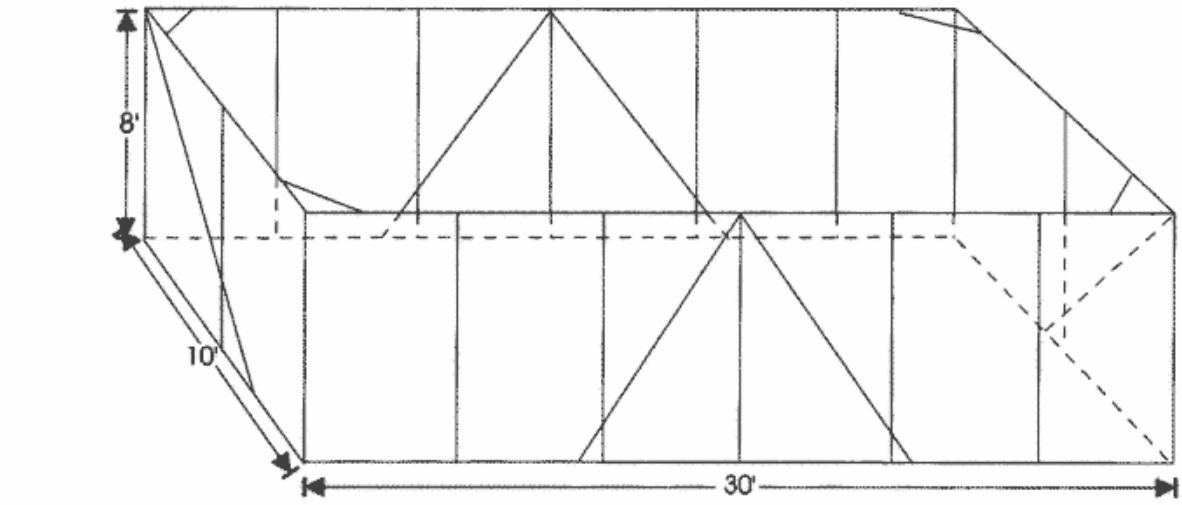


Figure 1. Fireplace Dimensions



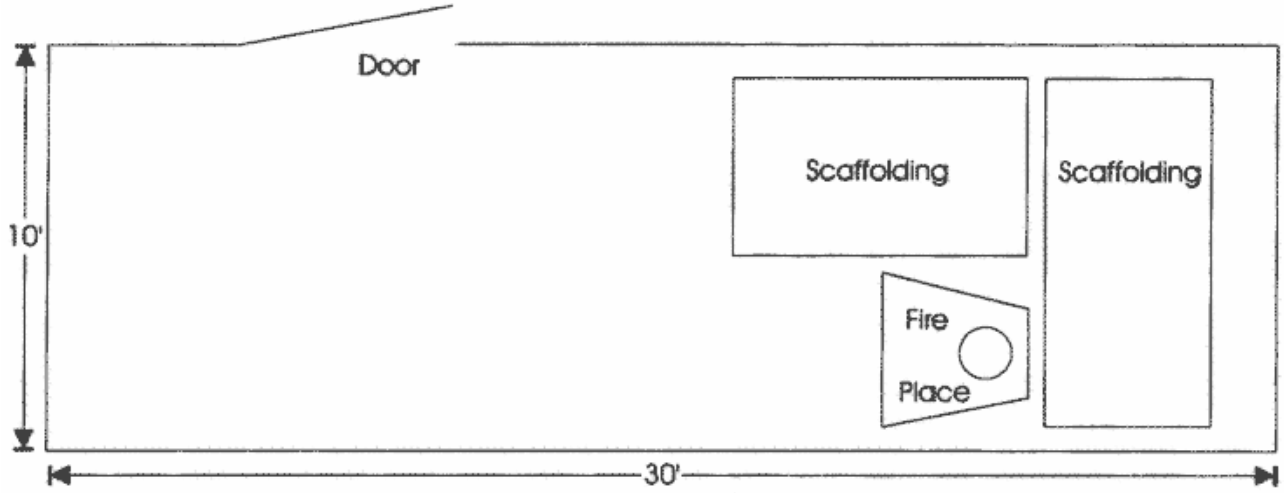


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Figure 2. Suggested Enclosure Design

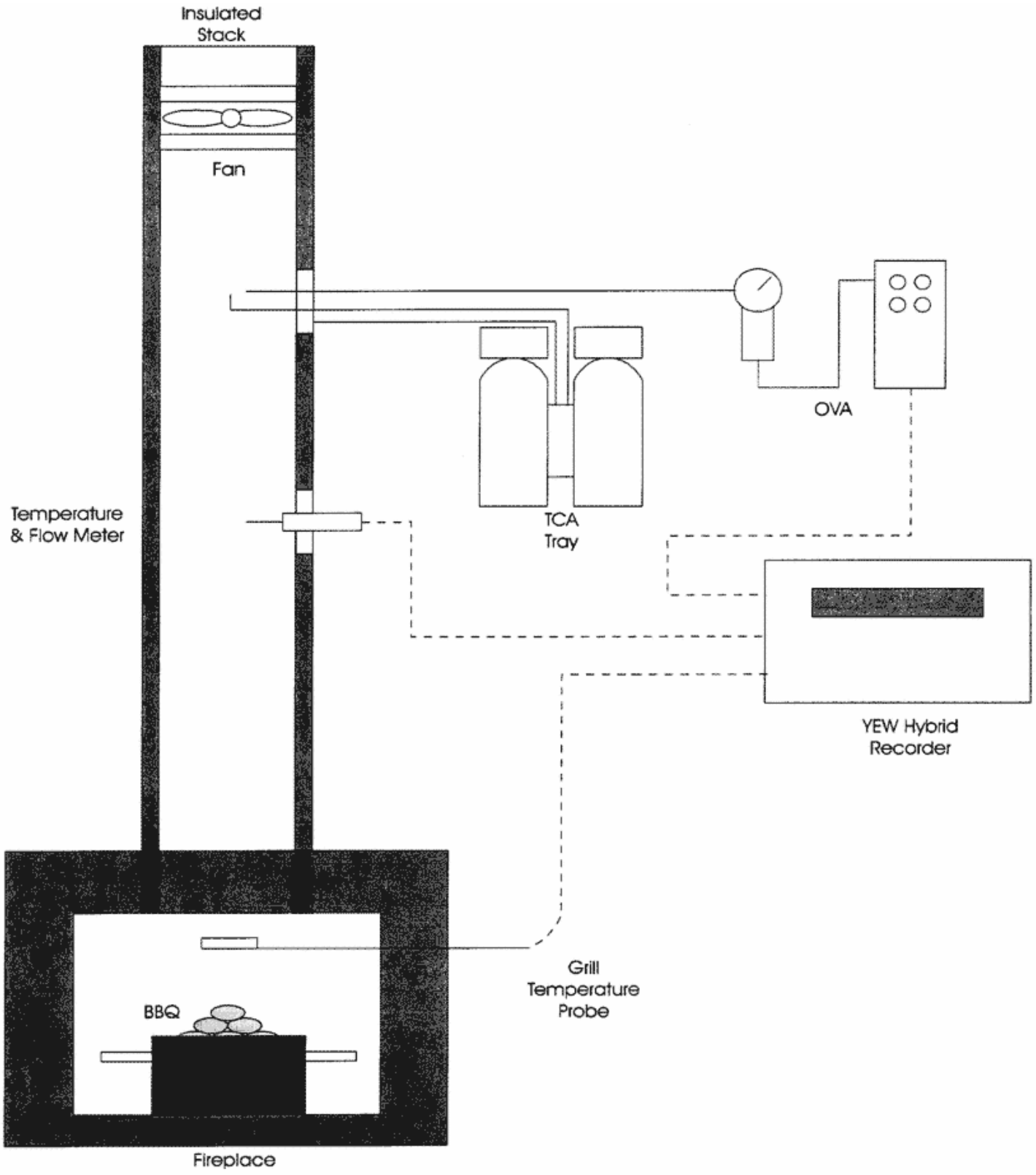
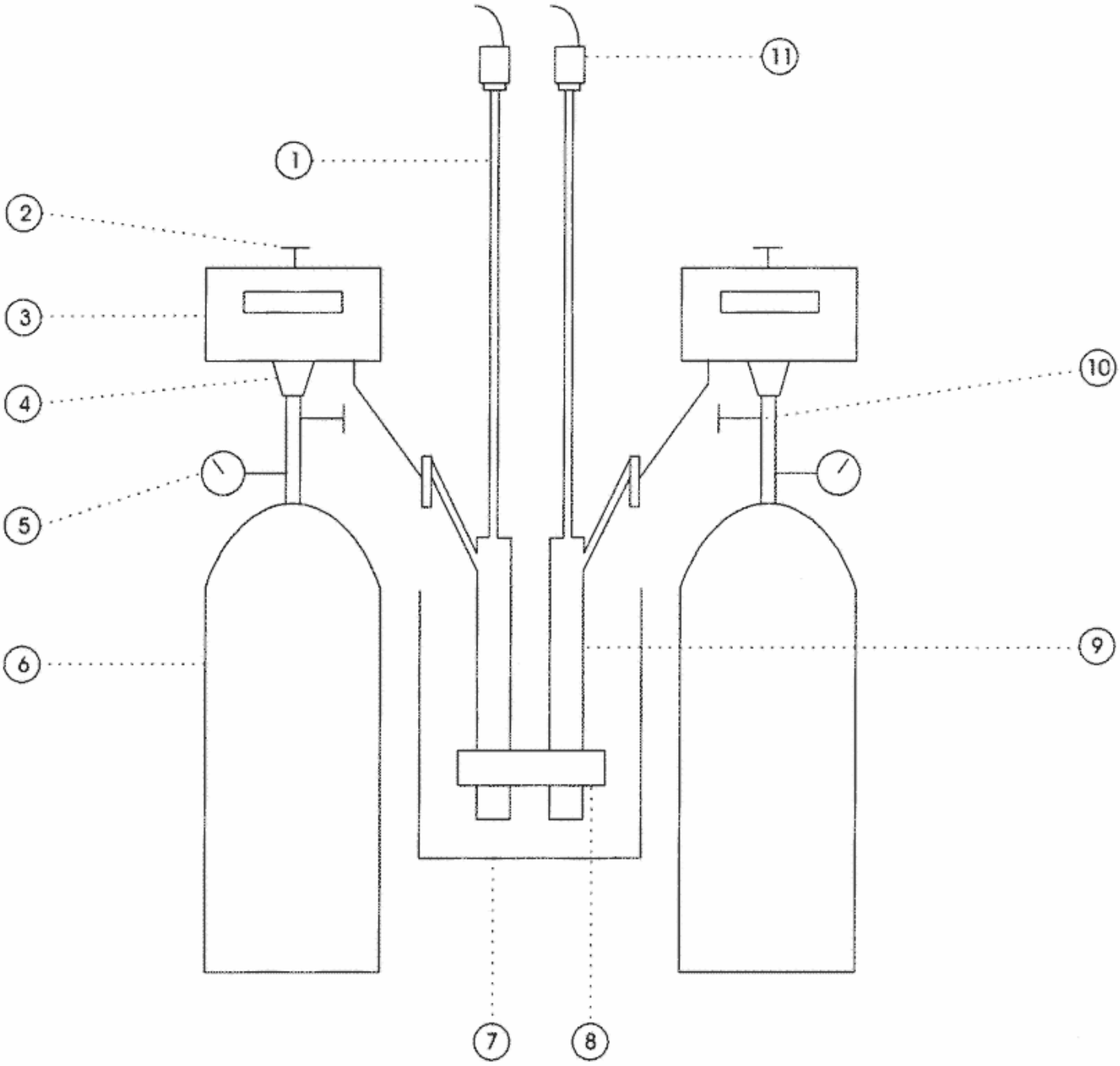


Figure 3. Sampling Apparatus Set-up with Chart Recorder



1. Sampling Probe
2. Flow Rate Control Valve
3. Minihelic Differential Pressure Gauge
4. Vacuum Regulator
5. Vacuum Gauge
6. Evacuated Tank
7. Condensate Trap Container
8. Heat Sink Trap
9. Condensate Trap
10. Sample Flow Valve
11. Two Micron Particulate Filter

Figure 4. Sampling Apparatus for Organics