

TONY JUDGE - Chair  
CHRISTINE McKIERNAN, M.D., Vice-Chair  
KAREN WALSH PIO, LICSW, LADC 1 - Clerk  
JESSICA COLLINS  
STEPHEN FRANTZ

SHARON HART, Director of Public Health

**NOTICE**

**BOARD OF HEALTH MEETING  
&  
AGENDA**

**September 13, 2022**

**6:00 p.m.**

**NOTE: Not all the topics listed in this notice may actually be reached for discussion. In addition, the topics listed are those which the Chair reasonably expects will be discussed as of the date of this notice.**

**To: Board of Health Members**

**From: Sharon D. Hart, Director of Public Health**

**Re: A Board of Health Meeting will be held on Tuesday, September 13, 2022 at 6:00 p.m. at the South Hadley Senior Center**

- 1: Chair to Call the Meeting to Order**
- 2: Acceptance of the Minutes of the July 12, 2022 meeting.**
- 3: Announcements and Open Forum (10 Minutes)**
- 4: Director's Update**
  - (a): Master Plan**
- 5: New Business:**
  - (a): NearMap**
  - (b): Glyphosate and Glufosinate**

**(c): Emergency Planning and Public Health**

**(d): Update - South Hadley Drug & Alcohol Prevention Coalition (Karen)**

**(e): Emergency Order to Vacate - 67 Pond Road – Garage Conversion Unit – Ratify**

**Emergency Order to Vacate – 5 Bach Lane**

**6: Set Next Meeting Date – (TBD) at 6:00 p.m. at South Hadley Senior Center**

**7: Adjourn Meeting**

\*\*\* Please note: Meetings are recorded\*\*\*

TONY JUDGE, Chair  
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JESSICA COLLINS  
STEPHEN FRANTZ

SHARON D. HART, Public Health Director

## Board of Health Minutes

July 12, 2022

--Draft-- --Draft-- --Draft-- --Draft--

Present: Tony Judge, Chair; Dr. Christine McKiernan, Vice Chair, Karen Walsh Pio, Clerk; Jessica Collins, Board of Health Member; Stephen Frantz, Board of Health Member; Sharon Hart, Public Health Director; Jennifer Jernigan, Assistant Public Health Director; Monasia Ceasar, Health Compliance Specialist

*The Board of Health Meeting was called to order at 6:02 p.m. by Chair Judge.*

### 1. Acceptance of the Minutes of the June 14, 2022, Meeting:

Chair Judge introduced the minutes from the 06/14/22 meeting and questioned if there were any comments or changes to be made. Board members shared revisions that needed to be made. Chair Judge mentioned he would accept a motion to approve the minutes with the proposed changes. Collins made a motion and Walsh Pio seconded it. A rollcall was taken, and all were in favor.

### 2. Announcements and Open Forum:

Chair Judge verified there were no comments to be brought forth from the open forum.

### 3. New Business:

#### (A) COVID-19 Update

Chair Judge introduced the COVID-19 update as the next topic of discussion. Director Hart shared an update on COVID-19 and monkeypox. COVID-19 continues to show an overall decreasing trend in case numbers and Biobot data. The state has released updated information regarding monkeypox, including the availability of vaccine.

**Discussion of PFAS pursued:** Chair Judge proposed the possibility of adding PFAS as an agenda topic for the next meeting. He highlighted the recent emergence of the topic and suggested Frantz lead the discussion. Frantz agreed to present on the topic and to forward related information so the other Board members can be adequately prepared for the meeting.

**(B) Grant- PHE Grant Update**

Chair Judge introduced Director Hart to provide an update on the Public Health Excellence Grant. Hart announced she is currently compiling an expense report for the \$625,000 dollars grant money. Four hundred thousand dollars is allocated for services, meanwhile \$225,000 dollars was awarded for COVID related expenses.

**(C) H.926- “An Act Relative to improving pesticide protections for Massachusetts schoolchildren”:  
Board of Health Support Letter**

Chair Judge introduced the Pesticide Protection support letter as the next topic of discussion. All Board members agreed with signing onto the letter in support of the initiative. Director Hart agreed to submit the required documents on behalf of the Board Health in addition to forwarding the information to the School Committee and Select Board to gain their participation as well.

**(D) Update: South Hadley High School Mold Remediation**

Chair Judge introduced the mold remediation at the South Hadley High School as the next topic for consideration. Led by Dr. McKiernan, a discussion pursued regarding the status of the mold remediation and the importance of ensuring that the issues are adequately addressed before the start of the 2022-2023 school year. Director Hart shared an update on the matter from the Business Administrator, Jennifer Voyik. With the approval from the Board members, Dr. McKiernan agreed to send a letter to the School Committee requesting an evaluation be conducted (by DPH or an outside vendor) of the High School to verify the status.

**(E) Update: South Hadley Drug & Alcohol Prevention Coalition**

Chair Judge introduced the update regarding the Drug and Alcohol Prevention as the next agenda item. Walsh Pio provided an update on the Coalition including the upcoming events and initiatives planned. She also noted that the state is hosting a webinar addressing the emergence of cannabis cafes and home delivery of THC products.

**Discussion regarding Nearmap pursued:**

Frantz questioned the status of his inquiry regarding gaining access to Nearmap. Director Hart shared she was informed by both Town Administration and the Assessor’s office that access is not granted to Board/ Committee members. Board members expressed their interest in the possibility of Department staff utilizing the software to acquire images related to Board of Health projects. Hart agreed to follow up with Town Administration regarding software restrictions and policy use.

*Draft* – Board of Health  
Meeting Minutes  
July 12, 2022

#### **4. Set Next Meeting Date- (TBD) @ 6:00 p.m. Virtual Using Zoom:**

Chair Judge introduced setting the next meeting date as the next topic of discussion. Director Hart confirmed that virtual meetings have been extended until March of 2023. Chair Judge proposed meeting in person at the Senior Center for the September meeting, as he feels as though in person meetings has begun to increase. Collins advised the Board to consider the impact this would have on the Department staff. Director Hart noted that all supplemental documents would have to be transported to the meeting site and time may have to be allotted after the meeting to acquire requested information that was not on hand. A vote was taken. All Board members, excluding Collins who abstained, were in favor of meeting in person. The next meeting was set for September 13<sup>th</sup> at 6 p.m. at the Senior Center.

#### **Discussion of Emergency Management Plans pursued:**

Dr. McKiernan questioned the status of acquiring E-ink's emergency management plans detailing the hazardous waste amounts as requested in the previous meeting from a community member. The documents provided by the community member outlined the Board of Health's purview to the manner. Director Hart noted she will have to verify the Board's jurisdiction, as this topic typically falls under Emergency Management. She also highlighted that certain aspects of the emergency plans may be private and unable to be shared with the public.

#### **Discussion of E360 Link on Website pursued:**

Dr. McKiernan followed up on the request to the Department to edit the E360 information listed on the website. Director Hart confirmed that a regulation section was added to the left margin of topics on the Public Health page that leads you to the main page of the E360 regulation listing. Dr. McKiernan noted the addition but mentioned there was still a link at the bottom of the page that listed only the tobacco regulation. Jernigan agreed to revise this.

#### **5. Adjourn the meeting:**

Chair Judge mentioned he would accept a motion to adjourn the meeting. All members were in consensus.

The meeting was adjourned at 7:31 p.m.

Respectfully,

Monasia Ceasar

**ATTACHMENT A**

**RECORD LOCATION**

Pesticide Protection Support Request	BOH File
Pesticide Protection Letter w/ Signatures	BOH File
Cannabis Cafes & Home Delivery	BOH File

DRAFT

Summary	August	2022
<b>Complaints Received</b>		
housing complaint	13	
food complaint	6	
COVID inquiry/reporting	2	
animal control	9	
dumpster permit	6	
hauler permit	1	
septic permit	1	
property care complaint	1	
miscellaneous	3	
<b>Total</b>	<b>42</b>	
<b>Notices Issued</b>		
<b>housing orders</b>		
condemnations	1	
property care notices	1	
compliance	2	
<b>Total</b>	<b>4</b>	
<b>Inspections Conducted</b>		
food inspections	4	
lodging/housing inspections	4	
site observations	2	
<b>Total</b>	<b>10</b>	

Memorandum

To: The South Hadley Board of Health

From: Robert Pleasure, 10 Jewett Ln. South Hadley, MA [REDACTED]

Date: July 8, 2022

Note: Hyperlinks can be accessed through Control Click, if they do not directly click through.

At the June meeting of the South Hadley Board of Health, I was asked to make written comment on my recommendations to the Board regarding roles it might decide to play in future in emergency planning. I believe it is clear that in Massachusetts, Local Boards of Health have significant roles to play in emergency planning together with the Director of Health. Some of these roles are, I believe, contemplated in the South Hadley Master Plan. I hope to address these issues with brief oral comments to accompany this memorandum at a time convenient to the Board. Thank you for asking for comments and for allowing a short time to speak and answer any questions you may have about the points I raise.

- I. **Massachusetts Boards of Health play an important role in emergency planning. The Massachusetts Board of Health Guidebook of the Massachusetts Association of Health Boards provides a succinct description of that important responsibility:**

#### "BOARD OF HEALTH ROLE AT A GLANCE

The local boards of health are involved with planning response activity regarding hazardous materials and should be knowledgeable of emergency response plans within their community. The board of health (BOH) responds to and refers to the appropriate agency, emergency situations involving hazardous materials found in their community. Additionally, the BOH must be aware of local facilities using hazardous materials and the potential for off-site exposure." Massachusetts Association of Health Boards, **Guidebook**, Chapter 14 (2006).

[Microsoft Word - 14 Superfund.doc \(mahb.org\)](#)

In addition to the MAHB **Guidebook**, see the MAHB **Legal Handbook** on the authority of Massachusetts Boards of Health to play a lead role in protecting the public in emergency situations, including pollution of the air by toxic materials. Handbook, page 127 and following.

#### "Authority

Boards of health derive authority from several sources to regulate activities that cause air pollution, or that generate levels of noise that are detrimental to the public health and welfare. These include the powers of boards of health (1) to abate nuisances under G.L. c. 111, § 122; (2) to regulate and control atmospheric pollution under G.L. c. 111, § 31C; (3) to regulate noisome trades; and (4) to enforce the

regulations promulgated under Chapter 111, § 142A-142M by the Department of Environmental Protection (DEP) with respect to noise, dust, odor and other specific activities (310 CMR 7.00).”

Massachusetts Association of Health Boards, **The Legal Handbook for Massachusetts Boards of Health, 3<sup>rd</sup> Edition** (2021), p. 127.

[Legal-Handbook-3rd-Edition-2021.pdf \(mahb.org\)](#)

**II. In the case of emergency preparedness, South Hadley participates in the Hampshire Regional Emergency Planning Committee (HREPC). [www.hrepc.us](http://www.hrepc.us)**

As participants in HREPC, individual Boards of Health do not lose their autonomy as local boards of health.

See [Legal-Handbook-3rd-Edition-2021.pdf \(mahb.org\)](#), supra. p. 151.

**III. The Off-Site Consequence Analysis (OCAs) for worst-case scenario chemical accidents in sections 2-5 of Required EPA Risk Management Plans (RMPs).**

An essential and required planning tool in emergency planning for chemical accidents of so called Tier 2 entities are the OCA and the RMP. The availability of OCAs to local health officials is described through the following sources and references below. The links are to the regulations and to the security notice, which makes certain information contained in the OCAs confidential and not to be distributed to the public through the internet. But, nevertheless, essential data is available to local public officials.

[40 CFR Part 1400 - DISTRIBUTION OF OFF-SITE CONSEQUENCE ANALYSIS INFORMATION | CFR | US Law | LII / Legal Information Institute \(cornell.edu\)](#)

[SECURITY NOTICE To Federal, State and Local Officials Receiving Access to the Risk Management Program's Off-site Consequence Analysis Information \(September 2016\) \(epa.gov\)](#)

Particular industrial facilities in South Hadley may have been acknowledged to be covered by the risk assessment requirements, or in other cases, likely to be covered. It is recommended that this essential information lawfully available to public officials in the OCAs should be obtained by the Director of Health and the Board of Health. In the event the information has not yet been received and integrated into emergency planning by the Town of South Hadley and the Hampshire Regional Emergency Planning Committee.

**IV. Recommendations.** I urge the Board of Health to review the foregoing references, and to play its important role in emergency planning, together with other South Hadley authorities, and particularly with the Director of the Board of Health. There are numerous references in the current South Hadley Master Plan that appear to make this a regular and important

activity of the Board of Health. I plan to discuss those references to the Master Plan, if given an opportunity to address these issues at a regular meeting of the Board of Health.

**Part I** ADMINISTRATION OF THE GOVERNMENT

**Title XVI** PUBLIC HEALTH

**Chapter 111** PUBLIC HEALTH

**Section 142D** AIR POLLUTION CONTROL DISTRICTS; STANDARDS AND PLANS FOR IMPLEMENTATION; ESTABLISHMENT; PERIODIC REVIEW; AMENDMENT; COMPLIANCE WITH MINIMUM FEDERAL STANDARDS

Section 142D. The department, with the approval of the governor, may establish air pollution control districts compatible with such air quality control regions as may be designated by the secretary of the federal department of health, education and welfare under the provisions of the Air Quality Act of 1967, or any additions or amendments thereto. The department, with the approval of the governor, may add to or remove from air pollution control districts such cities and towns, and may establish or abolish such other air pollution control districts, as it may deem advisable and necessary to effect air pollution control in the commonwealth. The department may adopt, and from time to time amend, after public hearings, ambient air quality standards applicable to said districts and to other portions of the commonwealth, and shall adopt a plan for the implementation, maintenance and attainment of such standards. The powers, duties and rights of the department in the exercise

of air pollution control in districts established under this section and the manner in which funds shall be made available to it shall be as provided in section one hundred and forty-two B.

From time to time the department shall review the ambient air quality standards and plan for implementation, maintenance and attainment of such standards adopted pursuant to this section and, after public hearings, shall amend such standards and implementation plan so as to minimize the economic cost of such standards and plan for implementation, provided, however, that such standards shall not be less than the minimum federal standards. The initial such amendments to such standards and implementation plan shall postpone the achievement dates for the primary and secondary ambient air quality standards to the latest dates permitted pursuant to federal law. Any compliance schedule, emission limitation, for new or existing facilities, order, rule, plan or regulation adopted pursuant to such standards or implementation plan shall be amended to conform to such amended standards and implementation plan upon petition of the owner or operator of a facility whose construction, maintenance or operation is affected by such compliance schedule, emission limitation, for new or existing facilities, order, rule, plan or regulation. The department shall, after opportunity for public hearing, issue a final order with respect to the subject matter of such petition within sixty days of the filing of the petition.

In any standard, implementation plan, compliance schedule, emission limitation, for new or existing facilities, order, rule, plan or regulation where the sulphur or ash content, or other chemical or physical characteristic of fuels or emissions therefrom is subject to consideration by the department, the department shall allow stack height, fuel switching and variations in plant operation to be used instead of controls on such

sulphur or ash content or chemical or physical characteristic of such fuels or emissions therefrom if the owner or operator of the facility shall demonstrate to the satisfaction of the department that such controls are not necessary to achieve ambient air quality standards; provided, however, the department may impose conditions necessary to minimize public nuisance and adverse effects to the public health. If a variance or other permission granted by the department with respect to the sulphur or ash content, or other chemical or physical characteristic of fuels or emissions therefrom would otherwise prevent the achievement of primary or secondary federal ambient air quality standards within a time period required by the express language of a federal statute or regulation such variance or other permission shall be limited to the maximum time period allowed by federal law.

**Part I** ADMINISTRATION OF THE GOVERNMENT

**Title XVI** PUBLIC HEALTH

**Chapter 111** PUBLIC HEALTH

**Section 142E** AIR POLLUTION; PREVENTING AND CONTROLLING BY DEPARTMENTS, AGENCIES, COMMISSIONS, AUTHORITIES AND POLITICAL SUBDIVISIONS

Section 142E. Any department, agency, commission, authority or political subdivision of the commonwealth having control and supervision over any building, installation or other property shall cooperate with the department of environmental protection in preventing and controlling pollution of the air insofar as the discharge of any matter from or by such building, installation or other property may cause or contribute to air pollution.

All departments, agencies, commissions, authorities and political subdivisions shall be subject to rules and regulations adopted by the department pursuant to sections one hundred and forty-two A to one hundred and forty-two C, inclusive. The department may serve upon any such department, agency, commission, authority or political subdivision an order to cease and desist from violating such rules or regulations. If objection to such order is made within ten days, the department, agency, commission, authority or political subdivision so objecting shall be

entitled to a hearing before a person designated by the commissioner whose recommendations when adopted, or amended and adopted, by the department of environmental protection shall be a final decision within the meaning of section fourteen of chapter thirty A, subject to judicial review as therein provided. If such order is violated the department may file a bill of complaint in the superior court to enjoin such violation; provided, however, that in such a proceeding the sole questions in issue shall be (1) was the order of the department violated and (2) is the relief sought appropriate.

**Part I** ADMINISTRATION OF THE GOVERNMENT

**Title XVI** PUBLIC HEALTH

**Chapter 111** PUBLIC HEALTH

**Section 142F** DISCHARGING EXCESS FUEL FROM AIRCRAFT INTO  
ATMOSPHERE; PENALTY; DEFINITIONS

Section 142F. Whoever, except in an emergency, allows excess fuel to be discharged into the atmosphere from an aircraft shall be punished by a fine of not less than two hundred and fifty dollars nor more than seven hundred and fifty dollars. As used in this section "excess fuel" shall mean that quantity of unused fuel which collects in "drain cans" from the engines of aircraft following the starting up or the shutting off of such engines, and "drain can" shall mean that receptacle located below or adjacent to an aircraft engine in which unused fuel collects or is collected when the engine is not in operation or just after the engine has been put into operation.

**Part I** ADMINISTRATION OF THE GOVERNMENT**Title XVI** PUBLIC HEALTH**Chapter 111** PUBLIC HEALTH**Section** BURNING OF CHRISTMAS TREES RESTRICTED  
**142G**

Section 142G. Notwithstanding the provisions of sections one hundred and forty-two A and one hundred and forty-two B, any person may burn Christmas trees during the period from December twenty-sixth to January seventh in each year, provided that said person obtains a permit from the head of the fire department of the city or town wherein such burning shall take place and provided further that such burning is conducted under the supervision and control of said head of the fire department.

**Part I** ADMINISTRATION OF THE GOVERNMENT

**Title XVI** PUBLIC HEALTH

**Chapter 111** PUBLIC HEALTH

**Section 122** REGULATIONS RELATIVE TO NUISANCES; EXAMINATIONS

Section 122. The board of health shall examine into all nuisances, sources of filth and causes of sickness within its town, or on board of vessels within the harbor of such town, which may, in its opinion, be injurious to the public health, shall destroy, remove or prevent the same as the case may require, and shall make regulations for the public health and safety relative thereto and to articles capable of containing or conveying infection or contagion or of creating sickness brought into or conveyed from the town or into or from any vessel. Whoever violates any such regulation shall forfeit not more than one thousand dollars.

<b>Part I</b>	ADMINISTRATION OF THE GOVERNMENT
<b>Title XVI</b>	PUBLIC HEALTH
<b>Chapter 111</b>	PUBLIC HEALTH
<b>Section 31C</b>	ATMOSPHERIC POLLUTION; REGULATION AND CONTROL; PUBLICATION; HEARINGS; PENALTIES; ENFORCEMENT; JURISDICTION; INJUNCTION

Section 31C. A board of health, or other legal authority constituted for such purpose by vote of the town or city council shall have jurisdiction to regulate and control atmospheric pollution, including, but not limited to, the emission of smoke, particulate matter, soot, cinders, ashes, toxic and radioactive substances, fumes, vapors, gases, industrial odors and dusts as may arise within its bounds and which constitutes a nuisance, a danger to the public health, or impair the public comfort and convenience.

Said board of health or other legal authority, subject to the approval of the department of environmental protection, in this section called the department, may from time to time adopt reasonable rules and regulations for the control of atmospheric pollution. Before the board of health or other legal authority submits such rules and regulations to the department for approval, such board or other legal authority shall hold a public hearing thereon, of which notice shall be given by publication for one day in each of two successive weeks in a newspaper published in the town,

the first publication to be at least fourteen days prior to the date of the hearing, or if no newspaper is published in such town, by posting a copy of such notice in a public place therein. Said rules and regulations, when approved by the department, and after publication in a newspaper published in the town, or, if no newspaper is published in such town, after posting a copy in a public place, shall have the force of law.

The department shall advise the board or other legal authority in all matters of atmospheric pollution. The department may, upon request of the board of health or other legal authority of a town adversely affected by atmospheric pollution arising in another town, after a hearing to all parties interested, assume joint jurisdiction to regulate or control such cause of atmospheric pollution and may exercise all powers of the local board of health or other legal authority under provisions of the General Laws or any special laws.

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.

Rules and regulations promulgated or adopted under the provisions of this section shall be enforced by said board of health or other legal authority either of which may delegate the power to enforce specific

regulations to other agencies or departments of the same city or town. The superior court shall have jurisdiction in equity to enforce such rules and regulations and may restrain by injunction any violation thereof.

**Part I** ADMINISTRATION OF THE GOVERNMENT

**Title XVI** PUBLIC HEALTH

**Chapter 111** PUBLIC HEALTH

**Section 142A** POLLUTION OR CONTAMINATION OF ATMOSPHERE;  
PREVENTION; REGULATIONS; VIOLATION; ENFORCEMENT

Section 142A. The department of environmental protection, referred to in this section and in sections one hundred and forty-two B through one hundred and forty-two M, inclusive, as the department may from time to time adopt regulations, pursuant to this section and sections one hundred and forty-two B through one hundred and forty-two M, inclusive, to prevent pollution or contamination of the atmosphere. Whoever violates any such regulation or any permit or plan approval or order issued thereunder: (a) shall be punished for each violation by a fine of not more than twenty-five thousand dollars, or by imprisonment for not more than one year, or both such fine and imprisonment; or (b) shall be subject to a civil penalty of not more than twenty-five thousand dollars for each violation. Each day or part thereof that such violation occurs or continues shall be a separate violation. The civil penalty may be assessed in an action brought on behalf of the commonwealth in the superior court. The commonwealth may also bring an action for injunctive relief in the

superior court for any such violation, and the superior court shall have jurisdiction to enjoin such violation and to grant such further relief as it may deem appropriate.

<b>Part I</b>	ADMINISTRATION OF THE GOVERNMENT
<b>Title XVI</b>	PUBLIC HEALTH
<b>Chapter 111</b>	PUBLIC HEALTH
<b>Section 142B</b>	METROPOLITAN AIR POLLUTION CONTROL DISTRICT; ESTABLISHMENT; COMPOSITION; POWERS OF DEPARTMENT OF ENVIRONMENTAL PROTECTION

Section 142B. There is hereby established a metropolitan air pollution control district, to consist of the territory and waters comprised within the cities and towns of Arlington, Belmont, Boston, Braintree, Brookline, Cambridge, Canton, Chelsea, Dedham, Everett, Lynn, Malden, Medford, Melrose, Milton, Needham, Newton, Peabody, Quincy, Revere, Saugus, Somerville, Stoneham, Wakefield, Waltham, Watertown, Weymouth, Winchester, Winthrop, and Woburn, and such other cities and towns as may, after application for admission to the said district, be admitted thereto by the department; provided, that said district shall at all times be composed of contiguous territory.

The department shall control the pollution of the atmosphere within said district. The department may from time to time, after a public hearing, prescribe and establish, amend or repeal, rules and regulations to prevent pollution or undue contamination of the atmosphere within said district.

Personnel of the department may in the performance of their duties under this section enter and inspect any premises, providing said personnel receive the consent of the owner or person in control of such premises. A court, judge or justice authorized to issue warrants in criminal cases may, upon sworn testimony by said personnel that consent for such entry and inspection has been requested and refused, and upon further sworn testimony either (1) that a reasonable inspection of industrial or commercial premises is necessary to detect, prevent or warn against conduct or conditions which may threaten the public health, comfort and convenience by contributing to air pollution, or (2) that a reasonable nondiscriminatory public health inspection, of which the inspection of the particular premises is a part, has been authorized by the department and is being undertaken to detect, prevent or warn against conduct or conditions which may threaten the public health, comfort and convenience by contributing to air pollution, if satisfied that such testimony is true, issue a warrant identifying the particular premises and authorizing said personnel seeking the warrant to conduct a reasonable search of such premises during daylight hours if the premises is residential, or during operating hours if the premises is industrial or commercial. For the purposes of securing a warrant under this section, belief or knowledge regarding actual conduct or conditions in a particular premises shall not be necessary. Notwithstanding the provisions of any law to the contrary, any information, record, or particular part thereof, other than emission data, submitted to the department pursuant to this section, shall, upon request, be kept confidential and not considered to be a public record when it is deemed by the commissioner that such information, record, or

report relates to secret processes, methods of manufacture, or production or that such information, record, or report if made public would divulge a trade secret.

This section shall not operate to abrogate any of the powers and duties, as defined by general or special law, of any agency or political subdivision of the commonwealth.

The department shall have power to order any person, corporation, or political subdivision having control of an air contamination source, other than an employee, to stop or abate violation of any of the rules and regulations adopted pursuant to this section or of any of the rules and regulations adopted under the provisions of section one hundred and forty-two A and standards adopted under section one hundred and forty-two A and regulations adopted under section one hundred and forty-two D. Said order shall inform the alleged violator in writing of his right to request, within ten days, a hearing under the provisions of chapter thirty A, but if no such request is made within ten days, said person, corporation, or political subdivision shall be deemed to have consented to the order. If said person, corporation, or political subdivision requests a hearing, the commissioner of environmental protection, in this section and section one hundred and forty-two E called the commissioner, or his designee, shall within a reasonable time hold a hearing under the provisions of said chapter thirty A. The commissioner may reissue such order as is warranted and all orders, permits, or other determinations of the commissioner, except those consented thereto, shall be subject to judicial review as provided in chapter thirty A. In addition, any person who participates in any public participation process required by the federal Clean Air Act, section 502 (b) (6), 42 U.S.C. section 7661a (b) (6), or any amended version thereof or any regulation enacted thereunder,

with respect to the department's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to chapter thirty A, and may obtain judicial review, pursuant to chapter thirty A, of a final decision therein. Any person, corporation, or political subdivision violating any order of the department (a) shall be punished by a fine of not more than twenty-five thousand dollars or by imprisonment for not more than one year, or both such fine and imprisonment; or (b), shall be subject to a civil penalty not to exceed twenty-five thousand dollars for each such violation. The civil penalty may be assessed in an action brought on behalf of the commonwealth in any court of competent jurisdiction. For the purpose of this paragraph each subsequent day or part thereof of violation of such an order, whether such violation be continuous or intermittent, shall be construed as a separate and succeeding offense. The superior court sitting in equity, on petition of the department or any person authorized by the department shall have jurisdiction to enforce any such order and to restrain violations of any rules or regulations adopted pursuant to this section until such rules and regulations have been complied with.

The department may, for the purpose of conducting a continuing inventory of air pollution source emissions, require any person owning, operating, or having control of any air contamination source to register said source with the department and to supply such information pertaining to said source as the department may specify. Registration shall be on a form supplied by the department and shall be accomplished within a period of time specified by the department after public notice, provided said period of time shall be not less than thirty days.

Nothing in this section or in any rule or regulation adopted hereunder shall be construed as relieving, under any circumstances, any person, corporation, or political subdivision from responsibility or liability for any damages which may occur or for civil or criminal proceedings arising out of or as a result of any action of said person, corporation, or political subdivision, regardless of any action of the department, and persons other than the department shall not acquire actionable rights by virtue of such action.

The department shall maintain and operate such air sampling stations and devices; make or perform such routine and special examinations, inspections, observations, determinations, laboratory analyses, and surveys; maintain such records; and perform such other acts as it deems necessary to conduct an adequate air pollution control program within the metropolitan air pollution control district.

The commonwealth shall be reimbursed, as hereinafter provided, for all appropriations made by the general court and expended by the department for such purposes. The state treasurer shall issue his warrant requiring the assessors of the cities and towns of the metropolitan air pollution control district to assess a tax in the amount of the sums expended, one half of which shall be in proportion to their assessed valuations and one half of which shall be in proportion to their respective populations; provided, that any such city or town may in any year anticipate in whole or in part its assessment, and appropriate, raise, and deposit the amount thereof with the state treasurer, and any sum so deposited shall be credited against such assessment. The assessed valuations of the several cities and towns shall be the last preceding valuations made for purposes of apportioning the state tax.

**Part I** ADMINISTRATION OF THE GOVERNMENT**Title XVI** PUBLIC HEALTH**Chapter 111** PUBLIC HEALTH**Section 142C** OTHER AIR POLLUTION CONTROL DISTRICTS; FORMATION

Section 142C. Other air pollution control districts similar to that established by section one hundred and forty-two B may be formed upon approval of the department. Each such district shall be composed of two or more political subdivisions of the commonwealth and of contiguous territory. Cities or towns wishing to form such a district shall make joint application to the department, requesting the department to approve such district and to effect the control of air pollution therein. The powers, duties, and rights of the department in the exercise of air pollution control in such districts and the manner in which funds shall be made available to it shall be as provided in section one hundred and forty-two B.

**Part I** ADMINISTRATION OF THE GOVERNMENT**Title XVI** PUBLIC HEALTH**Chapter 111** PUBLIC HEALTH**Section** CEREMONIAL BONFIRES RESTRICTED; PERMITS  
**142H**

Section 142H. The city council of a city with the approval of its mayor, or the board of selectmen or town council of a town, may authorize the fire department of such city or town to issue not more than one permit in any one year for a ceremonial bonfire in such city or town. Said ceremonial bonfire shall mark the observance of a significant municipal, state, or national event, and any such ceremonial bonfire shall be under the continuous supervision of the fire department. A permit for such a ceremonial bonfire shall be issued only to a municipal department or a civic, fraternal or veterans organization within such city or town. Only wood which has not been painted, impregnated, or otherwise treated with any foreign substance shall be permitted to burn in ceremonial bonfires. No ceremonial bonfire shall burn for more than twelve hours.

**Part I** ADMINISTRATION OF THE GOVERNMENT**Title XVI** PUBLIC HEALTH**Chapter 111** PUBLIC HEALTH**Section 142I** BONFIRES FROM JULY 2 TO JULY 6 AUTHORIZED

Section 142I. Notwithstanding any provision of sections one hundred and forty-two A and one hundred and forty-two B, and in addition to the ceremonial bonfires permitted under the provisions of section one hundred and forty-two H, any civic, fraternal, veteran, community, or business organization may build and ignite bonfires under the supervision and control of the fire department of the city or town in which such burning takes place during the period from July second to July sixth in each year. A permit for such bonfire shall be obtained by such organization from the head of the fire department upon his determination that such organization will conduct such burning in a proper and responsible manner.

**Part I** ADMINISTRATION OF THE GOVERNMENT

**Title XVI** PUBLIC HEALTH

**Chapter 111** PUBLIC HEALTH

**Section** REPEALED, 1998, 490, SEC. 8  
**142J**

**Part I** ADMINISTRATION OF THE GOVERNMENT**Title XVI** PUBLIC HEALTH**Chapter 111** PUBLIC HEALTH**Section 142K** MOTOR VEHICLE EMISSIONS STANDARDS; LATE MODELS

Section 142K. (a) In addition to the provisions of section one hundred and forty-two J authorizing the department of environmental protection to establish and administer setting motor vehicle emissions standards, for model years beginning with the model year nineteen hundred and ninety-three or as soon thereafter as allowable under federal law, the department of environmental protection, hereinafter referred to as the department, shall adopt motor vehicle emissions standards based on the California's duly promulgated motor vehicle emissions standards of the state of California unless, after a public hearing, the department establishes, based on substantial evidence, that said emissions standards and a compliance program similar to the state of California's will not achieve, in the aggregate, greater motor vehicle pollution reductions than the federal standards and compliance program for any such model year. The department shall publicly issue detailed written findings before and after holding a public hearing pursuant to this paragraph and said hearing shall be subject to the provisions for public hearings contained in chapter thirty A. A decision not to adopt said standards shall apply as long as the

federal standards and the standards of the state of California do not change. Emissions standards adopted pursuant to this section shall include the one hundred thousand mile certification standards of the state of California.

Notwithstanding any other provision of this section, the department may postpone, for no more than one year, the adoption of said motor vehicle emission standards if the department makes a written determination that none of the following states is likely to adopt California's motor vehicle emission standards for model year nineteen hundred and ninety-three pursuant to the requirements of 42 USC 7507: Connecticut, Maine, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. The department may further postpone adopting said motor vehicle emission standards for an additional year if the department makes a written determination that none of the aforesaid listed states is likely to adopt California's motor vehicle emission standards for model year nineteen hundred and ninety-four.

(b) No corporation, person or other entity shall sell or offer for sale a motor vehicle or motor vehicle engine, manufactured during or after the first model year that the motor vehicle emissions standards specified in subsection (a) are in effect which is intended for use primarily in the commonwealth and which has not been certified according to regulations promulgated by the department; provided, however, that reasonable exemptions may be made by the department for: (1) out-of-state registered vehicles transferred by inheritance, or by decree of divorce, dissolution or legal separation entered by a court of competent jurisdiction; (2) vehicles purchased by nonresidents prior to establishing residency in the commonwealth; and (3) used vehicles, as defined by regulations of the department, which were originally purchased in states

with emission standards different from the standards of the commonwealth. Upon the granting of an exemption from the provisions of this section, a motor vehicle shall forever be exempt. The department may promulgate regulations including, but not limited to, prohibitions on the purchase, importation, delivery, receipt, rental, leasing or acquisition of motor vehicles or motor vehicle engines not in compliance with the provisions of this section.

(c) On or before August first, nineteen hundred and ninety, the department shall promulgate regulations to ensure maximum motor vehicle pollution reductions pursuant to the provisions of this section including, but not limited to: engine family certification standards; after-market parts certification; one hundred percent assembly line functional testing; two percent manufacturer quality audits; post assembly line pre-sale new vehicle testing; dealership inspection; in-use testing; anti-tampering protections; on-board diagnostics, and warranty and recall requirements. The promulgation of these regulations may be postponed in accordance with the provisions of subsection (a) concerning postponement but, in no event shall the department promulgate regulations later than June first, nineteen hundred and ninety-two.

(d) The manufacturer's warranty for passenger vehicles certified pursuant to subsection (a) shall extend, at a minimum, for three years or fifty thousand miles for emissions related parts with a retail cost of less than three hundred dollars and seven years or seventy thousand miles for emissions related parts with a retail cost of three hundred dollars or more. The department shall periodically adjust said three hundred dollar repair level by the percentage change in the consumer price index, as published by the United States Bureau of Labor Statistics. For the model year nineteen hundred and ninety-three, if the motor vehicle emissions

standards as specified in subsection (a) are in effect, manufacturers shall report to the department all repairs made under warranty if the number of repairs on a specific model, for a specific emissions part, exceeds four percent of the total number of the model sold. For model year nineteen hundred and ninety-four and subsequent model years, if the motor vehicle emissions standards as specified in subsection (a) are in effect, manufacturers shall report to the department all repairs made under warranty if the number of repairs on a specific model for a specific emissions part exceeds two percent of the total number of the model sold.

(e) Any corporation, person, municipality or other entity that violates the requirements of this section or any regulation adopted hereunder shall be punished by a fine of not more than twenty-five thousand dollars or by imprisonment for not more than one year or both such fine and imprisonment and shall be subject to a civil penalty of not more than twenty-five thousand dollars for each such violation. Each day that a violation for any motor vehicle continues shall be a separate offense. The civil penalty may be assessed in an action brought on behalf of the commonwealth in any court of competent jurisdiction.

The penalties imposed hereunder shall be in addition to all other enforcement powers of the department under applicable law.

(f) The provisions of this section are intended as minimum requirements of the commonwealth's motor vehicle emissions program and shall not limit the department's authority to adopt and implement the stricter air quality regulations allowed under any other federal and state law.

(g) To decrease the impact of out-of-state generated auto emissions on the air quality of the commonwealth, the department is hereby directed to work in cooperation with other states to facilitate Massachusetts' and

other states' adoption of more stringent motor vehicle emissions control programs. The department is authorized to work in cooperation with and enter into contracts with other states in generating and reviewing certification, testing, recall and warranty data so long as such cooperation does not limit the effectiveness of the program established by this section and the department may adopt other states' certification results by reference.

(h) The responsibilities hereunder shall be in addition to all other responsibilities imposed by any other general or special law or rule or regulation.

**Part I** ADMINISTRATION OF THE GOVERNMENT**Title XVI** PUBLIC HEALTH**Chapter 111** PUBLIC HEALTH**Section** AGRICULTURAL BURNING**142L**

Section 142L. Notwithstanding the provisions of sections one hundred and forty-two A to one hundred and forty-two E, inclusive, the burning of tree prunings, diseased plant materials, and brush from land clearing operations, which are the direct result of the normal commercial pursuit of agriculture, as defined in section one A of chapter one hundred and twenty-eight, shall be allowed subject to the permission of the local fire chief which need not be in writing. Said permission shall be based solely upon whether or not appropriate meteorological conditions exist to ensure safe burning.

**Part I** ADMINISTRATION OF THE GOVERNMENT

**Title XVI** PUBLIC HEALTH

**Chapter 111** PUBLIC HEALTH

**Section 142M** MOTOR VEHICLE EMISSIONS INSPECTION AND REPAIR;  
DEFINITIONS; RULES AND REGULATIONS; INSPECTION  
FACILITIES; WAIVERS; QUALITY ASSURANCE PROGRAM;  
VIOLATIONS

Section 142M. (a) As used in this section, the following words shall have the following meanings unless the context clearly requires otherwise:

"Commissioner", the commissioner of environmental protection.

"Department", the department of environmental protection.

"Dynamometer", a device which applies a load to a vehicle's drive wheels while operating in a stationary, secure position to simulate actual driving conditions for an emissions inspection.

"Electronic network", or "network", a computerized communication system including, but not limited to, the computers, communications devices and software for such system which links emissions analyzers, the department's emissions database, and the registry of motor vehicles' registration database and which allows the department and the registry to store and analyze data on motor vehicle emissions inspections, motor vehicles and emissions inspectors.

"Emissions analyzer", a device which measures the volume of air pollutants and gases in motor vehicle exhaust or a device which analyzes a motor vehicle's computer system relating to emissions.

"Emissions inspection", a component of the periodic staggered inspection of motor vehicles required by section 7A of chapter 90 which may include, but shall not be limited to, the inspection of a motor vehicle's emissions control equipment, including its computer system relating to emissions, the measurement of air pollutant concentrations or mass in vehicle exhaust with an analyzer while the vehicle is operated on a dynamometer, the verification of vehicle fuel system integrity and the entry of a complete emissions inspection record in the registry's database for the vehicle being inspected, as prescribed by the department in regulations and performed by an emissions inspector.

"Emissions inspection certificate" or "inspection certificate", a printed statement, instrument or device in a form prescribed by the registrar, in consultation with the commissioner, which provides inspection information and facilitates effective enforcement of the emissions inspection and maintenance requirements of this section and chapter 90.

"Emissions inspection facility", a facility, licensed by the registrar under section 7W of chapter 90 for conducting motor vehicle emissions inspections and other related duties.

"Emissions inspector", a properly trained person, licensed by the registrar and certified by the department and meeting the department's requirements for performing motor vehicle emissions inspections.

"Emissions repair technician", a person registered with the department and meeting departmental training standards for diagnosing and repairing motor vehicles which fail an emissions inspection.

"Emissions inspection and maintenance program" or "I&M program", a component of the periodic staggered motor vehicle inspection required by section 7A of chapter 90 which shall include motor vehicle emissions inspections, including accurate and effective testing of vehicles, using emission testing equipment, visual and functional tests of evaporative systems, rigorous compliance and enforcement activities and quality assurance and quality control procedures which promotes effective emissions repair and maintenance of the motor vehicle.

"Evaporative emissions test", a test administered to determine whether there are leaks in a vehicle's fuel or evaporative control system, such as purge functions of a vapor canister.

"Emissions waiver certificate", a written statement, instrument or device indicating that the requirement of compliance with the emissions standards and criteria for the emissions component of the motor vehicle inspection program has been waived for a particular motor vehicle.

"On-road test", a field test designed and conducted to assess the emissions of motor vehicles.

"Registrar", the registrar of motor vehicles.

"Registry", the registry of motor vehicles.

"Tampering", (i) the act of removing or rendering inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under section 203(a) of the federal Clean Air Act prior to its sale and delivery to the ultimate purchaser; or (ii) for any manufacturer or dealer knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser.

"Vehicle identification number" or "VIN ", the unique number assigned to each vehicle by the vehicle manufacturer identifying specific vehicle characteristics, such as make, model, model year, pollution control devices and the particular vehicle itself.

(b) Pursuant to this section, the department shall develop the standards, requirements and rules and regulations for the emissions component of the periodic staggered inspection program established pursuant to section 7A of chapter 90. It shall be the responsibility of the department, under authority of this chapter, to provide the direct primary oversight of the operational and environmental aspects of the emissions component of the inspection program. Nothing in this section shall be construed to require the leasing or purchasing of a dynamometer, an emissions analyzer or any necessary computer hardware or software by an emissions inspection facility from the network contractor; provided, however, the network contractor shall provide access to the data acquisition and management network to any emissions inspection facility who purchases or leases a dynamometer, emissions analyzer or necessary computer hardware or software through sources other than the network contractor so long as such equipment complies with testing equipment specifications as established by the commissioner in consultation with the registrar. Any requests for proposals for contracting with a network contractor shall require that the commissioner, in consultation with the registrar, shall have oversight over the charge assessed by the network contractor for access to the data acquisition and management network to emissions inspection facilities who purchased equipment through sources other than the network contractor; provided, however, that notwithstanding the provisions of this section, the commissioner and the registrar may require emissions inspection facilities to obtain, lease or purchase such

equipment from the network contractor upon the determination that allowing emissions inspection facilities to lease or purchase such equipment through sources other than the network contractor would result in an increase in the inspection fee. Said determination shall be made by the commissioner and registrar, in consultation with the secretary of administration and finance, only upon a finding that no feasible option exists by which emissions inspection facilities may obtain such equipment through sources other than the network contractor without increasing the inspection fee. The amount of said fee for said inspection shall be uniform statewide. It shall be the responsibility of the registrar, under authority of chapter 90, to license inspection facilities and inspectors and to register vehicles complying with the inspection program requirements and to conduct audit and enforcement activities related thereto. The department, on behalf of the commonwealth, shall be responsible for submitting all appropriate and required program regulations on the motor vehicle emissions component of the inspection and maintenance program and applicable revisions to the state implementation plan to the United States Environmental Protection Agency, in accordance with the requirements of the federal Clean Air Act. The department, in conjunction with the registry, may develop and implement a demonstration or pilot of the motor vehicle emissions inspection program or elements of such program to evaluate the effectiveness of such program, or elements of such program, in successfully reducing air contaminants emitted by motor vehicles in the commonwealth as required by federal law.

The emissions component of the inspection program shall be required statewide, shall be conducted on a staggered basis throughout the year and shall be required of each subject motor vehicle at least every two

years unless otherwise exempted or specified by the department. The commissioner shall establish rules and regulations specifying which motor vehicles shall be subject to the motor vehicles emissions component of the inspection program.

The commissioner shall establish rules and regulations establishing standards and criteria for motor vehicle emissions inspections, giving consideration to the United States Environmental Protection Agency's performance standards for the enhanced emissions inspection and maintenance program and the level of emission reductions necessary to achieve and maintain federal and state ambient air quality standards. Such standards and criteria may include, but shall not be limited to, a requirement to test motor vehicle emissions for hydrocarbons, carbon monoxide and oxides of nitrogen. The standards and criteria may be different for different model years and types of vehicles.

Street rods and custom vehicles, as defined and registered pursuant to section 2H of chapter 90, shall receive an emissions waiver certificate. Specially constructed vehicles and replica vehicles, as defined and registered pursuant to said section 2H of said chapter 90, and registered on or before April 30, 2012, shall receive an emissions waiver certificate. Specially constructed vehicles and replica vehicles, as so defined, registered after April 30, 2012 shall be subject to emission control requirements based on the model year and configuration of the engine installed in the specially constructed or replica vehicle, whether the engine is an original equipment manufacturer's production engine, rebuilt engine or crate engine. Regulations relative to emissions compliance for replica or specially constructed vehicles registered after April 30, 2012 may establish maximum limits on the annual number of vehicle miles traveled by these vehicles; provided, however, that any such limit set,

shall not be set at less than 3,000 miles per year. If the model year of the engine installed in the specially constructed or replica vehicle requires an onboard diagnostic system, the vehicle shall be subject to an onboard diagnostic system emissions test applicable to the certified configuration, including any exclusions or exemptions otherwise granted to that certified configuration.

The commissioner, in consultation with the registrar, shall establish rules and regulations relative to testing equipment specifications, including emissions analyzers, quality assurance and quality control procedures for testing equipment, calibration gases, failure rates, emission standards, testing procedures, data collection and data analysis, and program evaluation.

The registrar, in consultation with the commissioner, shall determine the number and location of inspection facilities necessary for the success of the emissions component of the inspection program while considering consumer convenience and cost and achieving an equitable distribution across the commonwealth. Said registrar shall report to the joint committee on public safety and the house and senate committees on ways and means the actual number and location of inspection facilities on or before July 1, 1998. The commissioner may establish criteria and a process to select qualified applicants who shall be authorized to participate in the emissions component of the inspection program. In no event shall the use of state-owned or municipal-owned property as a site for an inspection facility or a test center relieve the owner or operator of the inspection facility from paying to the municipality an amount equal to the local property taxes due if such property was not state-owned or municipal-owned.

The department and the registry, in implementing the requirements of this section, shall acquire personnel, purchase equipment and procure services necessary to achieve the objectives hereunder including, but not limited to, the following: (i) inspection of motor vehicles; (ii) data acquisition and data management; (iii) quality control and quality assurance; (iv) on-road testing; (v) program evaluation; (vi) public communications; (vii) research and development; and (viii) any other purposes related to the development and implementation of the motor vehicle emissions component of the inspection program.

The technical and performance specifications of any equipment determined by the department to be necessary and required in the implementation of the provisions of this section, shall be reevaluated periodically as to its useful life, flexibility and applicability as to changing technological conditions and continued effectiveness in the emissions inspection and maintenance program.

The department and the registry shall contract with or any private entities that demonstrate an ability to manage emissions programs, hereinafter referred to as the network contractor, to develop and manage the network and inspection facilities of said motor vehicle inspection program. The department and the registry shall, as a term and condition of such contract, require the network contractor to: (i) acquire and distribute inspection facility equipment; and (ii) acquire such equipment and the associated maintenance services from one or more suppliers at discount prices through volume purchasing. Such contract shall also include performance standards which shall pertain to the motor vehicle inspection program goals as set forth in the commonwealth's state implementation plan. Such contract shall also require the network contractor to establish at least five test centers to be evenly distributed across the

commonwealth for research, training, repair assistance and for any other purposes related to the implementation and success of the emissions component of the inspection program. The network contractor shall be responsible for achieving such goals as set forth in regulations, policies and contract terms established by the department and registry. Such contract shall require an extensive public education and awareness program prior to the implementation of the motor vehicle inspection program. Such public education program shall include, but not be limited to, establishing and maintaining a comprehensive consumer outreach campaign concerning air quality, sources of pollutants, relevant aspects of automobile maintenance and other topics related to the motor vehicle inspection requirements of chapter 90 and this chapter. Such consumer outreach campaign shall include a consumer hotline to receive motorists' complaints and to answer questions regarding the inspection procedures, repair information and other related inspection issues.

(c) The commissioner shall establish rules and regulations implementing the motor vehicle emissions component of the inspection program required by section 7A of chapter 90. Such rules and regulations may reflect a phased-in schedule for the motor vehicles subject to the emissions component of the inspection program; provided, however, that such phase-in shall not begin prior to July 1, 1998. The department may continue to implement the motor vehicle emissions inspection program established pursuant to section 142J of chapter 111 while phasing-in the new requirements of this section.

The department shall notify the registrar as to which motor vehicles shall be subject to the motor vehicle emissions component of the inspection program. Said registrar shall give reasonable notification in the form prescribed by said registrar, to the owners of motor vehicles subject to the

emissions inspection indicating which emissions inspection procedures shall be required. The registrar shall not issue a registration or, if such registration has already been issued, shall suspend or not renew the registration of any motor vehicle which does not comply with the provisions of this section or any regulation promulgated hereunder.

The commissioner may establish regulations for exempting certain motor vehicles from some or all of the requirements of this section. The following motor vehicles may be exempt from the provisions of this section and may require alternative test procedures: (i) any motor vehicle the model year of which is 15 years before the year in which the inspection occurs; (ii) any motor vehicle or class of motor vehicle that is exempted by regulation or policy by the department because the vehicle or class presents a prohibitive inspection problem or is inappropriate for inspection; (iii) any motor vehicle operated exclusively by electric power; (iv) any motor vehicle that the United States Environmental Protection Agency or the California Air Resources Board new vehicle certification requirements do not require to be equipped with an onboard diagnostic system, as determined by the commissioner; and (v) for one inspection cycle only, any motor vehicle two model years old or less at the time the vehicle is due for inspection.

The commissioner and the registrar shall establish procedures under which fleet operators of fleets of 12 or more vehicles that are centrally fueled and maintained may be authorized under such program to conduct inspections and maintenance activities regarding such vehicles, subject to such audit, review and enforcement under this section as the commissioner and registrar deem appropriate.

The motorist presenting a motor vehicle for an emissions inspection shall pay a fee to the inspection facility pursuant to section 7A of chapter 90.

The registrar shall establish certification, training and continuing education requirements for the safety component of the inspection program. The commissioner shall establish certification, training and continuing education requirements for the emissions component of the inspection program. Such requirements shall be a precondition to the issuance of a license to conduct motor vehicle inspections issued by the registrar. Any person conducting an official motor vehicle inspection without having received such license and certification shall be subject to the penalties set forth in subsection (f).

The commissioner shall take steps to ensure that the capability exists in the repair industry to repair motor vehicles which fail the emissions component of the inspections required herein. Such steps shall include, but not be limited to, training and continuing education for emissions repair technicians and the involvement of vocational or technical schools and various members and sectors of the automobile and automotive repair industry. The commissioner shall establish procedures to register emissions repair technicians and to conduct a performance monitoring program of repair technicians, emissions inspection facilities and emissions inspectors. Such performance monitoring may include, but not be limited to, collection and evaluation of data on repairs. The provision of this paragraph shall not prevent any person not so registered from performing emissions repairs.

The department and the registry may conduct on-road testing of motor vehicles, including trucks and buses, for research, development, inspection or enforcement purposes. On-road testing may include

identification of motor vehicles which would pass the emissions inspection and motor vehicles which would fail the emissions inspection. The on-road testing program may include, but shall not be limited to: (i) the use of portable or remote sensing equipment to measure pollutants of a moving motor vehicle; (ii) evaluation of the use of such equipment, alone or with other analytical information, equipment or techniques, as a supplement or alternative to, replacement of or enforcement of the emissions inspection; and (iii) the establishment of test centers to research and evaluate the accuracy and effectiveness of various emissions testing and enforcement methods.

The department and the registry shall create or enter into contracts to create an electronic network linking the department, emissions inspection equipment, the registry and any contractor to the department. Such electronic network shall facilitate implementation, evaluation and enforcement of the emissions inspection and maintenance program by the department and the registry.

The registrar shall establish protocols for communication on the electronic network. At its discretion, the registrar may grant emissions inspection equipment, inspection facilities and inspectors access to the electronic network. The commissioner and the registrar shall require emissions inspection equipment to communicate with the commissioner through the electronic network. The registrar, in consultation with the commissioner shall establish procedures and requirements for connecting and disconnecting emissions inspection equipment and inspection facilities and for granting emissions inspectors access to the electronic network.

The commissioner, in consultation with the registrar, may adopt rules and regulations to implement an emissions inspection and maintenance program for diesel-fueled motor vehicles.

The commissioner, in consultation with the registrar, shall promulgate rules and regulations to establish a program for the issuance of emissions waiver certificates; provided, however, that such rules and regulations shall include eligibility standards and criteria, a procedure whereby motorists may petition for emissions waiver certificates and a notification process to inform motorists of the emissions waiver certificate program and the emissions waiver certificate petition process. Such eligibility standards and criteria shall include, but not be limited to, provisions for the issuance of emissions waiver certificates to any owner of a motor vehicle who displays satisfactory proof that such motor vehicle has undergone emissions-related repairs at a cost that exceeds a maximum cost threshold to be determined by the commissioner and the registrar. The commissioner shall report on the emissions waiver certificate program to the joint committees on public safety and the house and senate committees on ways and means on or before July 1, 1998.

(d) The commissioner and the registrar shall establish programs for public information and consumer protection. The commissioner shall establish procedures and requirements for the network contractor to ensure maximum convenience to the motorist.

Each emissions inspection facility shall distribute information to inform the public about the requirements, benefits and other consumer-related matters of the emissions inspection and maintenance program and any other information useful to the better understanding and facilitation of the emissions inspection to the consumer as directed by the commissioner.

Each inspection facility, while performing the emissions inspection, shall be capable of providing consumer protection by generating data on warranty-related recalls in a form and manner prescribed by the commissioner and any other related information deemed necessary by the commissioner. In addition, the commissioner shall establish procedures to advise motorists whose vehicles are subject to either a voluntary emissions recall or remedial action plan, as defined in and pursuant to section 207 of the federal Clean Air Act, to obtain the appropriate repairs.

(e) The commissioner, in consultation with the registrar, shall develop, establish and implement a quality control program to ensure the accuracy and integrity of the emissions component of the inspection program. Such quality control program may include, but not be limited to, procedures for: (i) calibrating, operating and maintaining emissions inspection equipment; (ii) documenting the results from the performance of such calibration, operation and maintenance; and (iii) transmitting such documentation to the department.

The registrar, in consultation with the commissioner, shall develop, establish and implement an on-going quality assurance program to discover and prevent fraud, waste and abuse in the emissions component of the inspection program. The quality assurance program shall include, but not be limited to, overt and covert audits of emissions inspection facilities and emissions inspectors, audits of data from emissions inspection facilities, examination of emissions inspection equipment, evaluation of quality control records and procedures and audits of consumer complaints and responses to such complaints.

(f) The commissioner and the registrar or their designees shall have the authority to enforce any provision of this section and may establish rules and regulations pursuant to such authority. Such enforcement authority shall permit officers or agents of the department or the registry to enter the premises of any motor vehicle inspection facility or any contractor to protect the public health and the environment, implement the quality control and quality assurance requirements of this section and for any other reasonable purpose related to implementation and enforcement of the motor vehicle inspection and maintenance program as determined by the commissioner and the registrar.

The registrar shall establish rules and regulations prohibiting any person from issuing an inspection certificate for a motor vehicle that has not been inspected in accordance with, or is not in compliance with, the standards and criteria for motor vehicle inspections as required in this section. The registrar also shall establish rules and regulations prohibiting any person from failing to issue a certificate for a motor vehicle that has been inspected in accordance with, and in compliance with, the standards and criteria for motor vehicle inspections required in this section if such motor vehicle meets the applicable standards and criteria. No person shall alter, falsify or counterfeit an emissions inspection certificate.

The registrar may deny access to the electronic network to any inspection facility or emissions inspector that said registrar has reason to believe is not performing inspections in compliance with the registry's rules and regulations adopted pursuant to this section or under the authority of chapter 90.

Tampering with any emissions control device or system is hereby prohibited. No person shall take any action that has the effect of causing a motor vehicle to no longer comply with federal law or with the applicable standards and criteria for the motor vehicle emissions inspection and maintenance program or with requirements for motor vehicle registration. Nothing in this section shall be construed to prevent the temporary alteration of equipment for motor vehicle repair or for the quality assurance program established pursuant to subsection (e).

The commissioner and the registrar shall have the authority to order any person, inspection facility or contractor to stop or abate a violation of any rule or regulation adopted pursuant to this section or chapter 90.

Any person who violates any of the provisions of the second or fourth paragraph of this subsection and any person or facility licensed or required to be licensed pursuant to section 7W of chapter 90 who violates any requirement or regulation adopted pursuant to this section or any certificate or order issued thereunder shall: (i) be punished for each violation by a fine of not more than \$25,000 or by imprisonment for not more than one year, or both such fine and imprisonment; or (ii) be subject to a civil penalty of not more than \$25,000 for each such violation. Each day or part thereof that such violation occurs or continues shall be deemed a separate violation. The civil penalty may be assessed in an action brought on behalf of the commonwealth in the superior court. The commonwealth also may bring an action for injunctive relief in the superior court for any such violation, and the superior court shall have jurisdiction to enjoin such violation and to grant such further relief as it may deem appropriate.

**CAS Number:** 77182-82-2 for ammonium-DL-homoalanin-4-yl(methyl) phosphinate

**Chemical Class:** Phosphonoglycine (an organophosphorus chemical)

**Use Type:** Non-selective herbicide; also used to desiccate crops before harvest

**Signal Word (on label):** Warning

**Toxicity Rating:** Toxic

**Listed in the PAN International Highly Hazardous Pesticides:** (the PAN International List was initially developed by PAN Germany in 2009, in response to a need identified through participation in the FAO/WHO Joint Meeting on Pesticide Management. Listing criteria include acute toxicity, long term health effects, environmental hazards and status under global pesticide-related conventions,

**EPA Registered:** for use on golf course turf, residential lawns, ornamentals, and a variety of industrial, residential and public areas, on fruit and nut orchards and vineyards, and, since 1995 on a wide range of genetically engineered (GE) crops (11). Currently, there are approved GE varieties of cotton, corn, soy, sugar beet, rice and canola that are glufosinate-tolerant.

**Trade Names:** Basta, Challenge, Finale, Ignite, Liberty, Rely

**GLUFOSINATE** is the short name for the formulated ammonium salt, glufosinate-ammonium (or GA); a non-selective contact herbicide used to control post-emergent weeds or for total weed control in land not used for cultivation. GA is “expected to adversely affect non-target plant species” that it contacts (1). It’s also used as a pre-harvest desiccant to allow early harvests.

This natural compound is a structural analogue of glutamate. It inhibits the enzyme activity of glutamine synthetase which is important for ammonia detoxification, amino acid metabolism, and protein and nucleotide biosynthesis in plants (10). Hence, application causes photosynthesis to stop and the plant dies within a few days (2). Note that GA inhibits the same glutamine synthetase activity (key in metabolism of nitrogen and glutamate) in animals, including humans, though the activity differs significantly within each type of organism.

## HEALTH IMPACTS

Glufosinate structurally resembles glutamic acid, a natural amino acid that can stimulate the central nervous system; an excess release of glutamic acid results in the death of nerve cells in the brain [= a neurotoxicant] (3). The *surfactant* AES, that is used in formulations, causes toxic effects itself and may be a cause of some of the clinical symptoms observed in suicide cases involving GA; however, the effects could be due to the active ingredient (glufosinate) or a combination of active ingredient and surfactants (10). A three-month GA feeding study in rats, concluded “it may be inferred that day to day exposure to GA may exert hazardous effects on the liver” (12). The *metabolite* MPPA-3, like glufosinate, is a neurotoxicant; MPPA-3 injected into the brain of rats caused severe convulsions (4).

### ACUTE TOXICITY

In humans, GA can cause a range of effects from substantial but temporary eye injury, skin irritation, respiratory failure, to death through dermal absorption or ingestion (11). Case reports describe symptoms of ingestion that include convulsions, respiratory distress, disturbed and loss of consciousness, tremor, speech impairment, circulatory failure, and loss of short-term memory.

Acute toxicity to glufosinate varies in different laboratory animals: Oral LD50 in mice = 431-464mg/kg; in rats = 1510-2000mg/kg; in rabbits = >2000mg/kg (10). Dogs are the most sensitive, the oral LD50 in beagles = 200-400mg/kg (5). The dermal LD50 is about the same as oral exposures; however, exposures of glufosinate formulations (GA) through the skin can be 2.5 times more toxic than glufosinate alone (clearly a warning for applicators).

### NEUROTOXIC EFFECTS

Neurotoxicity in humans can result from both the active ingredient and formulated surfactants, although the mechanism is not clear (11). Within two hours of ingestion, symptoms include nausea, vomiting, and diarrhea; within 24 hours, symptoms include generalized edema and mild leukocytosis, along with elevated liver enzymes. In cases of severe toxicity, initial gastrointestinal upset is followed by severe neurological effects including seizures, coma, nystagmus (uncontrollable eye movements), retrograde and anterograde amnesia, and respiratory failure.

Both oral and dermal exposures cause a number of neurological symptoms in lab animals. At lethal doses, signs of toxicity include: convulsions, salivation, urination, whining, hypersensitivity, irregular breathing and trembling (5,10). Some of these effects can last several days (4). At sub-lethal doses, glufosinate can have significant, but not so easily observable impacts. For example, low doses can affect CNS development in young rats. This suggests that exposure to even low doses in the infantile period in rats causes changes in specific receptors in the brain (6).

### TERATOGENIC EFFECTS

Exposure to sub-lethal doses of glufosinate causes abnormalities in embryo development in mammals both *in vitro* and *in vivo*. Brain deformities were the main finding: in mice, effects included growth retardation, death of embryos, incomplete development and cleft lips; similar effects were found in rats and rabbits (10). Paternal exposure to GA in humans has been found to correlate with a possible risk in congenital malformations.

### CARCINOGENICITY

EPA classifies glufosinate as "Not Likely to be Carcinogenic to Humans."  
Apparently not carcinogenic in mice & rats.

### RESIDUES IN FOOD AND WATER

This is of particular concern when GA is used as a pre-harvest desiccant. The Ministry of Agriculture, Fisheries and Food (MAFF) in the UK notes that adult consumers are at greatest risk of exposure from potatoes and dried (or processed) peas, and in liver and

kidney from animals fed on GA-treated forage (5). When used as a pre-harvest desiccant, significant residues will be found in: dried peas, field beans, wheat, barley, oilseed rape, linseed and other treated crops. MAFF reported that when contaminated wheat grain is turned into flour, 10-100% of the residue was retained; residue levels in bran were 10-600% of those in grain. Certain formulation additives, including MPPA-3, were found in milk and tissues of animals fed treated straw. Thus, residues can be expected in bread, pasta, milk, cheese, etc.

AgroEvo claims that GA is unlikely to leach into groundwater (7), but independent studies suggest otherwise (note that in 2020, BASF acquired the proprietary technology for this compound). GA is highly soluble in water, is persistent (resists breakdown by light & water [11]) and mobile. The US EPA also notes that GA is persistent and mobile (less mobile in soils with high organic content [11]). Degradation is largely dependent on microbial activity, and GA harms soil microbes. The reported half life varies from 3 to 70 days, depending on soil type and application rate. In sandy soils, such as what overlies many aquifers, glufosinate is highly persistent and its transport through the soil is essentially unretarded (8). GA's metabolite, MPPA-3, has been found to be even more persistent and mobile than glufosinate (9). It can be assumed that a higher persistence means a higher exposure risk to non-target species.

### **EFFECTS ON WILDLIFE**

Commercial formulations are more toxic than the technical grade glufosinate. It is toxic to larvae of clams and oysters, daphnia and some freshwater fish species (4, 5). Rainbow trout are particularly sensitive. Fish kill incidents have been documented by the EPA in association with nearby terrestrial application of GA in surrounding agricultural areas (11). Tested birds species showed signs of CNS damage, including ataxia, disequilibrium, convulsions, trembling and wing flapping (5). GA is harmful to tadpoles and can be toxic to terrestrial mammals, reptiles, amphibians and certain predatory mite species (11). In EPA's chronic risk Level of Concern (LOC), EPA found LOC exceedances for off-site transport of GA to surface water for federally listed threatened and endangered species of aquatic nonvascular plants (e.g. algae) and estuarine/marine invertebrates.

### **CONCLUSIONS**

The development of herbicide resistant crops is a strategy developed by various chemical companies to increase revenues and ensure their products can compete in the marketplace. In this scenario, BASF has glufosinate-ammonium as their key product. Studies demonstrate that GA causes: adverse health effects in animal studies; and likely results in human health effects (especially to fetuses, infants & children) due to consumption of contaminated animal and plant products; is likely to leach into drinking water sources; and is toxic to beneficial soil microbes (hence, adds to the climate crisis).

The addition of GA-tolerant crops and a greater exposure to GA increases the likelihood of these harmful effects on humans and the environment. For humans, any contact with GA can result in some sort of deleterious effect (11). Widespread GA resistance in plant species, and the subsequent incorporation of GA tolerance into stacked varieties of GE crops (that are also resistant to 2,4-D and glyphosate as of 2014) will intensify and

increase dependency on herbicide use. While GA is sometimes advertised as an “alternative” to glyphosate-based herbicides, *it is not* recommended for reasons provided herein.

There's a trade-off between herbicide quantity used and toxicological hazards to humans and other non-target organisms, e.g., honeybees, wild bees, earthworms, and birds. Of all pesticides used worldwide, herbicides account for the largest share. However, reducing herbicide quantity (without consideration of ecotoxicological properties) may reduce risks to humans, but increase toxic loads to non-target species (13). There are alternatives to toxic chemical herbicides for homeowners and small growers (e.g., uprooting, repeat cutting, hot water/steam, flame weeding, smothering, solarizing and vinegar/20% acetic acid (14). However, for large farms and industrial agriculture the best protection for public health and biodiversity is to increasingly adopt regenerative organic agroecological methods that are advantageous for public health, are sustainable and are climate friendly (13,15,16,17).

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