



FALL 2021

Odor Mitigation Plan for HumboldtEast



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Introduction

EcoBuds, Inc., an industry leader in compliant odor mitigation plans (OMP) and systems for indoor agriculture, has been hired by HumboldtEast LLC to assess the cannabis cultivation and manufacturing facility and to design an effective odor control and mitigation plan for the proposed facility at 2 Norino Way, Georgetown, MA.

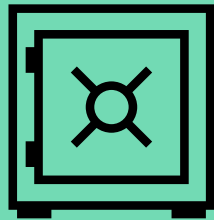
EcoBuds' specialized work combines the science of odor elimination with a practical, real-world understanding of industrial hygiene in order to design and implement systems that virtually eliminate the probability of any odor escape from agricultural facilities. This is achieved through the use of odor-containing construction strategies, EPA-regulated odor elimination agents (as opposed to just odor masking), fully optimized filtration, and proprietary technology, all while ensuring that the platform is safe for both employees and community residents.

EcoBuds has already designed robust odor control plans and systems for use in facilities throughout Massachusetts. These include sites located in Mashpee, Wareham, and Mansfield. The plans proposed for facilities within those communities have been fully approved and/or vetted by a certified industrial hygienist, MASS-DEP, and local Boards of Health and Planning. The proposed plan for the town of Georgetown is equally as robust and will provide the confidence and security, to both the Planning Board and abutters, that odor escape will not be an issue for the proposed Facility.

In this document, we discuss and clarify the challenges and optimal solutions to prevent and mitigate odor concerns that are often unfamiliar to non-industry personnel. The Odor Mitigation Plan and related discussion has been developed based on EcoBuds', and its platform partners', diverse background and technical expertise in biosecurity, technology, building design, agriculture, microbiology, engineering, econometrics, chemistry, and industrial safety. Additionally, the team brings substantial experience and familiarity with the regulatory framework from various municipalities, states, and federal entities like the EPA, FDA, CDC, USDA, as well as standards organizations like that of FOCUS, ASTM, ANSI, and ISO. This document should be viewed as supplemental to the technical plans and designs that HumboldtEast will provide to the Board.

5 Principles of Successful Odor Mitigation

Preventing odor is always preferred to other controls, such as masking. As such, odor containment, capture, and elimination prior to indoor air being exhausted from a facility should be the goal of any high-quality odor mitigation plan. Air dispersion techniques may also be employed so as to help avoid ground detection for what little remaining odor may occasionally exist. While most of the controls are physical in nature, reporting and legislative controls are equally important so as to maintain accountability and ensure cooperation between operators and municipalities .



Contain

Building design helps contain as much odor inside the facility as possible



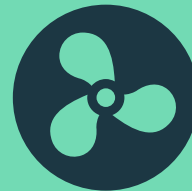
Eliminate

EPA-approved treatments eliminate odor by destroying the compounds that create odor; not just masking



Filter

Recirculated air is filtered by specialized media which traps odor and particulate matter



Avoid

Air is directed to exit a facility by way of a high plume fan or other structure to exhaust air away from ground



Inform

If odor escape is detected, a robust reporting and feedback system is in place between, public, city officials and operator

HumboldtEast's Odor Plan KPIs

HumboldtEast's commitment to "zero odor emissions" from the proposed Georgetown, MA facility includes numerous layers of redundant technology that, together, offer near failure-proof odor suppression. Few, if any, operators nationwide will be able to claim a more robust, redundant, and effective odor mitigation system. The Key Performance Indicators for ongoing success include:



01. No Detectible Odor Beyond Facility Border

Residents and nearby businesses should not be able to detect any odor drift from the proposed facility



02. Environmentally Safe

The techniques and products used to deodorize are EPA-registered and/or considered safe for employees, residents, and the environment



03. Highly Responsive

Will work closely with town officials and residents to further educate about cannabis production while assuring "rapid response" action to any reports of odor escape.

Plan Highlights

HumboldtEast will put in place proven layers of odor control technology to eliminate odor emissions resulting from cannabis cultivation and manufacturing located at 2 Norino Way. The system is being designed to treat the full volume of air throughout the facility prior to any exhausting taking place. The measures undertaken to achieve the intended results include:



01. Automated, At-Source Odor Elimination Using Chlorine Dioxide

Using EPA-approved and regulated chlorine dioxide (ClO₂), recirculated facility air will only be forcibly exhausted through ClO₂-emitting scrubbers prior to exit from the facility. This process eliminates 99.99% of cannabis odor through ClO₂'s oxidative capabilities. This is far superior to odor masking systems which are commonly used throughout the industry and do not actually eliminate odors but only cover them up.



02. Specialty Air Filtration & Circulation

Purafil® (or similar) recirculating air systems will be used to recirculate the full atmospheric volume of Humboldt East's facility up to 5 air exchanges per hour. Air filtration units have been selected that utilize special chemo-absorption media that, while similar to carbon filtration, is more efficient and effective at reducing cannabis odor in industrial settings. These are to be placed in line with the ductwork and connected to the HVAC system in order to ensure an extra layer of odor suppression.



03. Containment-focused Building Design

The Georgetown, MA facility will be a sealed structure. Spray foam insulation will be used to help "encapsulate" or provide a barrier between the inside of the facility and any possible routes of air escape. Also, all of the HVAC systems installed will be considered "closed-loop" systems. These design elements help to "contain" the air within the facility and to ensure it is directed through the filtration and ClO₂ treatment systems prior to being exhausted to the outside environment.

Plan Highlights

...continued



04. Workflow & Staff Training

HumboldtEast will require extensive and ongoing employee training that includes, specifically, best practices for odor mitigation such as the importance of keeping exterior doors shut, changing air filters on schedule, and requiring compliance with all standard operating procedures (SOPs). Workflow procedures are being designed to specifically address reducing the chance of untreated air escaping the facility. These include limiting points of ingress and egress, minimizing the number of deliveries that require loading dock access, and other steps designed to keep the facility as sealed as possible.



05. Recurring Filter Exchange

HumboldtEast intends to participate in a filter subscription service that helps to facilitate the consistent, on-time procurement and changing of all air filters in accordance with the manufacturer's recommendations. This ensures that the filtration aspect of the plan is working properly at all times.



06. Monitoring & Inspection

While HumboldtEast staff will be trained to notice any odor escaping beyond an acceptable boundary of the facility, odor mitigation system technicians will be inspecting the system no less frequently than every 60 days to ensure its ongoing proper operation for odor elimination. Air filters will be changed according to the manufacturer's recommendations and delivered via a subscription plan to ensure consistent exchange. ClO₂ will be delivered onsite via a recurring subscription plan, at least every 60 days, to ensure continuous operation and avoid any system interruptions due to human error.

Plan Summary

HumboldtEast has gone to great lengths and expense to create a thorough odor mitigation plan, one that is primarily focused upon the best interests of the town's residents, nearby businesses, and HumboldtEast's own employees. Humboldt East is committed to completely and consistently suppressing odors associated with cannabis production at its proposed **Georgetown, MA** facility.

The design of the odor suppression system to be used by HumboldtEast relies upon both primary and secondary suppression techniques that, together, intend to deliver "near 100%" odor elimination. This expected result is achieved by way of:

- i) the facility design itself, constructed to contain odor and reduce the possibility of unwanted air escape;
- ii) the EPA-registered deodorizers and disinfectants that destroy, trap, and filter odor; and
- iii) the mechanical systems employed to move and filter air;
- iv) controlled venting and exhausting that moves treated air up and away from ground level; and
- v) a robust and transparent reporting system between the city, residents, and HumboldtEast in the case of any unexpected odor problems

These measures all act together to significantly reduce the probability of any detectable odor beyond the facility boundary. In the unlikely event of a system failure or unforeseen circumstance that leads to a detectable odor coming from the facility, the plan contemplates a reporting and communication strategy to be developed between HumboldtEast and town officials to ensure rapid response and resolution.

Odor-emitting activities shall be constrained to within the superstructure of the facility and all technologies used to mitigate odors shall be within the guidelines for safe manufacturing and are to be approved for use by regulatory authorities such as the EPA, MASS-DEP, OSHA, and other health and safety authorities.

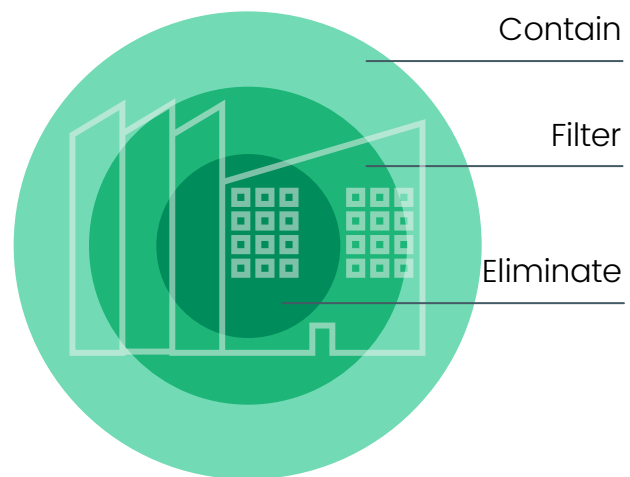
As such, HumboldtEast has retained EcoBuds, Inc., and its platform partners, to provide this Odor Mitigation Plan and to design, install, and maintain the solution(s) that will provide to Humboldt East and the residents of Georgetown, MA, a comprehensive solution that consistently suppresses odors relating to the production of cannabis.

Plan Details

LOCATION: The proposed facility is located at 2 Norino Way, Georgetown, MA, and is owned and operated by HumboldtEast.

1. System Design

EcoBuds and its alliance partners, which include global leaders in deodorization and disinfection, will install a facility-wide, odor suppression system that includes: i) building design choices intended to help to contain odor, ii) air recirculation and filtration units for trapping odors, and iii) a patented dual-phase Chlorine Dioxide (ClO₂) system for successful elimination of cannabis' terpene-generated Volatile Organic Compounds (VOC's).



CONTAINMENT: The plan/facility is designed with the following odor containment characteristics:

Sealed structure – The primary strategy employed for odor control of the facility is the design of the building itself and insulated air-sealed rooms. By operating a closed and sealed facility, and within sealed pod-style rooms, there is very little exchange of air from inside the facility, mitigating the vast majority of odors from escaping the facility. The facility is heavily modernized, conforming to higher than average standards, and utilizes the best of class methods to increase energy efficiencies, increase noise reduction, and enhance odor containment.

Closed-cell spray foam – For the purposes of biosecurity and odor mitigation, spray foam is inert and not subject to decay, and is mold and bacteria resistant. In addition, closed-cell foam creates a "true-conditioned space" and "air-seals" the interior "envelope" of the superstructure, thereby preventing air exchanges and odors from escaping outside the building.

Odor Plan Details

System Design, con't

Closed-loop HVAC - All of the HVAC systems installed at the facility will be considered “closed-loop” systems. The HVAC equipment, along with Purafil recirculation units, will recirculate the air throughout the facility up to 5 times per hour.

FILTRATION: The plan/facility is designed with the following odor filtration characteristics:

PuraShieldTM Smart - The HVAC system and in-line ductwork will be constructed to both maximize the number of air exchanges per hour as well as to force the air through Purafils class-leading chemo-absorption filters which are designed to trap odors more efficiently than even carbon filtration.

The Purafil Smart line air filtration systems media (OdorMax) uses a proprietary blend designed for indoor grow house odor removal and uses a chemisorption process to chemically transform unwanted odorous gases into inert solids that are then trapped inside the media

This process removes the odor from the air and, unlike activated carbon, is rated to withstand a continuous operating temperature of up to 125°F, with bi-annual media exchanges to ensure the life and efficacy of adsorption (odor suppression).

ELIMINATION: The plan/facility is designed with the following odor elimination characteristics:

Chlorine Dioxide (ClO₂) Scrubbing - While Containment is designed to keep interior air from escaping the facility and Filtration is designed to repeatedly filter as much of the odor as possible as it cycles through the facility, the ClO₂ scrubbers work to Eliminate cannabis odor in the air through the process of oxidation. This is a reactive process whereby the chlorine dioxide breaks apart the odor-causing Volatile Organic Compounds (VOCs) while leaving no trace of any toxic chemicals behind.

Odor Plan Details

System Design, con't

The air scrubbing is the final stage prior to the air being exhausted through a high-plume fan, thus allowing odor-free air to exhaust to the outside. The EcoBuds air scrubbing system is based on existing technologies and logistics already in use in the "food ag" industry.

A truck with specialized equipment arrives on-site (approximately every 60 days) and fills and recharges a special "smart" tank with liquid chlorine dioxide. The refilling process is a lossless system and has zero waste, restoring the ClO₂ concentration to full capacity.

The smart tank uses a variety of inline and in-tank sensors to measure the parts per million (PPM) of the ClO₂, and a feedback loop is established with other sensors to ensure the proper pH and concentration of the ClO₂ is always "correct" in order to maximize odor suppression. Pumps drive the prescribed concentration of ClO₂ to the plumbed systems (inline scrubbers, sprayers, emitters). The pumps that deliver the ClO₂ are operated by "if this, then that" and timed programming methods.

AVOID: The plan/facility is designed with the following odor avoidance characteristics:

High Plume Fan - HumboldtEast is exercising the Avoidance principle in the design of the building and its environmental control systems, especially through the use of a high-plume fan. It acts in a similar fashion to a fireplace at one's home. The high plume will heat the air exhaust to a temperature higher than the surrounding environment and create what is called the "chimney effect." This effect, coupled with the height of the building, theoretically propels the exhaust up high and away from any possible ground detection.

Odor Plan Details

System Design, con't

INFORM: The plan/facility is designed with the following reporting, communication, and cooperative characteristics:

Detected Odor "Rapid Response" Plan- An odor caused by the release of an air contaminant is considered air pollution and a violation of the local ordinance if the MassDEP or local regulatory authority determines that the odor has unreasonably interfered with the enjoyment of life or property.

If problems arise, as they occasionally may, it's important to be able to have a communication loop in place to address those concerns in order to fix them. As such, the most important part of an odor mitigation plan is to provide a way for residents, abutting businesses, and town officials to communicate odor detection concerns to Humboldt East who can react to rapidly fix the issue.

HumboldtEast and key townstakeholders will create a "Rapid Response" plan that outlines the chain of custody for complaints in the event of a concern about odor escaping the facility. The point of contact for these Rapid Response plans is generally available to the public through the local city government website or telephone "hotline." All complaints received, whether by telephone, letter, or through the MassDEP of Environmental Protect or local authorities will be immediately forwarded to the General Manager or his/her designee for review.

2. Odor Mitigation Treatment Frequency

Odor mitigation-related activities will occur on a virtually constant basis with little to no employee interaction required. The system of building design elements, air recirculation, and filtration, and ClO₂ air scrubbing will occur every day and does not require employees to perform any activities specific to odor suppression. This removes human error from the equation and assures that regardless of the odor-causing activities being undertaken within the facility, that the system is always operating to mitigate such odors from escaping the facility prior to treatment.

Odor Plan Details

3. Administrative Controls

Staff training procedures - The Director of Cultivation, Agent-in-Charge, and/or General Manager shall be responsible for day-to-day activities and management of all facility activities, including any SOPs associated with the Odor Mitigation Plan (OMP). The execution of the OMP is under the responsibilities and management of these person(s).

The remaining staff shall be trained on the use of facilities engineering controls. The controls include, but are not limited to, the ventilation of the facility, temperature controls, filtration units (and filter exchanges), and disinfection/deodorization systems.

Staff shall be trained within fifteen (15) days of employment on the safety, recognition, and handling of procedures, processes, and technologies involved with the OMP-related systems. Additional training shall be conducted to attest and record the employee's knowledge and understanding of the respective technologies, methodologies, and systems of the plan, no less than annually, or as otherwise indicated by corporate policy. Training may be conducted in person or via digital learning platforms or a combination thereof so long as course completion and testing occur.

Recordkeeping systems and forms - Staff, at the direction of the Director of Cultivation, Agent-in-Charge, and/or General Manager, shall utilize Cleaning Logs and other records-oriented procedures to detail when and by whom certain tasks are completed. Odor mitigation-related equipment shall be serviced and maintained by EcoBuds and its platform partners, according to any service agreements between the parties. Tasks such as filter exchanges will be performed by staff at regularly scheduled intervals as per filtration equipment manufacturers' guidelines.

Odor Plan Details

4. Engineering Controls

Venting - The ventilation of this site is exercised through a rooftop mounted high plume fan located on the roof for the purpose of temperature regulation. Based on the construction of this site, the exhaust vent is approximately forty (40') feet above ground level. Additional odor suppression technologies on-site, such as filtration (odor-trapping) and at source elimination (ClO₂ air-scrubbing) manage and eliminate odors prior to venting.

"At-source" Air Deodorization - Chlorine dioxide, an oxidizer, has been shown to cause the rapid and complete chemical destruction of many Volatile Organic Compounds in addition to unwanted pathogens (mold, viruses, bacteria, etc). In general, oxidants such as ClO₂ have been capable of achieving high treatment efficiencies (e.g., > 90 percent) for unsaturated aliphatic (e.g., trichloroethylene [TCE]) and aromatic compounds (e.g., benzene), with very fast reaction rates (90 percent destruction in minutes). Field applications have clearly affirmed that matching the oxidant and in situ delivery system to the contaminants of concern (COCs) and the site conditions is the key to successful implementation and achieving performance goals for odor mitigation. Since the automated odor and disinfection system to be installed at the HumboldtEast Georgetown, MA facility is designed and implemented within a sealed facility and using active ClO₂ scrubbing technology, odor mitigation is occurring at the source of the odor at all times.

Chlorine Dioxide - The chlorine dioxide used in the platform is both EPA-registered and FDA-compliant. By deploying a sophisticated ClO₂ system, the Georgetown, MA facility can be effectively and safely treated for reducing or eliminating odor. A benefit of the EcoBuds platform is that it significantly reduces and in most cases eliminates, the time and expense of manual treatment and reduces risks such as unnecessary employee exposure to chemicals or human error which leads to subpar and inconsistent results.

ClO₂ is always an optimal choice for odor reduction because it reacts more rapidly and completely than many other available oxidizers. As such and unlike most oxidants, chlorine dioxide's efficacy remains consistent within a broad range of pH. This allows it to oxidize (reduce) odor-causing compounds, such as organic vapors, in virtually all environmental conditions.

Odor Plan Details

4. Engineering Controls, con't

CIO₂ is also unique in its operation. Due to its extremely small molecular size and its course of action, CIO₂ neutralizes certain organic molecules on contact. Since CIO₂ is also most effective in the absence of light, treatment applications may be optimized within “dark” environments (e.g., HVAC, ductwork, etc.). Upon the reintroduction of light, CIO₂ breaks down, taking the remnants of the destroyed odor molecule with it, leaving no toxic residues to negatively impact regulatory testing, building materials, or employee health.

CIO₂ is water-soluble true-gas. Essentially, what that means is that it always remains a gas, but can be put in water at a wide variety of concentrations without actually mixing with the H₂O molecule. They remain separate. The solution of CIO₂ remains in water until agitated or no longer contained. The molecule(CIO₂) remains in the physical state of matter, gas. As such, the gas can only be held together if contained (or by gravitational force). Gases have measurable properties: temperature (T), volume (V), and a number of particles, which is expressed in a mole number (n or mol). This measurement allows one to very precisely and mathematically “treat” the whole volume of a given space.

CIO₂ mode of action, whether for deodorization or disinfection, is that it oxidizes volatile organic compounds, size-specific mold, bacteria, and viruses (sans your skin, or plant cells and trichomes). Oxidation is the process in which an electron is taken away from a molecule. Taking away electrons disrupts important cellular structures of microbes (like a cell wall) and VOCs.

Operational Processes – Operational processes are virtually all fully automated and most are monitored in real-time to ensure 100% uptime and efficacy. Air recirculation and filtration and “at source” deodorization with chlorine dioxide occur daily and without employee intervention.

Maintenance Plan – Maintenance of the systems shall be routine and scheduled in accordance with manufacturers' recommendations, regulatory requirements, or performed periodically by third-party partners and technicians. All maintenance performed shall be documented in detail and retained in a centralized repository or “Maintenance Log.”

About EcoBuds, Inc.

EcoBuds was founded by a team of renowned risk management leaders with the help of disinfection experts, pathogen scientists, and even a few data geeks. We combine irrefutable science, leading tech, unified standards, custom facility design, analytics, economic modeling, and efficacy validation to deliver truly assured cultivation that eliminates the worry about disease and unwanted odor.

The EcoBuds mission is simple: to provide the most scientifically valid, repeatable, consistent, and assured disinfection, deodorization, and biosecurity solutions to our clients. Our mission provides:

- **CULTIVATORS** compliant growing conditions that virtually eliminate odor and failed regulatory tests for disease;
- **OPERATORS** increased profitability through yield increases, expense reduction, and risk mitigation;
- **EMPLOYEES** and **GUESTS** healthier facilities and working conditions; and
- **CONSUMERS** healthier, safer, and more enjoyable products.

The **EcoBuds** platform, which includes globally recognized partners, regulatory advocates, and class-leading tools and technology, suppresses pathogens and odor using a fundamental and specific understanding of how each uniquely proliferates in cultivation, agriculture, and commercial environments, especially indoors. Inspired by the scientific method, **EcoBuds'** results are repeatedly tested and verified using the latest protocols of monitoring, measurement, and evaluation.

The health and well-being of our clients' products, facilities, employees, and customers shouldn't be left to guesswork, hope, or "not quite applicable" case studies. Instead, **EcoBuds** relies upon evidence-based science and methods that work in the real world...every time.

Contact

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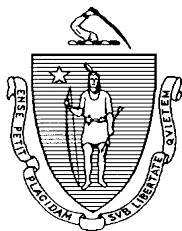
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Appendix

**The following represent supporting documentation for
the operator and municipality in reference to
jurisdiction-specific air quality assessment**

Appendix

**The following represent supporting documentation for
the operator and municipality in reference to
jurisdiction-specific air quality assessment**



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292 -5500

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

**Guidance for Adopting Municipal Regulations to Control
Air Pollution under M.G.L. chapter 111, section 31C**

A city or town, through its Board of Health or other legal authority (referred to in this fact sheet as "Board of Health"), has the authority to enact "reasonable" rules and regulations to control air pollution, pursuant to Massachusetts General Laws Chapter 111, Section 31C (Section 31C). These regulations are enforceable only after they are approved by the Massachusetts Department of Environmental Protection (MassDEP) and printed in a newspaper published in the city or town (if there is no newspaper published in the city or town, the regulation must be posted in a public place).

Boards of Health may enact regulations to control air pollution if the regulation serves to prevent:

1. Nuisance to members of the town;
2. Danger to the public health of the town; or
3. Detriment to public comfort and convenience in the town.

According to Section 31C "air pollution" includes (but is not limited to) the emission of smoke, particulate matter, soot, cinders, ashes, toxic and radioactive substances, fumes, vapors, gases, industrial odors, and dusts that may arise within the town's boundaries and are a nuisance, danger, or detriment.

Procedural Requirements of Section 31C

Before sending a regulation or an amendment of a previously approved regulation to MassDEP for approval, the Board of Health must hold a public hearing to give the public an opportunity to comment on the regulation. The date, time, place and subject of the hearing must be printed in a newspaper published in the city or town, or if there is no newspaper published in the city or town, the notice of the hearing must be posted in a public place within the city or town. The text of the regulation or amended regulation does not have to be published in the newspaper before the hearing, but it should be made available to the public at or before the hearing.

The notice must be published in the newspaper twice, in two successive weeks before the hearing, as follows:

- The first notice must be published at least two weeks (14 days) before the hearing; and
- The second notice must be published sometime during the week immediately following the week of the first publication. For example, if a hearing is scheduled to be held on June 15, the first notice should be published by June 1, and the second notice must be published during the week of June 8, 2009.



After the hearing, if the Board of Health approves the regulation or amended regulation, the regulation must then be approved by MassDEP. To obtain MassDEP's approval, the Board of Health must submit the following information:

1. A letter requesting approval of the regulations;
2. One copy of the regulation; and
3. Copies of the two public hearing notices that were published or posted (please make sure the copies show the date on which the notices were published).

This information must be submitted to Assistant Commissioner, Bureau of Waste Prevention, MassDEP, One Winter Street, Boston, MA 02108

MassDEP will inform the Board of Health in writing whether the agency approves or disapproves the regulation.

If MassDEP approves the regulation, the Board of Health must print a copy of it in a newspaper published in the city or town to give the regulation the force of law¹.

Substantive Requirements of Section 31C

Regulations adopted by cities and towns pursuant to Section 31C must be "reasonable." Although there is no specific definition of "reasonable" in the statute, these regulations should be clear, concise and not conflict with existing laws and regulations.

Section 31C contains a penalty provision that should be included in the regulation either in its entirety or by reference:

Whoever violates any order, rule or regulation promulgated or adopted under the provisions of this section shall be punished, for the first offense, by a fine of not less than one thousand nor more than five thousand dollars and for a subsequent offense, by a fine of not less than five thousand nor more than ten thousand dollars. For the purpose of this paragraph each day or part thereof of violation of such an order, rule or regulation whether such violation be continuous or intermittent, shall be construed as a separate and succeeding offense.

Regulations adopted by the Board of Health can include limits, bans and/or moratoriums on certain activities that produce air pollution (e.g. outdoor wood fired boilers). The regulation must be at least as stringent as any applicable state or federal law or regulation.

Local Regulations Adopted Pursuant to M.G.L. Chapter 111, Section 31

Boards of Health also have the authority to "make reasonable health regulations" pursuant to M.G.L. Chapter 111, Section 31. Regulations adopted under Section 31 do not have to be approved by MassDEP, but this section of the statute requires that "attested copies of sanitary codes, and all rules, regulations and standards, and any amendments and additions thereto" must be filed with MassDEP (Please send them to: Assistant Commissioner, Bureau of Waste Prevention, MassDEP, One Winter Street, Boston, MA 02108).

¹ If no newspaper is published in the city or town, a copy of the regulation must be posted in a public place in the city or town.

An air pollution regulation may be adopted pursuant to both Section 31 and Section 31C, but the procedural and substantive requirements of Section 31C must be followed in order to give the air pollution regulation the force of law.

For More Information

- MassDEP encourages Boards of Health to consult with their Town Counsel on the procedural and substantive requirements for adopting air regulations under Section 31C, and to consult with other cities/towns to develop a consistent approach for regulating air pollution.
- Contact Marc Cohen in MassDEP's Bureau of Waste Prevention (email: marc.cohen@state.ma.us or telephone: 617/292-5873), with questions about the requirements of Section 31C.

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 7.00 AIR POLLUTION CONTROL REGULATIONS

**310 CMR 7.25 U BEST AVAILABLE CONTROLS FOR CONSUMER AND
COMMERCIAL PRODUCTS**

7.25: U Best Available Controls for Consumer and Commercial Products

(1) Purpose. 310 CMR 7.25 applies to and sets forth requirements for the control of volatile organic compound emissions from the use of consumer and commercial products as defined in Title I Part D Subpart 2 Section 183(e)(1)(B) of the federal Clean Air Act.

[(2) through (10): Reserved]

(11) Architectural and Industrial Maintenance (AIM) Coatings.

(a) Applicability.

1. Except as provided in 310 CMR 7.25(11)(a)2., the requirements of 310 CMR 7.25(11) apply to any person who, on or after January 1, 2009, supplies, sells, offers for sale, blends for sale, or manufactures any architectural coating listed in 310 CMR 7.25(11)(b) for use within Massachusetts, as well as any person who applies or solicits the application of any architectural coating within Massachusetts.
2. The provisions of 310 CMR 7.25(11) do not apply to any person who supplies, sells, offers for sale, blends for sale, or manufactures any architectural coating that is for exclusive use outside of Massachusetts.

(b) Definitions. Terms used in 310 CMR 7.25 are defined at 310 CMR 7.00: *Definitions* or in 310 CMR 7.25. Where a term is defined in both 310 CMR 7.00: *Definitions* and in 310 CMR 7.25, the definition in 310 CMR 7.25 shall apply.

AEROSOL COATING PRODUCT means an aerosol coating product containing pigments or resins that is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marketing applications.

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

ANTIFOULING COATING means a coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the U.S. EPA under the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. § 136 *et seq.*) and with the under the Massachusetts Pesticide Control Act.

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

ARCHITECTURAL COATING means a coating to be applied to stationary structures or the appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to nonstationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purposes of 310 CMR 7.25.

ASTM means the American Society for Testing and Materials.

BAAQMD means Bay Area Air Quality Management District of the State of California.

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

BITUMINOUS ROOF COATING means a coating that incorporates bitumens that is labeled and formulated exclusively for roofing.

BITUMINOUS ROOF PRIMER means a primer that incorporates bitumens that is labeled and formulated exclusively for roofing.

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

CALCIMINE RECOATER means a flat solvent-borne coating formulated and recommended specifically for recoating calcimine-painted ceilings and other calcimine-painted substrates.

CARB means the California Air Resources Board.

CLEAR BRUSHING LACQUERS means clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without

chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush and which are labeled as specified in 310 CMR 7.25(11)(d)3.

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

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

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

CONCRETE CURING COMPOUND means a coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water.

CONCRETE SURFACE RETARDER means a mixture of retarding ingredients such as extender pigments, primary pigments, resin, and solvent that interact chemically with the cement to prevent hardening on the surface where the retarder is applied, allowing the retarded mix of cement and sand at the surface to be washed away to create an exposed aggregate finish.

CONSUMER means any person who purchases or acquires any product for personal, family, household, or institutional use. Persons acquiring a product for resale are not consumers for that product.

CONVERSION VARNISH means a clear acid curing coating with an alkyd or other resin blended with amino resins and supplied as a single component or two-component product. Conversion varnishes produce a hard, durable, clear finish designed for professional application to wood flooring. The film formation is the result of an acid-catalyzed condensation reaction, affecting a transesterification at the reactive ethers of the amino resins.

DATE-CODE means the day, month and year on which the product was manufactured, filled, or packaged, or a code indicating such a date.

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

EXEMPT COMPOUND a compound identified as exempt under the definition of Volatile Organic Compound (VOC), under 310 CMR 7.25(11)(b). Exempt compounds content of a coating shall be determined by U.S. EPA Method 24 or South Coast Air Quality Management District (SCAQMD) Method 303-91 (Revised August 1996).

FAUX FINISHING COATING means a coating labeled and formulated as a stain or a glaze to create artistic effects including, but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain.

FIRE-RESISTIVE COATING means an opaque coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been fire tested and rated by a testing agency and approved by building code officials for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements. The fire-resistive coating and the testing agency shall have been approved by building code officials. The fire-resistive coating shall be tested in accordance with ASTM Designation E 119-98.

FIRE-RETARDANT COATING means a coating labeled and formulated to retard ignition and flame spread, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state, and local building code requirements. Building code officials shall have been approved the fire-retardant coating and the testing agency. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-99.

FLAT COATING means a coating that is not defined under any other definition in 310 CMR 7.25 and that registers gloss less than 15 on an 85° meter or less than five on a 60° meter according to ASTM Designation D 523-89 (1999).

FLOOR COATING means an opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces that may be subjected to foot traffic.

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

HIGH-TEMPERATURE COATING means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C.

IMPACTED IMMERSION COATING means a high performance maintenance coating formulated and recommended for application to steel structures subject to immersion in turbulent, debris-laden water. These coatings are specifically resistant to high-energy impact damage caused by floating ice or debris.

INDUSTRIAL MAINTENANCE COATING means high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates exposed to one or more of the following extreme environmental conditions listed in a. through e., and labeled as specified in 310 CMR 7.25(11)(d)2.:

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

- (b) Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
- (c) Repeated exposure to temperatures above 121/C (250/F);
- (d) Repeated heavy abrasion, including mechanical wear and frequently repeated scrubbing with industrial solvents, cleansers, or scouring agents; or
- (e) Exterior exposure of metal structures and structural components.

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

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

LOW-SOLIDS COATING means a coating containing 0.12 kilogram or less of solids per liter (one pound or less of solids per gallon) of coating material.

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 sold exclusively to establishments that manufacture or construct goods or commodities, and labeled not for retail sale.

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

MANUFACTURER means any person who manufactures, processes, imports, assembles, produces, packages, repackages, or re-labels a product.

MANUFACTURERS MAXIMUM RECOMMENDATION means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

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

METALLIC PIGMENTED COATING means a coating containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon) when tested in accordance with SCAQMD Method 318-95.

MULTI-COLOR COATING means a coating that is packaged in a single container and that exhibits more than one color when applied in a single coat.

NON-FLAT HIGH GLOSS COATING means a non-flat coating that registers a gloss of 70 or above on a 60° meter according to ASTM Designation D 523-89 (1999).

NON-FLAT COATING means a coating that is not defined under any other definition in 310 CMR 7.25(11)(b) and that registers a gloss of 15 or greater on an 85° meter and five or greater on a 60° meter according to ASTM Designation D 523-89 (1999).

NON-INDUSTRIAL USE means any use of architectural coatings except in the construction or maintenance of any of the following: facilities used in the manufacturing of goods and commodities; transportation infrastructure, including highways, bridges, airports and railroads; facilities used in mining activities, including petroleum extraction; and utilities infrastructure, including power generation and distribution, and water treatment and distribution systems.

NUCLEAR COATING means a protective coating formulated and recommended to seal porous surfaces such as steel or concrete that otherwise would be subject to intrusion by radioactive materials. These coatings must be resistant to long-term, *e.g.*, service life, cumulative radiation exposure (tested according to ASTM Method D 4082-89, *Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants*), relatively easy to decontaminate, and resistant to various chemicals to which the coatings are likely to be exposed (Tested according to ASTM Method D 3912-80, Reapproved 1989, *Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants*).

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” does not include any substance, mixture of substances, or device that the U.S. EPA does not consider to be a pesticide.

POST-CONSUMER COATING means a finished coating that would have been disposed of as waste, having completed its usefulness to a consumer, and does not include manufacturing wastes.

PRE-TREATMENT WASH PRIMER means a primer that contains a minimum of 0.5% acid, by weight, when tested in accordance with ASTM Designation D 1613-96, and that is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

PRIMER means a coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.

QUICK-DRY ENAMEL means non-flat coating that is labeled as specified in 310 CMR 7.25(11)(d)6. and that is formulated to have the following characteristics:

- (a) Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16/C and 27/C;
- (b) When tested in accordance with ASTM Designation D 1640-95, sets to touch in two hours or less, is tack free in four hours or less, and dries hard in eight hours or less by the mechanical test method; and
- (c) Has a dried film gloss of 70 or above on a 60° meter.

QUICK-DRY PRIMER SEALER AND UNDERCOATER mean a primer, sealer, or undercoater that is dry to the touch in 30 minutes and can be re-coated in two hours when tested in accordance with ASTM Designation D 1640-95.

RECYCLED COATING means an architectural coating formulated such that 50% or more of the total weight consists of secondary and post-consumer coating, with 10% or more of the total weight consisting of post-consumer coating.

RESIDENCE means areas where people reside or lodge, including, but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.

ROOF COATING means a non-bituminous coating labeled and formulated exclusively for application to roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation. Metallic pigmented roof coatings, which qualify as metallic pigmented coatings, shall not be considered in this category, but shall be considered to be in the Metallic Pigmented Coatings category.

RUST PREVENTIVE COATING means a coating formulated exclusively for non-industrial use to prevent the corrosion of metal surfaces and labeled as specified in 310 CMR 7.25(11)(d)4.

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

SCAQMD means South Coast Air Quality Management District of the State of California.

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

SECONDARY COATING (REWORK) means a fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.

SHELLAC means a clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*Lacifer lacca*), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.

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

SOLICIT means to require for use or to specify, by written or oral contract.

SPECIALTY PRIMER, SEALER, AND UNDERCOATER means a coating that is formulated for application to a substrate to seal fire, smoke or water damage; to condition excessively chalky surfaces; or to block stains. An excessively chalky surface is one that is defined as having a chalk rating of four or less as determined by ASTM Designation D 4214-98.

STAIN means a clear, semi-transparent, or opaque coating labeled and formulated to change the color of a surface, but not conceal the grain pattern or texture.

SWIMMING POOL COATING means a coating labeled and formulated to coat the interior of swimming pools and to resist the adverse effects of chemicals in swimming pool water.

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

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

THERMOPLASTIC RUBBER COATING AND MASTIC means a coating or mastic formulated and recommended for application to roofing or other structural surfaces and that incorporates no less than 40% by weight of thermoplastic rubbers in the total resin solids and may also contain other ingredients including, but not limited to, fillers, pigments, and modifying resins.

TINT BASE means an architectural coating to which colorant is added after packaging in sale units to produce a desired color.

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

UNDERCOATER means a coating labeled and formulated to provide a smooth surface for subsequent coatings.

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

VOC CONTENT means the weight of VOC per volume of coating, calculated according to the procedures specified in 310 CMR 7.25(11)(f)1.

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

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

WOOD PRESERVATIVE means a coating labeled and formulated to protect exposed wood from decay or insect attack that is registered with both the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. § 136, *et seq.*) and with the Massachusetts Pesticide Control Act.

(c) Standards.

1. VOC Content Limits. Except as provided in 310 CMR 7.25(11)(c)2. Through 310 CMR 7.25(11)(c)4., 310 CMR 7.25(11)(c)6., and 310 CMR 7.25(11)(c)7., no person subject to 310 CMR 7.25 shall:
 - a. manufacture or blend for sale within Massachusetts;
 - b. supply, sell, or offer for sale within Massachusetts; or
 - c. solicit for application or apply within Massachusetts any architectural coating with a VOC content in excess of the corresponding limit specified in 310 CMR 7.25(11)(c)1.: *Table 1*.

**Table 1. VOC Content Limits for Architectural And Industrial Maintenance Coatings
Effective January 1, 2009**

Coating Category	VOC Content Limit (grams/liter)
Flat Coatings	100
Non-flat Coatings	150
Non-flat High Gloss Coatings	250
SPECIALTY COATINGS	
Antenna Coatings	530
Antifouling Coatings	400

Bituminous Roof Coatings	300
Bituminous Roof Primers	350
Bond Breakers	350
Calcimine Recoater	475
Clear Wood Coatings;	
Clear Brushing Lacquers	680
Lacquers (including lacquer sanding sealers)	550
Sanding Sealers (other than lacquer sanding sealers)	350
Varnishes	350
Conversion Varnishes	725
Concrete Curing Compounds	350
Concrete Surface Retarders	780
Dry Fog Coatings	400
Faux Finishing Coatings	350
Fire Resistive Coatings	350
Fire Retardant Coatings	
Clear	650
Opaque	350
Floor Coatings	250
Flow Coatings	420
Form release Compounds	250
Graphic Arts Coatings (Sign Paints)	500
High Temperature Coatings	420
Impacted Immersion Coatings	780
Industrial Maintenance Coatings	340
Low solids Coatings	120
Magnesite Cement Coatings	450
Mastic Texture Coatings	300
Metallic Pigmented Coatings	500
Multi-color Coatings	250
Nuclear Coatings	450
Pre Treatment Wash Primers	420
Primers, Sealers, and Undercoaters	200
Quick Dry Enamels	250
Quick Dry Primers, Sealers and Undercoaters	200
Recycled Coatings	250
Roof Coatings	250
Rust Preventative Coatings	400
Shellacs	
Clear	730
Opaque	550
Specialty Primers, Sealers, and Undercoaters	350
Stains	250
Swimming Pool Coatings	340

Swimming Pool Repair and Maintenance Coatings	340
Temperature indicator Safety Coatings	550
Thermoplastic Rubber Coatings and Mastics	550
Traffic Marking Coatings	150
Waterproofing Sealers	250
Waterproofing Concrete/Masonry Sealers	400
Wood Preservatives	350

Limits are expressed in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases.

2. Most Restrictive VOC Limit. If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on its behalf, any representation is made that indicates that the coating meets the definition of, or is recommended for use, for more than one of the coating categories specified in 310 CMR 7.25(11)(c)1., then the lowest VOC content limit shall apply. 310 CMR 7.25(11)(c)2. does not apply to the following coating categories:
 - a. Lacquer coatings (including lacquer sanding sealers).
 - b. Metallic pigmented coatings.
 - c. Shellacs.
 - d. Fire-retardant coatings.
 - e. Pretreatment wash primers.
 - f. Industrial maintenance coatings.
 - g. Low-solids coatings.
 - h. Wood preservatives.
 - i. High-temperature coatings.
 - j. Temperature-indicator safety coatings.
 - k. Antenna coatings.
 - l. Antifouling coatings.
 - m. Flow coatings.
 - n. Bituminous roof primers.
 - o. Specialty primers, sealers, and undercoaters.
 - p. Calcimine recoaters.
 - q. Concrete surface retarders.
 - r. Conversion varnishes.
 - s. Impacted Immersion Coatings.
 - t. Nuclear coatings.
 - u. Thermoplastic rubber coating and mastic.
3. Sell-through of Coatings. A coating manufactured prior to January 1, 2009, may be sold, supplied, offered for sale, or applied after January 1, 2009, until January 1, 2012,

so long as the coating complied with the VOC content standards and other applicable requirements in effect at the time the coating was manufactured. 310 CMR 7.25(11)(c)3. shall not apply if:

- a. A coating does not display the date on which the product was manufactured or a code indicating such date as required by 310 CMR 7.25(11)(d)1.a.i.; or
 - b. The manufacturer has not filed an explanation of the code with the Department by the deadlines specified in 310 CMR 7.25(11)(d)1.a.ii.(i) for a coating on which the manufacturer has used a code indicating the date of manufacture that is different than the code specified in 310 CMR 7.25(11)(d)1.a.ii.(ii).
4. Exclusions. The VOC content standards specified in 310 CMR 7.25(11)(c)1. Shall not apply to:
 - a. Any aerosol coating product.
 - b. Any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less.
5. Coatings Not Listed in 310 CMR 7.25(11)(c)1.: Table 1. For any coating that does not meet any of the definitions for the specialty coatings categories listed in 310 CMR 7.25(11)(c)1.: *Table 1*, the VOC content limit shall be determined by classifying the coating as a flat coating, non-flat coating, or non-flat high gloss coating based on its gloss, as defined in 310 CMR 7.25(11)(b), and the corresponding flat, non-flat, or nonflat high gloss coating limit shall apply.
6. Lacquers. Notwithstanding the provisions of 7.25(11)(c)1., a person or facility may add up to 10% by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater than 70% and temperature below 65/F, at the time of application, provided that the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.
7. Products Registered Under FIFRA.
 - a. AIM coatings registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA; 7 U.S.C. § 136-136y) must comply with the VOC standards specified in 310 CMR 7.25(11)(c)1.: *Table 1*, by 12 months after the VOC limit compliance date specified in 310 CMR 7.25(11)(c)1. Such products must also be registered under the Massachusetts Pesticide Control Act.

- b. The labeling requirements of 310 CMR 7.25(11)(d) do not apply to products that are registered as pesticides under FIFRA and the Massachusetts Pesticide Control Act.
 - c. For coatings that are registered under FIFRA, the three-year sell-through period provided in 310 CMR 7.25(11)(c)3. shall begin one year after the date specified in 310 CMR 7.25(11)(c)1.
8. Thinning. No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in Table 1.
9. Painting Practices. All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging, or other means, shall be closed when not in use. These architectural coatings containers include, but are not limited to, drums, buckets, cans, pails, trays, or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.

(d) Labeling Requirements.

1. Each manufacturer of any architectural coating subject to this rule shall display the information required in 310 CMR 7.25(11)(d)1.a. through 7.25(11)(d)1.c. on the coating container (or label) in which the coating is sold or distributed.
- a. Product Dating.
 - i. The date the coating was manufactured, or a code representing the date, shall be indicated on the label, lid, or bottom of the container.
 - ii. Explanation of the Code.
 - (i) If the manufacturer uses a code indicating the date of manufacture for any coating, an explanation of the code shall be filed with the Department no later than:
 - the effective date of the applicable standard specified in 310 CMR 7.25(11)(c)1.; or, the date on which the product first becomes available for sale, distribution, or use within Massachusetts, whichever is later; and
 - 12 months prior to any date on which the product first becomes available for sale, distribution, or use within Massachusetts after any modification to an existing product's date-code format.

- (ii) A manufacturer who uses the following code to indicate the date of manufacture shall not be subject to the requirements of 310 CMR 7.25(11)(d)1.a.ii.(i), if the code is represented separately from other codes on the product container so that it is easily recognizable:

YY DDD

where:

YY = two digits representing the year in which the product was manufactured.

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”).

- iii. 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.
 - iv. Codes indicating the date of manufacture are public information and may not be claimed as confidential.
- b. Thinning Recommendations. A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. 310 CMR 7.25(11)(d)1.b. does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating must be applied without thinning.
- c. VOC Content. Each container of any coating subject to this rule shall display either the maximum or the actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in 310 CMR 7.25(11)(f)2. The equations in 310 CMR 7.25(11)(f)1. Shall be used to calculate VOC content.
2. Industrial Maintenance Coatings. In addition to the information specified in 310 CMR 7.25(11)(d)1.a. through 310 CMR 7.25(11)(d)1.c., each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or the lid of the container in which the coating is sold or distributed one or more of the following descriptions:

- a. "For industrial use only."
 - b. "For professional use only."
 - c. "Not for residential use." or "Not intended for residential use."
 3. Clear Brushing Lacquers. The labels of all clear brushing lacquers shall prominently display the statements "For Brush Application Only" and "This product must not be thinned or sprayed."
 4. Rust Preventive Coatings. The labels of all rust preventive coatings shall prominently display the statement "For Metal Substrates Only."
 5. Specialty Primers, Sealers, and Undercoaters. The labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the following descriptions:
 - a. For blocking stains.
 - b. For fire-damaged substrates.
 - c. For smoke-damaged substrates.
 - d. For water-damaged substrates.
 - e. For excessively chalky substrates.
 6. Quick Dry Enamels. The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time.
 7. Non-flat High Gloss Coatings. The labels of all non-flat high gloss coatings shall prominently display the words "High Gloss."
- (e) Recordkeeping and Reporting Requirements.

1. Each manufacturer of a product subject to a VOC content limit in 310 CMR 7.25(11)(c) of this regulation shall keep records demonstrating compliance with the VOC content limits in accordance with 310 CMR 7.25(11)(f). Such records shall clearly list each product by name (and identifying number, if applicable) as shown on the product label and in applicable sales and technical literature, the VOC content as determined in 310 CMR 7.25(11)(f), the names and chemical abstract service (CAS) numbers of the VOC constituents in the product, the dates of the VOC content determinations, the coating category and the applicable VOC content limit. These records shall be kept on site for a period not less than three years and shall be made available to the Department within 90 days of a written request.
2. A responsible official from each manufacturer shall, upon request of the Department, provide data concerning the distribution and sales of coatings subject to a VOC content limit in 310 CMR 7.25(11)(c). The responsible official shall within 90 days provide information including, but not limited to:

- a. the name and mailing address of the manufacturer;
- b. the name, address and telephone number of a contact person;
- c. the name of the product as it appears on the label and the coating category in 310 CMR 7.25(11)(c) under which it is regulated;
- d. whether it is marketed for interior or exterior use or both;
- e. the number of gallons sold in Massachusetts in containers greater than one liter and less than one liter;
- f. the actual VOC content and VOC content limit in grams per liter. If thinning is recommended, list the actual VOC content and VOC content after recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately;
- g. the names and CAS numbers of the VOC constituents in the product; and
- h. the names and CAS numbers of any compounds in the products specifically exempted under 310 CMR 7.25(11)(c).

(f) Compliance Provisions and Test Methods.

1. Calculation of VOC Content. For the purpose of determining compliance with the VOC content limits in 310 CMR 7.25(11)(c)1.: *Table 1*, the VOC content of a coating shall be determined according to 310 CMR 7.25(11)(f)1.a. or 310 CMR 7.25(11)(f)1.b., as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

- a. For all coatings other than low-solids coatings, the VOC content of the coating in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds, shall be determined using Equation (1) as follows:

$$\text{VOC Content} = (W_v - W_w - W_{ec}) / (V_c - V_w - V_{ec}) \text{ Equation (1)}$$

Where,

VOC Content = grams of VOC per liter of coating

W_v = weight of volatiles, in grams

W_w = weight of water, in grams

W_{ec} = weight of exempt compounds, in grams

V_c = volume of coating, in liters

V_w = volume of water, in liters

V_{ec} = volume of exempt compounds, in liters

- b. For low-solids coatings, the VOC content in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds, shall be determined using Equation (2) as follows:

$$\text{VOC Content (ls)} = (W_v - W_w - W_{ec}) / (V_c) \text{ Equation (2)}$$

where,

VOC Content (ls) = the VOC content of a low solids coating in grams per liter of coating

W = weight of volatile, in grams

W_w = weight of water, in grams

W_{ec} = weight of exempt compounds, in grams

V_c = volume of coating, in liters

2. VOC Content of Coatings. Except as provided in 310 CMR 7.25(11)(f)3. and (f)4., U.S. EPA Method 24 shall be used to determine the physical properties of a coating in order to perform the calculations in 310 CMR 7.25(11)(f)1. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996). The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised August 1996). The manufacturer may use U.S. EPA Method 24, an alternative test method as provided in 310 CMR 7.25(11)(f)3., formulation data, or any other reasonable means (e.g., quality assurance records, recordkeeping) to determine the VOC content of the coating. However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 results shall govern, except when an alternative method is approved by EPA. The Department may require the manufacturer to conduct a Method 24 analysis.
3. Alternative Test Methods. Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with 310 CMR 7.25(11)(c)1. May be used provided that the manufacturer has received an approval from CARB for the alternative testing method to be used in architectural and maintenance coatings VOC content determination. A copy of CARB's approval, including all conditions established by CARB applicable to the testing procedure, shall be submitted to the Department within 30 days upon the Department's written request.
4. Methacrylate Traffic Coating Markings. Analysis of methacrylate multi-component coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A). This

method has not been approved for methacrylate multicomponent coatings used for purposes other than traffic marking coatings or for other classes of multicomponent coatings.

5. Test Methods. The following test methods are incorporated by reference herein, and shall be used to test coatings subject to the provisions of this rule:
- a. Flame Spread Index. The flame-spread index of a fire-retardant coating shall be determined by the ASTM Designation E 84-99, *Standard Test Method for Surface Burning Characteristics of Building Materials*.
 - b. Fire-resistance Rating. The fire-resistance rating of a fire-resistive coating shall be determined by ASTM designation E 119-98, *Standard Test Methods for Fire Tests of Building Construction Materials*.
 - c. Gloss Determination. The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), *Standard Test Method for Specular Gloss*.
 - d. Metal Content of Coatings. The metallic content of a coating shall be determined by SCAQMD Method 318-95, *Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction*, SCAQMD Laboratory *Methods of Analysis for Enforcement Samples*.
 - e. Acid Content of Coatings. The acid content of a coating shall be determined by ASTM Designation D 1613-96, *Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related Products*.
 - f. Drying Times. The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, *Standard Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature*. The tack free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95.
 - g. Surface Chalkiness. The chalkiness of a surface shall be determined using ASTM Designation D 4214-98, *Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films*.
 - h. Exempt Compounds – Siloxanes. To determine the cyclic, branched, or linear completely methylated siloxanes content of a coating, the coating shall be analyzed according to BAAQMD Method 43, *Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials*, BAAQMD Manual of Procedures, Volume III, adopted November 6, 1996.
 - i. Exempt Compounds - Parachlorobenzotrifluoride (PCBTF). To determine parachlorobenzotrifluoride content of a coating, the coating shall be analyzed according to BAAQMD Method 41, *Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride*, BAAQMD Manual of Procedures, Volume III, adopted December 20, 1995.

- j. Exempt Compounds – Volatile Organic Compounds Exempted Under U.S. EPA Method 24. To determine the composition of a coating with respect to volatile organic compounds that are exempt under U.S. EPA Method 24, the coating shall be analyzed according to SCAQMD Method 303-91 (Revised August 1996), *Determination of Exempt Compounds*, SCAQMD "Laboratory Methods of Analysis for Enforcement Samples."
- k. VOC Content of Coatings. The VOC content of a coating shall be determined by U.S. EPA Method 24 as it exists in appendix A of 40 Code of Federal Regulations (CFR) Part 60, *Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings*.
- l. Alternative Methods for Determining VOC Content of Coatings. The VOC content of coatings may be determined by either U.S. EPA Method 24 or by SCAQMD Method 304-91 (Revised 1996), *Determination of Volatile Organic Compounds (VOC) in Various Materials*, SCAQMD Laboratory Methods of Analysis for Enforcement Samples.
- m. Methacrylate Traffic Marking Coatings. The VOC content of methacrylate multi-component coatings used as traffic marking coatings shall be determined by the procedures in 40 CFR part 59, subpart D, appendix A, *Determination of Volatile Matter Content of Methacrylate Multi-component Coatings Used as Traffic Marking Coatings*, (September 11, 1998).

(12) Consumer Products.

(a) Applicability.

- 1. Except as provided in 310 CMR 7.25(12)(a)2., the requirements of 310 CMR 7.25(12) apply to any person who, on or after January 1, 2009, sells, supplies, offers for sale, or manufactures any consumer product listed in 310 CMR 7.25(12)(c)1. for use in Massachusetts.
- 2. a. The provisions of 310 CMR 7.25(12) do not apply to any person who, sells, supplies, offers for sale, or manufactures in Massachusetts any consumer product specified in 310 CMR 7.25(12)(b) that is for exclusive use outside of Massachusetts as long as the manufacturer or distributor can demonstrate both that the consumer product is intended for shipment and use outside of Massachusetts and that the manufacturer or distributor has taken reasonable prudent precautions to assure that the consumer product is not distributed to Massachusetts.
- b. The provision in 310 CMR 7.25(12)(a)2.a. does not apply to consumer products that are sold, supplied, or offered for sale by any person to retail outlets in Massachusetts.

- (b) Definitions. Terms used in 310 CMR 7.25 are defined at 310 CMR 7.00: *Definitions* or in 310 CMR 7.25. Where a term is defined in both 310 CMR 7.00: *Definitions* and in 310 CMR 7.25, the definition in 310 CMR 7.25 shall apply.

ACP EXECUTIVE ORDER means the document approved and signed by CARB that includes the conditions and requirements of the ACP, and which allows a manufacturer to sell products in the state of California under the ACP.

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 Contact Adhesive, “adhesive” does not include units of product, less packaging, which consist of more than one gallon. For Construction, Panel, and Floor Covering Adhesive, and General Purpose Adhesive, “adhesive” does not include units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces. This limitation does not apply to aerosol adhesives.

ADHESIVE REMOVER means a product designed to remove adhesive from either a specific type of substrate or a variety of types of substrates. Adhesive removers do not include products that remove adhesives intended for use on humans or animals. For the purpose of 310 CMR 7.25(11)(b):

ADHESIVE REMOVER and 310 CMR 7.25(11)(b): ADHESIVE REMOVER 1. through 4. , the term “adhesive” shall mean a substance used to bind 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 designed or labeled to remove floor or wall coverings and associated adhesive from the underlying substrate;

2. GASKET OR THREAD LOCKING ADHESIVE REMOVER means a product designed or labeled to remove 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 to remove cyanoacrylate adhesives as well as non-reactive adhesives or residue from a variety of types of substrates. General Purpose Adhesive Remover includes, but is not limited to, products that remove thermoplastic adhesives; pressure sensitive adhesives; dextrin 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.

AEROSOL ADHESIVE means an aerosol adhesive 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.

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.

AEROSOL PRODUCT means a pressurized spray system that dispenses product ingredients by means of a propellant contained in a product's container or a mechanically induced force. Aerosol Product does not include Pump Spray.

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 home use; use in structural pest control; industrial use; or institutional use. For the purposes of this definition only:

1. HOME USE means use in a household or its immediate environment.
2. STRUCTURAL PEST CONTROL USE means a use requiring a license under the Massachusetts Pesticide Control Act.
3. 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.
4. INSTITUTIONAL USE means use within the lines of or on property necessary for the operation of buildings such as hospitals, schools, libraries, and auditoriums.

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 includes dual-purpose air freshener/ disinfectant products. 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, or Toilet/Urinary 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.

ALL OTHER CARBON CONTAINING COMPOUNDS means any other compound that contains at least one carbon atom and is not an Exempt Compound or an LVP-VOC.

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).

ALTERNATIVE CONTROL PLAN or ACP means an emissions-averaging program approved by CARB pursuant to California Code of Regulations, Title 17, Subchapter 8.5, Article 4, Sections 94540-94555.

ANTIMICROBIAL HAND OR BODY CLEANER OR SOAP means a cleaner, or soap, that 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 antimicrobial hand or body washes/cleaners, food-handler hand washes, healthcare personnel hand washes, pre-operative skin preparations and 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.

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% in at least 50% of a target population.

ANTI-STATIC PRODUCT means a product that is labeled to eliminate, prevent, or inhibit 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.

ARCHITECTURAL COATING means a coating to be applied to stationary structures or the appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs.

ASTM means the American Society for Testing and Materials.

ASTRINGENT/TONER means any product not regulated as a drug by the United States Food and Drug Administration (FDA) that 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.

AUTOMOTIVE BRAKE CLEANER means a cleaning product designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.

AUTOMOTIVE HARD PASTE WAX means an automotive wax or polish that is:

1. designed to protect and improve the appearance of automotive paint surfaces; and
2. a solid at room temperature; and
3. contains 0% water by formulation.

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.

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.

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.

AUTOMOTIVE WINDSHIELD WASHER FLUID means any liquid designed for use in a motor vehicle windshield washer system either as 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 designed primarily to clean toilet bowls, toilet tanks, or urinals.

BUG AND TAR REMOVER means a product labeled to remove either 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.

CARB means the California Air Resources Board.

CARBURETOR OR FUEL-INJECTION AIR INTAKE CLEANERS means a product designed 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 exclusively for direct introduction into the fuel lines or fuel storage tank prior to introduction into the carburetor or fuel injectors.

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.

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.

COLORANT means any pigment or coloring material used in a consumer product for an aesthetic effect, or to dramatize an ingredient.

CONSTRUCTION, PANEL, AND FLOOR COVERING ADHESIVE means any one component adhesive that is designed exclusively for the installation, remodeling, maintenance, or repair of:

1. structural and building components that include, but are not limited to, beams, trusses, studs, paneling (such as drywall or drywall laminates, fiberglass reinforced plastic (FRP), plywood, particle board, insulation board, pre-decorated hardboard or tileboard, *etc.*), ceiling and acoustical tile, molding, fixtures, countertops or countertop laminates, cover or wall bases, and flooring or subflooring; 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, non-resilient flooring material, mirror tiles and other types of tiles, and artificial grass. Construction, Panel, and Floor Covering Adhesive does not include Floor Seam Sealer.

CONSUMER means any person who purchases or acquires any product for personal, family, household, or institutional use. Persons acquiring a product for resale are not Consumers for that product.

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 Product, as defined in 310 CMR 7.25, includes Aerosol Adhesives used for consumer, industrial, or commercial uses.

CONTACT ADHESIVE means an adhesive that:

1. is designed for application to both surfaces to be bonded together; and
2. is allowed to dry before the two surfaces are placed in contact with each other; and
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 tire repair only.

CONTACT ADHESIVE - GENERAL PURPOSE means any contact adhesive that is not a Contact Adhesive - Special Purpose.

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:
 - a. automotive under-the-hood applications requiring heat, oil or gasoline resistance; or
 - b. body-side molding, automotive weather-strip or decorative trim.

CONTAINER/PACKAGING means the part or parts of the consumer or institutional product that 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.

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 310 CMR 7.25(11)(b): CRAWLING BUG INSECTICIDE 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.
2. HOUSE DUST MITE means mites that 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.

DATE-CODE means the day, month and year on which the product was manufactured, filled, or packaged, or a code indicating such a date.

DEODORANT means 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 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 any sticker or label affixed thereto, that it can be used on or applied to the human axilla is a Deodorant as defined in 310 CMR 7.25(12)(b).

DEODORANT BODY SPRAY is a Personal Fragrance Product, as defined in 310 CMR 7.25(12)(b), with 20% or less fragrance that is designed for application all over the human body to provide a scent. A Deodorant Body Spray product that indicates or depicts on the container or packaging, or any sticker or label affixed thereto, that it can be used on or applied to the human axilla is a Deodorant as defined in 310 CMR 7.25(12)(b).

DEVICE means any instrument or contrivance other than a firearm that is designed for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than

human and other than bacterium, virus, or another microorganism on or in living human or other living animals); but not including equipment used for the application of pesticides when sold separately therefrom.

DISINFECTANT means any product intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects and whose label is registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136, *et seq.*). Disinfectant does not include any of the following:

1. products designed solely for use on humans or animals;
2. products designed for agricultural use;
3. products designed solely for use in swimming pools, therapeutic tubs, or hot tubs;
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.

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.

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.

DRY CLEANING FLUID means any non-aqueous liquid product designed and labeled exclusively for use on:

1. fabrics that are labeled “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 310 CMR 7.25(11)(b): DRY CLEANING FLUID, S-coded fabric means an upholstery fabric that is designed to be cleaned only with water-free spot cleaning products as specified by the Joint Industry Fabric Standards Committee.

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.

ELECTRICAL CLEANER means a product labeled to remove heavy 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.

ELECTRONIC CLEANER means a product labeled 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 to clean the casings or housings of electronic equipment.

ENERGIZED ELECTRICAL CLEANER means a product that meets both of the following criteria:

1. the product is labeled to clean and/or degrease electrical equipment, where cleaning and/or degreasing is accomplished when electrical current exists, or when there is a residual electrical potential from a component such as a capacitor; and
2. the product label clearly displays the statements: "For Energized Equipment use only. Not to be used for motorized vehicle maintenance, or their parts." Energized Electrical Cleaner does not include Electronic Cleaner.

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.

EXISTING PRODUCT means any formulation of the same product category and form sold, supplied, manufactured, or offered for sale in Massachusetts prior to January 1, 2009, or any subsequently introduced identical formulation.

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 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 that are labeled for dry clean only and sold in containers of ten fluid ounces or less.

FABRIC REFRESHER means a product labeled to neutralize or eliminate odors on nonlaundered 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 application to both fabric and human skin. For the purposes of 310 CMR 7.25(11)(b): FABRIC REFRESHER only, soft household surface sanitizer means a product labeled to neutralize or eliminate odors on surfaces whose label is registered as a sanitizer under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136 *et seq.*).

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.

FAT WOOD means pieces of wood kindling with high naturally occurring levels of sap or resin that 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.

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.

FLEXIBLE FLOORING MATERIAL means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl, and vinyl composite flooring.

FLOOR COATING means an opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces that may be subjected to foot traffic.

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 architectural coatings regulations.

FLOOR SEAM SEALER means any product designed and labeled exclusively for bonding, fusing, or sealing (coating) seams between adjoining rolls of installed flexible sheet flooring.

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.

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 mothproofing product. For the purposes of 310 CMR 7.25(11)(b): FLYING BUG INSECTICIDE only, 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.

FOOTWEAR OR LEATHER CARE PRODUCT means any product designed or labeled to be applied to footwear or to other leather articles/components, to maintain, enhance, clean, protect, or modify the appearance, durability, fit, or flexibility of the footwear or leather article/component. Footwear includes both leather and non-leather foot 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.

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

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 at 20°C, the sole purpose of which is to impart an odor or scent, or to counteract a malodor.

FURNITURE COATING means any paint designed for application to room furnishings including, but not limited to, cabinets (such as kitchen, bath and vanity cabinets), tables, chairs, beds, and sofas.

FURNITURE MAINTENANCE PRODUCT means a wax, polish, conditioner, or any other product designed for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors. Furniture Maintenance Product does not include Dusting Aids, Wood Cleaners and 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 disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.

GENERAL PURPOSE ADHESIVE means any non-aerosol adhesive designed for use on a variety of types 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).

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 and does not include general purpose degreasers and electronic cleaners.

GENERAL PURPOSE DEGREASER means any product labeled to remove or dissolve grease, grime, oil and other oil-based contaminants from a variety of types 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 that 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.

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, Heavy-duty Hand Cleaner or Soap, Medicated Astringent/Medicated Toner, or Rubbing Alcohol.

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.

GRAFFITI REMOVER means a product labeled 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, Nail Polish Remover, or Spot Remover. Products labeled for dual use as both a paint stripper and graffiti remover are considered Graffiti Removers.

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

HAIR MOUSSE means a hair-styling foam designed to facilitate styling of a coiffure and provide limited holding power.

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 sheen to the hair. Hair Shine does not include Hair Spray, Hair Mousse, Hair Styling Product, or products whose primary purpose is to condition or hold the hair.

HAIR SPRAY means a product that is applied to styled hair, and is designed or labeled 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 do not provide finishing of a hairstyle.

For the purposes of 310 CMR 7.25(11)(b): HAIR SPRAY, “finish” or “finishing” means the maintaining and/or holding of previously styled hair for a period of time. For the purposes of 310

CMR 7.25(11)(b): HAIR SPRAY, “styling” means the forming, sculpting, or manipulating of the hair to temporarily alter the hair's shape.

HAIR STYLING PRODUCT means a product manufactured on or after January 1, 2009, that is designed or labeled for the application to wet, damp, or dry hair to aid in defining, shaping, lifting, styling and/or sculpting the hair. Hair Styling Product includes, but is not limited to, hair balm, clay, cream, creme, 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.

For the purposes of 310 CMR 7.25(11)(b): HAIR STYLING PRODUCT, “finish” or “finishing” means the maintaining and/or holding of previously styled hair for a period of time, and “styling” means the forming, sculpting, or manipulating of the hair to temporarily alter the hair's shape.

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 body 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.

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.

HIGH VOLATILITY ORGANIC COMPOUND (HVOC) means any volatile organic compound that exerts a vapor pressure greater than 80 millimeters of mercury when measured at 20°C.

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.

INSECTICIDE means a pesticide product that is designed for use against insects or other arthropods, but excluding products that are:

1. for agricultural use; or
2. for a use that requires a structural pest control license under the Massachusetts Pesticide Control Act; or
3. restricted materials that require a permit for use and possession.

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.

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.

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 product or 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, fresh look and may also act to help ease ironing of the fabric. Laundry Starch Product includes, but is not limited to, fabric finish, sizing, and starch.

LAWN AND GARDEN INSECTICIDE means an insecticide product labeled 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 is capable of a visually detectable flow as determined under ASTM D4359-90(2000)e1, D 4359 90 *Standard Test Method For Determining Whether A Material Is A Liquid Or A Solid*, ASTM International. Liquid does not include powders or other materials that are composed entirely of solid particles.

LVP-VOC or Low-Vapor-Pressure 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 millimeters of mercury at 20°C, as determined by CARB Method 310; or
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 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; or
4. is the weight percent of a chemical mixture that boils above 216°C, as determined by CARB Method 310.

For the purposes of 310 CMR 7.25(11)(b): 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.

MANUFACTURER means any person who manufactures, processes, imports, assembles, produces, packages, repackages, or re-labels a product.

MEDICATED ASTRINGENT/MEDICATED TONER means any product regulated as a drug by the FDA that 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.

MEDIUM VOLATILITY ORGANIC COMPOUND (MVOC) means any volatile organic compound that exerts a vapor pressure greater than two millimeters of mercury and less than or equal to 80 millimeters of mercury when measured at 20°C.

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 exclusively for automotive and marine detailing, or products designed for use in degreasing tanks.

MIST SPRAY ADHESIVE means any aerosol that 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.

MULTI-PURPOSE DRY LUBRICANT means any lubricant that is:

1. designed and labeled 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.

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.

MULTI-PURPOSE SOLVENT means any organic liquid designed to be used for a variety of purposes, including cleaning or degreasing of a variety of types 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 solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment.

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.

NAIL POLISH REMOVER means a product designed to remove nail polish and coatings from fingernails or toenails.

NON-AEROSOL PRODUCT means any consumer product that is not dispensed by a pressurized spray system.

NON-CARBON CONTAINING COMPOUND means any compound that does not contain any carbon atoms.

NON-RESILIENT FLOORING means flooring of a mineral content that is not flexible. Non-Resilient Flooring includes terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.

NON-SELECTIVE TERRESTRIAL HERBICIDE means a terrestrial herbicide product that is toxic to plants without regard to species.

OVEN CLEANER means any cleaning product designed to clean and to remove dried food deposits from oven walls.

PAINT means any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate in a thin layer that 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.

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, paintbrush cleaners, products designed and labeled exclusively as Graffiti Removers, and hand cleaner products that claim to remove paints and other related coatings from skin.

PENETRANT means a lubricant designed and labeled 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 primarily to loosen bonded parts.

PERSONAL FRAGRANCE PRODUCT means any product which is applied to the human body or clothing for 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 bacterial growth on feet or other areas of the body;
3. mouthwashes, breath fresheners and deodorizers;

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 used to clean the human body; and
7. fragrance products designed to be used exclusively on non-human animals.

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” does not include any substance, mixture of substances, or device that the United States Environmental Protection Agency does not consider to be a pesticide.

PRESSURIZED GAS DUSTER means a pressurized product labeled 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.

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.

PRODUCT BRAND NAME means the name of the product exactly as it appears on the principal display panel of the product.

PRODUCT CATEGORY means the applicable category that best describes the product as listed in Definitions.

PRODUCT LINE means a group of products of identical form and function belonging to the same product category or categories.

PROPELLANT means 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.

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.

RESPONSIBLE PARTY means the company, firm or establishment that is listed on the product label. If the label lists two companies, firms or establishments, the responsible party is the party that the product was manufactured for or distributed by, as noted on the label.

RESTRICTED MATERIALS means pesticides established as restricted materials under applicable Massachusetts laws or regulations.

RETAIL OUTLET means any establishment at which consumer products are sold, supplied, or offered for sale directly to consumers.

RETAILER means any person who sells, supplies, or offers consumer products for sale directly to consumers.

ROLLON PRODUCT means any antiperspirant or deodorant that dispenses active ingredients by rolling a wetted ball or wetted cylinder on the affected area.

RUBBER AND VINYL PROTECTANT means 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.

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.

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, or 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 310 CMR 7.25(11)(b): SEALANT AND CAULKING COMPOUND only, removable caulking compound means a compound that temporarily seals windows or doors for three to six month time intervals. For the purposes of 310 CMR 7.25(11)(b): SEALANT AND CAULKING COMPOUND only, clear/paintable/water resistant caulking compound means a compound that:

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

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.

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 bodily hair. Shaving Cream does not include Shaving Gel.

SHAVING GEL means an aerosol product that 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.

SILICONE-BASED MULTI-PURPOSE LUBRICANT means any lubricant that is:

1. signed and labeled to provide lubricity primarily through the use of silicone compounds including, but not limited to, polydimethylsiloxane; and
2. designed and labeled 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 exclusively to release manufactured products from molds.

SINGLE-PHASE AEROSOL AIR FRESHENER means an aerosol air freshener with the liquid contents in a single homogeneous phase and that does not require that the product container be shaken before use.

SOLID means a substance or mixture of substances that, either whole or subdivided (such as the particles comprising a powder), is not capable of visually detectable flow as determined under ASTM D4359-90(2000)e1, *Standard Test Method For Determining Whether A Material Is A Liquid Or A Solid*, ASTM International.

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 (such as 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 non-rigid polyvinyl chloride plastic with at least 5%, 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 D1045- 95(2001), "*Standard Test Methods for Sampling and Testing Plasticizers Used in Plastics*," ASTM International, 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:

- a. The touch-up or repair of items laminated with high-pressure laminates (*e.g.*, lifted edges, delaminates, *etc.*); or
- b. The touch-up, repair, or attachment of edge-bonding 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 that 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 that require oil and plasticizer resistance, as well as high shear strength, at temperatures of 93°C through 135°C.

SPOT REMOVER means any product labeled to clean localized areas, or remove 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.

SPRAY BUFF PRODUCT means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.

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.

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).

TERRESTRIAL means to live on or grow from land.

TIRE SEALANT AND INFLATION means any pressurized product that is designed to temporarily inflate and seal a leaking tire.

TOILET/URINAL CARE PRODUCT means any product designed or labeled to clean and/or to deodorize toilet bowls, toilet tanks, or urinals. Toilet bowls, toilet tanks, or urinals include, but are 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 toilet 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.

TYPE A PROPELLANT means a compressed gas such as CO₂, N₂, N₂O, or compressed air that is used as a propellant, and is either incorporated with the product or contained in a separate chamber within the product's packaging.

TYPE B PROPELLANT means any halocarbon that is used as a propellant, including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs).

TYPE C PROPELLANT means any propellant that is not a Type A or Type B propellant, including propane, isobutane, n-butane, and dimethyl ether (also known as dimethyl oxide).

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.

USAGE DIRECTIONS means the text or graphics on the product's principal display panel, label, or accompanying literature that describes to the end user how and in what quantity the product is to be used.

VINYL/FABRIC/LEATHER/POLYCARBONATE COATING means a coating designed and labeled exclusively to coat vinyl, fabric, leather, or polycarbonate substrates.

VOC CONTENT means except for charcoal lighter products, the total weight of VOC in a consumer product expressed as a percentage of the product weight (exclusive of the container or packaging), as determined pursuant to 310 CMR 7.25(12)(h)1.

For charcoal lighter material products only,

$$\text{VOC CONTENT} = \text{Certified Emissions} * 100 / \text{Certified Use Rate}.$$

Where:

Certified Emissions = the emissions level for products approved by the CARB and as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (February 27, 1991), expressed to the nearest 0.001 pound CH₂ per start.

Certified Use Rate = the usage level for products approved by CARB and as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (February 27, 1991), expressed to the nearest 0.001 pound certified product used per start.

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 nest.

WATERPROOFER means a product designed and labeled exclusively to repel water from fabric or leather substrates. Waterproofer does not include Fabric Protectants.

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 carnauba wax and beeswax, substances of a mineral origin such as ozocerite and paraffin, and synthetic polymers such as polyethylene.

WEB SPRAY ADHESIVE means any aerosol adhesive that is not a mist spray or special purpose spray adhesive.

WOOD CLEANER means a product labeled 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 Cleaner, Furniture Maintenance Product, Floor Wax Stripper, Floor Polish or Wax, or products designed and labeled exclusively to preserve or color wood.

WOOD FLOOR WAX means wax based products for use solely on wood floors.

(c) Standards.

1. VOC Content Limits. Except as provided in 310 CMR 7.25(12)(d) (Variances), CMR 7.25(12)(e) (Innovative Products), and 310 CMR 7.25(12)(i) (Alternative Control Plans), no person subject to 310 CMR 7.25 shall:
 - a. manufacture for use within Massachusetts; or
 - b. sell, supply, or offer for sale within Massachusetts any consumer product that contains volatile organic compounds in excess of the limits specified in 310 CMR 7.25(11)(c)1.: *Table 2.*

Table 2. VOC Content Limits for Consumer Products Effective January 1, 2009

Product Category	Percent VOC by Weight (%W)
Adhesive Removers	
Floor or Wall Covering	5
Gasket or Thread Locking	50
General Purpose	20
Specialty	70
Adhesives	
Aerosol:	
Mist Spray	65
Web Spray	55
Special Purpose Spray Adhesives:	
Mounting; Automotive Engine Compartment; Flexible Vinyl	70
Polystyrene Foam and Automobile Headliner	65
Polyolefin and Laminate Repair/Edgebanding	60
Construction, Panel, and Floor Covering	
Contact:	
General Purpose	55
Special Purpose	80
General Purpose	10
Structural Waterproof	15
Air Fresheners	
Single-phase Aerosols	30
Double-phase Aerosols	25
Liquids/pump Sprays	18
Solids/Semisolid	3
Antiperspirants	
Aerosol	40 HVOC
	10 MVOC

Non-aerosol	0 HVOC
	0 MVOC
Anti-static	
Non-aerosol	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	5
Bug and Tar Remover	40
Carburetor or Fuel-injection Air Intake Cleaners	45
Carpet and Upholstery Cleaners	
Aerosols	7
Non-aerosols (Dilutables)	0.1
Non-aerosols (Ready-to-Use)	3.0
Charcoal Lighter Material	See 310 CMR 7.25(12)(c)8.
Cooking Spray Aerosols	18
Deodorants	
Aerosol	0 HVOC
	10 MVOC
Non-aerosol	0 HVOC
	0 MVOC
Dusting Aids	
Aerosols	25
All Other Forms	7
Engine Degreasers	
Aerosols	35
Non-aerosols	5
Electrical Cleaner	45
Electronic Cleaner	75
Fabric Protectants	60
Fabric Refresher	
Aerosol	15
Non-aerosol	6
Floor Polishes/ Waxes	
Products for Flexible Flooring Materials	7
Products for Non-resilient Flooring	10
Wood Floor Wax	90
Floor Wax Strippers	

Non-aerosol	See 310 CMR 7.25(12)(c)10.
Footwear or Leather Care Products	
Aerosol	75
Solid	55
All Other Forms	15
Furniture Maintenance Products	
Aerosols	17
All other Forms Except Solid or Paste	7
Graffiti Remover	
Aerosol	50
Non-aerosols	30
General Purpose Cleaners	
Aerosols	10
Non-aerosols	4
General Purpose Degreasers	
Aerosols	50
Non-aerosols	4
Glass Cleaners	
Aerosols	12
Non-aerosols	4
Hair Mousses	6
Hair Shines	55
Hair Sprays	55
Hair Styling Products	
Aerosol and Pump Sprays	6
All Other Forms	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	
Aerosol / Solids	22
All Other Forms	5
Laundry Starch Products	5
Metal Polishes/ Cleansers	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	5
Paint Remover or Stripper	50
Penetrants	50
Rubber and Vinyl Protectants	
Aerosols	10
Non-aerosols	3
Sealants and Caulking Compounds	4
Shaving Creams	5
Shaving Gel	7
Silicone-based Multi-Purpose Lubricants (Excluding Solid or Semi-solid Products)	60
Spot Removers	
Aerosols	25
Non-aerosols	8
Tire Sealants and Inflators	20
Toilet/Urinal Care Products	
Aerosol	10
Non-aerosols	3
Undercoatings	
Aerosols	40
Wood Cleaner	
Aerosol	17
Non-aerosols	4

2. Most Restrictive Limit. Notwithstanding the definition of product category in 310 CMR 7.25(12)(b), if anywhere on the container or packaging of any consumer product manufactured on or after January 1, 2009, or any FIFRA-registered insecticide manufactured on or after January 1, 2010, 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 310 CMR 7.25(12)(c)1., then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners, antiperspirant/deodorant products and insecticide foggers. This lowest VOC limit requirement shall apply to the consumer product irrespective of whether the definition of the consumer product category, as defined in 310 CMR 7.25(12)(b), explicitly excludes the other consumer product category or categories that have been represented in the product's labeling information.
3. Sell-through of Consumer Products.

- a. A consumer product listed in 310 CMR 7.25(12)(c)1.: *Table 2* and manufactured prior to the effective date specified in 310 CMR 7.25(12)(c)1., may be sold, supplied, or offered for sale after the effective date specified in 310 CMR 7.25(12)(c)1.: *Table 2*, so long as the consumer product complied with the VOC content standards and other applicable requirements in effect at the time the consumer product was manufactured. This does not apply to the following:
 - 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 310 CMR 7.25(12)(f)1.
 - ii. Any consumer product on which the manufacturer has used a code indicating the date of manufacture that is different than the code specified in 310 CMR 7.25(12)(f)1.e.ii., but an explanation of the code has not been filed with the Department by the deadlines specified in 310 CMR 7.25(12)(f)1.e.i.
 - iii. Solid Air Fresheners and Toilet/Urinal Care Products that contain paradichlorobenzene. These products are subject to a one-year sell-through period as provided in 310 CMR 7.25(12)(c)13.b.

4. Exclusions.

- a. The VOC content standards specified in 310 CMR 7.25(12)(c)1. shall not apply to:
 - i. Any LVP-VOC.
 - ii. Fragrances up to a combined level of 2% by weight contained in any consumer product, and colorants up to a combined level of 2% by weight contained in any antiperspirant or deodorant.
 - iii. VOCs that contain more than ten carbon atoms per molecule and for which the vapor pressure is unknown, or that have a vapor pressure of two mm Hg or less at 20°C in antiperspirants or deodorants.
 - iv. Air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs in 310 CMR 7.25(12)(b) or exempted under 310 CMR 7.25(12)(c)4.a.i.
 - v. Insecticides containing at least 98% paradichlorobenzene.

- vi. Adhesives sold in containers of one fluid ounce or less.
 - vii. Bait Station Insecticides. For the purpose of 310 CMR 7.25(11)(c)4., 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 5% active ingredients.
- b. The medium volatility organic compound (MVOC) content standards specified in 310 CMR 7.25(12)(c)1. for antiperspirants or deodorants shall not apply to ethanol.
5. Use of Toxic Air Contaminants in Antiperspirant or Deodorant. No person shall sell, supply, offer for sale, or manufacture any antiperspirant or deodorant for use in Massachusetts that 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, as a toxic air contaminant.
6. Products that are Diluted Prior to Use.
- a. 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 limits specified in 310 CMR 7.25(12)(c)1. shall apply to the product only after the minimum recommended dilution has taken place. For purposes of 310 CMR 7.25(11)(c)6., 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.
 - b. 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 limits specified in 310 CMR 7.25(12)(c)1. shall apply to the product only after the maximum recommended dilution has taken place.
7. Products Registered Under FIFRA.
- a. For consumer products registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA; 7 U.S.C. § 136-136y), the effective date of the VOC standards is one year after the date specified in 310 CMR 7.25(12)(c)1.: *Table 2* Such products shall also be registered under the Massachusetts Pesticide Control Act.

- b. The labeling requirements of 310 CMR 7.25(12)(f) do not apply to products that are registered as pesticides under FIFRA and under the Massachusetts Pesticide Control Act.
- 8. Charcoal Lighter Materials. No person shall sell, supply, offer for sale or manufacture for use in Massachusetts any charcoal lighter materials as defined in 310 CMR 7.25(12)(b) unless the manufacturer of that product has been granted a currently effective charcoal lighter materials certification (Executive Order) for that product by CARB under the Consumer Products provisions of Title 17 California Code of Regulations, § 94509(h). A copy of the certification decision by CARB, including all conditions established by CARB applicable to the certification, shall be submitted to the Department within 30 days upon the Department's written request.
- 9. Aerosol Adhesives.
 - a. These standards apply to all uses of aerosol adhesives, including consumer, industrial, and commercial uses. Except as otherwise provided in 310 CMR 7.25(12)(c)3. (Sell-Through of Consumer Products), 310 CMR 7.25(12)(d) (Variances), 310 CMR 7.25(12)(e) (Innovative Products), and 310 CMR 7.25(12)(i) (Alternative Control Plans), no person shall sell, supply, offer for sale, or manufacture any aerosol adhesive for use in Massachusetts that, at the time of sale, use, or manufacture, contains VOCs in excess of the specified standard.
 - b. No person shall sell, supply, offer for sale, or manufacture any aerosol adhesive for use in Massachusetts that, at the time of sale, use, or manufacture, contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.
 - c. If a product meets more than one of the definitions specified in 310 CMR 7.25(12)(b) for Special Purpose Spray Adhesive, then the VOC limit for the product shall be the lowest applicable VOC limit specified in 310 CMR 7.25(12)(c)1.: *Table 2*.
- 10. Floor Wax Strippers. Effective January 1, 2009, no person shall sell, supply, offer for sale or manufacture any floor wax stripper for use in Massachusetts unless the following requirements are met:
 - a. 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 3% by weight or less.

- b. 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 its use on heavy build-up of polish that results in an as-used VOC concentration of 12% by weight or less.
- c. The term “light build-up”, “medium build-up”, or “heavy build-up” is not specifically required, as long as comparable terminology is used.

11. Contact Adhesives, Electronic Cleaners, Footwear or Leather Care Products, and General Purpose Degreasers.

- a. Except as provided in 310 CMR 7.25(12)(c)11.b., 310 CMR 7.25(12)(c)11.c., and 310 CMR 7.25(12)(c)11.d., effective January 1, 2009, no person shall sell, supply, offer for sale, or manufacture for use in Massachusetts 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.
- b. Impurities. The requirements of 310 CMR 7.25(12)(c)11.a. 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% by weight.
- c. 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, 2009, may be sold, supplied, or offered for sale until January 1, 2012, 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 310 CMR 7.25(12)(f).
- d. Notification for products sold during the sell-through period. Any person who sells or supplies a consumer product subject to standards in 310 CMR 7.25(12)(c)11.a. shall notify, in writing, the purchaser that the sell-through period for that product will end on January 1, 2012 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, 2012.

12. Adhesive Removers, Electrical Cleaners, and Graffiti Removers.

- a. Except as provided below in 310 CMR 7.25(12)(c)12.b., effective January 1, 2009, no person shall sell, supply, offer for sale, or manufacture for use in Massachusetts any adhesive remover, electrical cleaner, or graffiti remover that contains any of the following compounds: methylene chloride, perchloroethylene, or trichloroethylene.
- b. Impurities. The requirements of 310 CMR 7.25(12)(c)12.a. 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% by weight.
- c. Sell-through of Products. adhesive removers, electrical cleaners, and graffiti removers that contain methylene chloride, perchloroethylene, or trichloroethylene and were manufactured before January 1, 2009, may be sold, supplied, or offered for sale until January 1, 2012, 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 310 CMR 7.25(12)(f).
- d. Notification for Products Sold During the Sell-through Period. Any person who sells or supplies a consumer product subject to standards in 310 CMR 7.25(12)(c)12.a. shall notify, in writing, the purchaser that the sell-through period for that product will end on January 1, 2012 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, 2012.

13. Solid Air Fresheners and Toilet/Urinal Care Products.

- a. Effective January 1, 2009, no person shall sell, supply, offer for sale, or manufacture for use in Massachusetts any solid air freshener or toilet/urinal care products that contain para-dichlorobenzene.
- b. Solid air fresheners and toilet/urinal care products that contain paradichlorobenzene and were manufactured before January 1, 2009 may be sold, supplied, or offered for sale until January 1, 2010, 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 310 CMR 7.25(12)(f).

14. Products Containing Ozone-depleting Compounds.

- a. Effective January 1, 2009, no person shall sell, supply, offer for sale or manufacture for use in Massachusetts any consumer product that 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.

- b. The requirements of 310 CMR 7.25(12)(c)14.a. 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% by weight of the product.
- c. The requirements of 310 CMR 7.25(12)(c)14.a. shall not apply to any existing product formulation that complies with the requirements in 310 CMR 7.25(12)(c)1. or any existing product formulation that is reformulated to meet the requirements in 310 CMR 7.25(12)(c)1., provided that ozone depleting compound content of the reformulated product does not change.

(d) Variances.

1. Any person who cannot comply with the requirements set forth in 310 CMR 7.25(12)(c)1., because of extraordinary reasons beyond the person's reasonable control may apply in writing to the Department for a variance. The variance application shall set forth the following:
 - a. the specific grounds upon which the variance is sought;
 - b. the proposed dates by which compliance with the provisions of 310 CMR 7.25(12)(c)1. will be achieved;
 - c. a compliance report detailing the methods by which compliance will be achieved.
 - d. information to support criteria in 310 CMR 7.25(12)(d)3.
2. Upon receipt of a variance application containing the information required in 310 CMR 7.25(12)(d)1., the Department shall hold a public hearing to determine whether, under what conditions, and to what extent, a variance from the requirements in 310 CMR 7.25(12)(c)1. is necessary and will be permitted. A hearing shall be initiated no

later than 75 days after receipt of a variance application. Notice of the time and place of the hearing shall be sent to the applicant by certified mail not less than 30 days prior to the hearing. Notice of the hearing shall also be submitted for publication in the *Massachusetts Register* and sent to every person who requests such notice, not less than 30 days prior to the hearing. The notice shall state that the parties may, but need not be, represented by counsel at the hearing. At least 30 days prior to the hearing, the variance application shall be made available to the public for inspection. Information submitted to the Department by a variance applicant may be claimed as confidential, and such information shall be handled in accordance with the Department's confidentiality procedures. The Department may consider such confidential information in reaching a decision on a variance application. Interested members of the public shall be allowed a reasonable opportunity to testify at the hearing and their testimony shall be considered.

3. No variance shall be granted unless all of the following findings are made:
 - a. that because of reasons beyond the reasonable control of the applicant, requiring compliance with 310 CMR 7.25(12)(c)1. would result in extraordinary economic hardship;
 - b. 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;
 - c. that the compliance report proposed by the applicant can reasonably be implemented, and will achieve compliance as expeditiously as possible.
4. Any variance order shall specify a final compliance date by which the requirements of 310 CMR 7.25(12)(c)1. will be achieved. Any variance order shall contain a condition that specifies increments of progress necessary to assure timely compliance, and any other conditions that the Department deems necessary.
5. A variance shall cease to be effective upon failure of the party to whom the variance was granted to comply with any term or condition of the variance.
6. Upon the application of any person, the Department may review, and for good cause, modify or revoke a variance from requirements of 310 CMR 7.25(12)(c)1.
7. All variances, or modifications to variances, shall be approved by EPA.

(e) Innovative Products.

1. Any manufacturer of a consumer product which has been granted an Innovative Product exemption by CARB under the Innovative Products provisions in Subchapter 8.5, Article 2, Section 94511, or Subchapter 8.5, Article 1, Section 94503.5 of Title 17 of the California Code of Regulations, and such Innovative Products Exemption has been approved by EPA, shall be, for that product, exempt from the VOC limits in 310 CMR 7.25(12)(c)1.: *Table 2* for the period of time that the CARB Innovative Product exemption remains in effect. Any manufacturer claiming an Innovative Product exemption on this basis must submit to the Department a copy of the CARB Innovative Product exemption decision (*i.e.*, the Executive Order), including all conditions established by CARB applicable to the exemption.
2. Manufacturers of consumer products that have been granted an Innovative Products exemption under the Innovative Products provisions in Subchapter 8.5, Article 2, Section 94511, or Subchapter 8.5, Article 1, Section 94503.5 of Title 17 of the California Code of Regulations based on California specific data, or that have not been granted an exemption by CARB, may seek an Innovative Products exemption in accordance with the following criteria:
 - a. The Department shall exempt a consumer product from the VOC limits specified in 310 CMR 7.25(12)(c)1. 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 limits specified in 310 CMR 7.25(12)(c)1., or
 - ii. the calculated VOC emissions from a non-complying representative product, if the product had been reformulated to comply with the VOC limits specified in 310 CMR 7.25(12)(c)1. VOC emissions shall be calculated using the following equation:

$$ER = ENC \times VOCSTD / VOCNC$$

where:

ER = the VOC emissions from the non-complying representative product, had it been reformulated

ENC = the VOC emissions from the non-complying representative product in its current formulation

VOCSTD = the VOC limit specified in the table of standards in 310 CMR 7.25(12)(c)1.

VOCNC = the VOC content of the non-complying 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 that accurately calculates emissions may be used upon approval of the Department.

- b. For the purposes 310 MR 7.25(11)(e)2.b., “representative consumer product” means a consumer product that meets all of the following criteria:
 - i. the representative product shall be subject to the same VOC limit in 310 CMR 7.25(12)(c)1. 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 that does not exist in the product category at the time the application is made.
 - 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.
- c. A manufacturer shall apply in writing to the Department for any exemption claimed under 310 CMR 7.25(12)(e)2.a. 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 shall provide any information necessary to enable the Department 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 310 CMR 7.25(11)(e)2.c. shall be handled in accordance with the procedures specified in applicable Massachusetts confidentiality requirements.
- d. Within 30 days of receipt of the exemption application, the Department shall determine whether an application is complete.
- e. Within 90 days after an application has been deemed complete, the Department shall determine whether, under what conditions, and to what extent, an exemption from the requirements of 310 CMR 7.25(12)(c) will be permitted. The applicant and the Department 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 Department 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 310 CMR 7.25(e)2.a.

- f. In granting an exemption for a product, the Department 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 Department to be necessary. The Department 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.
- g. For any product for which an exemption has been granted pursuant to this section, the manufacturer shall notify the Department in writing within 30 days of any change in the product formulation or recommended product usage directions, and shall also notify the Department within 30 days if the manufacturer learns of any information which would alter the emissions estimates submitted to the Department in support of the exemption application.
- h. If the VOC limits specified in 310 CMR 7.25(12)(c)1. 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 310 CMR 7.25(12)(e)2.h., shall have no force and effect as of the effective date of the modified VOC standard. 310 CMR 7.25(12)(e)2.h. shall not apply to those innovative products which have VOC emissions less than the applicable lowered VOC limit and for which a written notification of the product's emissions status versus the lowered VOC limit has been submitted to and approved by the Department at least 60 days before the effective date of such limits.
- i. If the Department determines that a consumer product for which an exemption has been granted no longer meets the criteria for an innovative product specified in 310 CMR 7.25(12)(e)2.a., the Department may modify or revoke the exemption as necessary to assure that the product will meet these criteria.

(f) Labeling Requirements.

1. Product Dating.

- a. No person shall sell, supply, offer for sale, or manufacture a consumer product subject to 310 CMR 7.25(12)(c) for use in Massachusetts unless each consumer product container or package clearly displays the day, month, and year on which the product was manufactured, or a code indicating such date.
- b. For products manufactured on or after January 1, 2009, the date-code shall be displayed on the product container or package such that it is readily observable without irreversibly disassembling any portion of the product container or

packaging. For the purposes of 310 CMR 7.25(11)(f)1.b., information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.

- c. 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.
- d. Explanation of the Code.
 - i. If a manufacturer uses a code indicating the date of manufacture for any consumer product subject to 310 CMR 7.25(12)(c), an explanation of the code shall be filed with the Department no later than 12 months prior to:
 - the effective date of the applicable standard specified in 310 CMR 7.25(12)(c)1.; or, the date on which the product first becomes available for sale, distribution, or use within Massachusetts, whichever is later; and
 - any date on which the product first becomes available for sale, distribution, or use within Massachusetts after any modification to an existing product's date-code format.
 - ii. A manufacturer who uses the following code to indicate the date of manufacture shall not be subject to the requirements of 310 CMR 7.25(12)(f)1.d.i., if the code is represented separately from other codes on the product container so that it is easily recognizable:

YY DDD

where:

YY = two digits representing the year in which the product was manufactured

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").

- e. The requirements of 310 CMR 7.25(12)(f)1. shall not apply to products containing no VOCs, as defined in 310 CMR 7.25(12)(b), or containing VOCs at 0.10 percent by weight or less.
- f. Codes indicating the date of manufacture are public information and may not be claimed as confidential.

2. Additional Labeling Requirements for Aerosol Adhesives, Adhesive Removers, Electronic Cleaners, Electrical Cleaners, Energized Electrical Cleaners, and Contact Adhesives.
 - a. In addition to the requirements specified in 310 CMR 7.25(12)(f)1., the manufacturer and responsible party for each aerosol adhesive, adhesive remover, electronic cleaner, electrical cleaner, energized electrical cleaner, and contact adhesive product subject to 310 CMR 7.25 shall ensure that all products clearly display the following information on each product container that is manufactured on or after January 1, 2009:
 - i. The product category as specified in 310 CMR 7.25(12)(c)1. or an abbreviation of the category shall be displayed;
 - ii. The applicable VOC standard for the product that is specified in 310 CMR 7.25(12)(c)1., except for energized electrical cleaner, expressed as a percentage by weight, shall be displayed;
 - iii. If the product is classified as a special purpose spray adhesive, the applicable substrate and/or application or an abbreviation of the substrate or application that qualifies the product as special purpose shall be displayed;
 - iv. If the manufacturer or responsible party uses an abbreviation as allowed under 310 CMR 7.25(12)(f)2.a.i. and 310 CMR 7.25(12)(f)2.a.iii., an explanation of the abbreviation must be filed with the Department no later than 90 days prior to:
 - the effective date of the applicable standard specified in 310 CMR 7.25(12)(c)1.; or, the date on which the product first becomes available for sale, distribution, or use within Massachusetts, whichever date is later; and
 - any date on which the product first becomes available for sale, distribution, or use within Massachusetts after any modification to an existing product's abbreviation.
 - b. The information required in 310 CMR 7.25(12)(f)3.a., 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 subsection, information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.
 - c. No person shall remove, alter, conceal, or deface the information required in 310 CMR 7.25(12)(f)2.a. prior to final sale of the product.

(g) Recordkeeping and Reporting Requirements.

1. Each responsible party for a product subject to a VOC content limit in 310 CMR 7.25(12)(c) shall keep records demonstrating compliance with the VOC content limits in accordance with 310 CMR 7.25(12)(h). If the Department requests such information and the responsible party does not have or does not provide the information requested by the Department, the Department may require the reporting of this information by the person that has the information, including, but not limited to, any formulator, manufacturer, supplier, parent company, private labeler, distributor, or repackager. All records for compliance determination, including 310 CMR 7.25(12)(g)2. and 310 CMR 7.25(12)(g)3., shall be kept on site for a period of time not less than three years and shall be made available to the Department within 90 days of request.
2. Upon a written request by the Department, a responsible official from each responsible party shall provide, to the Department within 90 days, the information for any consumer product or products that the Department may specify including, but not limited to, all or part of the following information:
 - a. the company name, telephone number, and designated contact person;
 - b. any claim of confidentiality made pursuant to applicable Massachusetts confidentiality requirements, 310 CMR 3.00;
 - c. the product brand name for each consumer product subject to recordkeeping and reporting requirements and the product label;
 - d. the product category to which the consumer product belongs;
 - e. the applicable product form(s) listed separately;
 - f. an identification of each product brand name and form as a Household Product or Industrial and Institutional Product, or both;
 - g. for reporting information submitted by multiple companies, an identification of each company that is submitting relevant data separate from that submitted by the responsible party.
 - h. 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%:
 - i. Total Exempt 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:

- the percent of fragrance that are LVP-VOCs, and
- the percent of fragrance that are All Other Carbon-Containing Compounds
- vii. Total Paradichlorobenzene

i. 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 Exempt Compound
- ii. Each LVP-VOC that is not a fragrance

j. if applicable, the weight percent comprised of propellant for each product;

k. If applicable, an identification of the type of propellant (Type A, Type B, Type C, or a blend of the different types);

l. If applicable, the net percent by weight of each ozone-depleting compound that is listed in 310 CMR 7.25(12)(c)14. and is contained in a product subject to reporting under 310 CMR 7.25(12)(g) in any amount greater than 0.1% by weight.

(h) Compliance Testing Requirements.

1. The responsible party shall determine compliance with the VOC content requirements of this regulation according to one of the following:
 - a. CARB Method 310 Determination of Volatile Organic Compounds (VOC) in *Consumer Products and Reactive Organic Compounds in Aerosol Coating Products*, adopted September 25, 1997, and as last amended on May 5, 2005;
 - b. An alternative test method to CARB Method specified in 310 CMR 7.25(12)(h)1.a. that is shown to accurately determine the concentration of VOCs in a subject product, or its emissions, if the applicant has received an approval from CARB for the alternative test method for determining the VOC content of the subject product and the applicant submits to the Department a copy of the CARB Executive Order, including all applicable conditions and limitations;
 - c. VOC content determination using product formulation and records.
 - i. Testing to determine compliance with the requirements of 310 CMR 7.25 may be demonstrated through calculation of the VOC content from records of the amounts of constituents used to make the product pursuant to the following equation:

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

where,

A = total net weight of unit (excluding container and packaging)

B = total weight of all VOCs, as defined in 310 CMR 7.25(12)(b), per unit

C = total weight of VOCs exempted under 310 CMR 7.25(12)(c)4., per unit

ii. If product records demonstrate compliance with the VOC limits, but these records are contradicted by product testing performed using CARB Method 310, the results of CARB Method 310 shall take precedence over the product records and may be used to establish a violation of the requirements of 310 CMR 7.25.

iii. Compliance determinations based on product formulation 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 shall be kept for at least three years.

2. Testing to determine whether a product is a liquid or solid shall be performed using ASTM D4359-90(2000)e1, *Standard Test Method for Determining Whether a Material Is a Liquid or a Solid*, ASTM International.
3. 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 (Table 1, Section 200.9)(February 28, 1991).
4. Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM D86-04b, *Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure*, ASTM International.
5. Testing to determine plasticizer in flexible vinyl adhesive shall be performed using ASTM D1045-95(2001), *Standard Test Methods for Sampling and Testing Plasticizers Used in Plastics*, ASTM International.
6. Records shall 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.

(i) Alternative Control Plans.

1. The VOC content limits specified in 310 CMR 7.25(12)(c)1.: Table 2. shall not apply to any manufacturer for any consumer product that is subject to an ACP for the period

of time that the ACP remains in effect provided that the manufacturer complies with all conditions and requirements of the ACP Executive Order.

2. Any manufacturer who claims an exemption pursuant to 310 CMR 7.25(12)(i)1. Shall submit to the Department a copy of the ACP Executive Order within 30 days of receiving the ACP Executive Order from CARB
3. Any manufacturer who claims an exemption pursuant to 310 CMR 7.25(12)(i)1. Shall notify the Department within 30 days of any violation of the ACP as determined by CARB pursuant to California Code of Regulations, Title 17, Subchapter 8.5, Article 4, Section 9454