City of Waltham

FIVE YEAR VEGETATION MANAGEMENT PLAN 2020-2024

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1. INTRODUCTION

The City of Waltham's Vegetation Management Plan (VMP) is designed to establish a five-year program to control vegetation along facilities considered rights-of-way under 333 CMR 11.02. These include "…any roadway, or thoroughfare on which public passage is made and any corridor of land over which facilities such as bicycle paths are located." These include roads, curbing, sidewalks, medians/traffic islands and bicycle paths ("public ways"). The city has been able to more efficiently manage these areas, which has reduced the amount of maintenance required. In compliance with 333 CMR 11.00, Waltham is continuing an Integrated Vegetation Management (IVM) program that incorporates regulatory and industry standards that account for safety, environmental concerns and effective target vegetation control. Described in detail below, cultural, physical, mechanical, and chemical (herbicide) practices and principles are the four components of this plan.

First settled in 1636 and incorporated as a city in 1884, the City of Waltham has a total area of 13.6 square miles and over 62,000 residents. Waltham was a pioneer in the textile industry as well as in labor relations; its Charles River waterfront featuring several dams left from its days as a textile mill town. Today Waltham is a leader in higher education and technology, serving as a home to Brandeis and Bentley Universities as well as facilities for biomedical, pharmaceutical, military technology and other corporations.

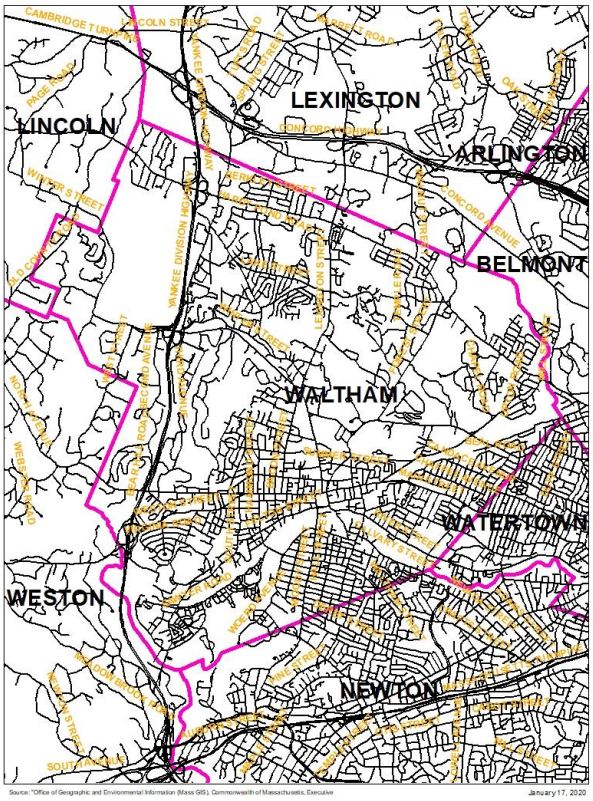

Figure 1: Waltham

2. GENERAL STATEMENT OF GOALS AND OBJECTIVES

Vegetation management along public ways is necessary to control unwanted vegetation that poses a public nuisance and creates traffic and pedestrian hazards. The operational goal of this VMP is to ensure vegetation management practices along public ways are conducted in an effective and environmentally sound manner.

Waltham is continuing its IVM program that adheres to the parameters set in 333 CMR 11.00. This will be accomplished by following an adaptation of the American National Standards Institute (ANSI)/International Society of Arboriculture (ISA) definition of IVM *(ANSI A300 (Part 7-2018) Tree, Shrub, and Other Woody Plant Management – Standard Practices (Integrated Vegetation Management)*. As stated in the IVM standard *"the reason for IVM is to create, promote, and conserve sustainable plant communities that are compatible with the intended use of the site, and manage incompatible plants that may conflicted with the intended use of the site."*. This IVM model includes eight management objectives which are designed to be continuously re-examined and adapted to current conditions:

- "Determine the Right to Use IVM Methods"
- "Communicate With, and Engage Stakeholders"
- "Determine Management and planning Objectives"
- "Determine Tolerance Levels"
- "Establish IVM Treatment Methods"
- "Establish IVM Specifications"
- "Conduct IVM Application(s)"
- "Determine Adaptive Management, Quality Control, and Quality Assurance".

Adhering to the model above, the individual objectives of this VMP are:

- To maintain safe public ways;
- To ensure that all vegetation management operations are conducted in a safe, effective regulatory compliant manner;
- To work towards achieving a long-term, low maintenance vegetation management program;
- To allow for unplanned tasks for which precautions are taken to utilize the correct treatment methods;
- To use certified, licensed and qualified vegetation management crews;
- To have a Department of Consolidated Public Works (DPW) representative available to respond quickly to interactions with the public and/or government agencies;
- To perform an annual assessment of treatment methods, cost effectiveness, environmental effects, public safety and regulatory compliance;
- To maintain the flexibility necessary to accommodate unique situations and the need for more appropriate techniques as they arise within the regulatory framework of 333 CMR 11.00 (in accordance with new regulations and/or scientific advances).

Waltham's VMP is a public document designed to be the principle source of information for state and municipal officials, and other interested parties about Waltham's adherence to the regulatory standards set forth in 333 CMR 11.00. It also provides guidance to the qualified and licensed/certified individuals who implement the vegetation management treatment program.

3. IDENTIFICATION OF TARGET VEGETATION

Target Vegetation:
Vegetation that poses a public nuisance and/or poses a risk to pedestrian or vehicle safety.

Achieving a long-term, low maintenance vegetation management program requires the ability to identify incompatible plant species and to understand why they are targets. Incompatible vegetation along public ways poses a public nuisance and/or a safety risk to pedestrians or vehicles and interferes with the safe movement of goods and services.

Vegetation Posing a Risk to Safety

Vegetation that obstructs visibility or impedes movement along public ways poses a risk to public safety. M.G.L. Chapter 87, Section 5 authorizes tree wardens to control "all public shade trees, shrubs, and growths" along public ways. This includes woody plants, grasses and herbaceous species and public nuisance vegetation as listed below. For example, any vegetation such as grape vines or tree branches that might obscure street signs.

Public Nuisance Vegetation

Public nuisance vegetation includes but is not limited to plant species growing along public ways that pose a health, safety or environmental hazard. Poisonous, invasive and other nuisance plants and weeds, pose a risk to safety and health because of heavy thorns, dense foliage and/or impenetrable stems; examples include, but are not limited to, Multi-flora Rose, Common and Glossy Buckthorn, Japanese Knotweed, Blackberries, Barberry and Autumn Olive. Although not the only poisonous target species of concern, Poison Ivy currently comprises the overwhelming majority of poisonous plant communities along Waltham's public ways that require control.

Nuisance Grass and Herbaceous Growth

In most instances, grass is a desirable plant species. Along the shoulders of roads, grass growth is often encouraged and maintained through mechanical mowing. However, in some instances, grasses and other herbaceous plants are targets in areas where they cause a safety risk. These areas include, but are not limited to, cracks in asphalt, along guiderails, within paved traffic islands, medians, on and between sidewalks and the adjacent curbing. Herbaceous and other broadleaf vegetation can also impair the stability of grassy areas by out-competing the desirable grass species.

4. PUBLIC WAY INTEGRATED VEGETATION MANAGEMENT

> "The purpose of 333 CMR 11.00 is to establish a statewide and uniform regulatory process which will minimize the uses of, and potential impacts from herbicides in rights-of-way on human health and the environment while allowing for the benefits to public safety provided by the selective use of herbicides."*

Returning to the ANSI/ISA definition of IVM, the individual components of an IVM driven vegetation management program cannot work without the others. They are all part of both the decision and the treatment phases of IVM. The eight objectives list above of IVM are the same for all IVM programs but the individual components and the items thereunder, are tailored to both the ROWs being treated and the incompatible vegetation. As a result, IVM programs are well suited to deal with important items such as site sensitivity, the presence of endangered species, invasive species, safety, the public, the effectiveness of the program, etc.

Taking all these factors into considerations, the four components of Waltham's IVM program are: cultural, physical, mechanical, and chemical (herbicide). Where all four components come together is IVM (see Figure 2).

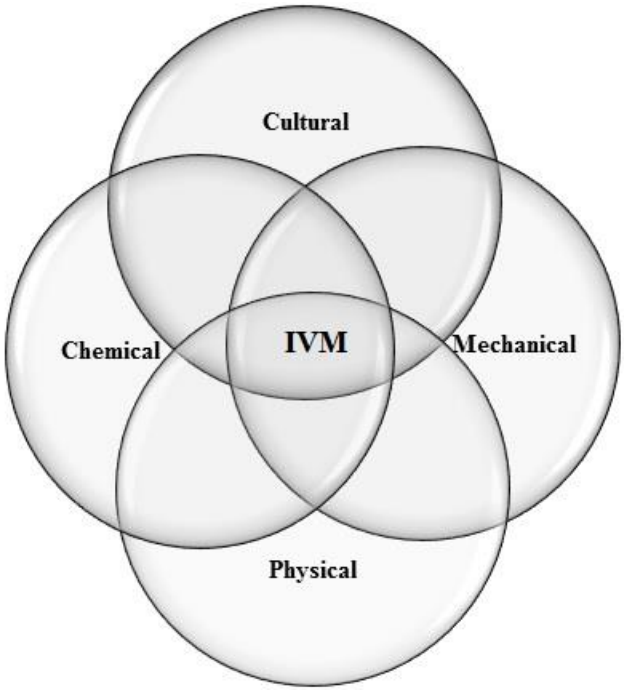

Figure 2: Public Way Integrated Vegetation Management

The cultural component of IVM may be the hardest component to pin down due to the many variations in how individuals and industries use the word "cultural." For the purposes of

333 CMR 11.00 Right of Way Management: Section 1.

this VMP, the term means understanding the uses, requirements, and aesthetics of the different treatment areas in Waltham. In other words, the first step in implementing any municipal IVM program is understanding how the property in the treatment areas is being used and why it is being used that way. In some places, plantings are appropriate, but others, such as roadways and sidewalks, require vegetation free conditions. Grass and weeds on sidewalks and pavement, aside from being unsightly and creating tripping hazards, also damage and destroy concrete and pavement. Likewise, inappropriate plantings may cause safety concerns at intersections. A well designed IVM program recognizes and manages for instances in which these factors prescribe the treatment methods. In all cases, effective control methods are adapted or limited to suit the management situation.

Another "cultural" component of Waltham's IVM program is continued monitoring of the current and potential treatment areas. This allows the city to adapt the treatments to the conditions and to alter the treatment areas as necessary. For example, monitoring for new populations of Poison Ivy or other vegetation such as the invasive plant species Oriental Bittersweet that is killing trees along our roads throughout the Northeast; both are most effectively controlled with herbicides.

The physical control components of Waltham's IVM program are general maintenance tasks that help prevent the establishment of vegetation. These include, sealing cracks, general right-of-way repairs (i.e. repaving, installing new sidewalk, etc.), cleaning ditches and sweeping streets (see Section 5).

Mechanical controls will be discussed in detail in Section 6, but in brief, they include mowing, selective pruning and hand cutting to remove or reduce target vegetation. For example, applying the decision-making part of an IVM program to the use of mechanical controls, in many locations the targets are grass and herbaceous plants growing along the edge of the road with no man-made obstructions (e.g. guiderail, curbs) therefore, they may effectively be controlled by the use of mowers, trimmers or other mechanical means.

The chemical control component of this IVM program is the use of herbicides to control incompatible vegetation that cannot be controlled effectively or safely by either physical or mechanical methods alone (see Section 6). When appropriate, herbicide use will be minimized by timing applications to maximize control, by avoiding fixed application schedules and by using the most selective methods practical on a site-by-site basis. The main chemical controls are basal, cut stump treatments, and foliar applications which may include pre-emergent herbicides.

In summary, the benefit of IVM is the ability to choose the most appropriate treatment method or combination of methods for each situation. This is only possible by using the cultural component of IVM in the process of deciding the direct methods of physical, mechanical and chemical treatments. This is achieved through careful monitoring, landscape awareness, education, experience and record keeping.

5. IVM PROTOCOL

Taking into consideration all four components of Public Way IVM, the protocol for implementing the IVM program is as follows:

***Monitoring**:* All public ways will be surveyed prior to any scheduled treatment program. Monitoring will be conducted by foot or by vehicle. Monitoring of areas may also result from public requests. Monitoring is a year-round protocol.

Maintenance: Roads will be cleaned using a street sweeper. Cracks in the asphalt and sidewalks and other defects will be repaired, and ditches will be cleaned.

Direct Vegetation Control Methods: The decision to use one or a combination of IVM techniques will take into consideration the cultural uses of the landscape. The direct IVM management tactics selected will control nuisance vegetation in the most environmentally responsible and efficient manner:

A. Mechanical Controls
   1. Hand Cutting
   2. Mowing
   3. Selective Pruning

B. Chemical Controls
   1. Foliar applications
   2. Pre-emergent applications
   3. Cut stump treatments
   4. Basal applications

Record Keeping: A log of surveyed areas will be kept for future planning and reference purposes. Areas maintained either through physical repair, mechanical or chemical control will be recorded by the DPW for at least 5 years.

6. VEGETATION MANAGEMENT CONTROL METHODS AND RATIONALE FOR USE

As the two IVM components directly used to control vegetation, the following section is a description of mechanical and chemical treatment methods. The method(s) chosen for a given vegetation problem are based on achieving a long-term, low-maintenance vegetation management program.

Mechanical Methods:

1. **Hand Cutting:** cutting target species using hand saws, chain saws and brush saws. Target species are cut as close to the ground as practical: the ideal stump height is three inches or less (when possible). Hand cutting is used to remove hazard trees and to protect environmentally sensitive sites including sites where herbicide use is prohibited by regulation, including the removal of target vegetation greater than twelve feet tall.

Hand cutting is also used on sites where terrain, target species size or sensitivity renders mowing impossible or impractical. Hand cutting may be used at any time of the year.

2. **Mowing:** the mechanical cutting of target vegetation using machines including push mowers, riding-mowers, offset flail mowers, brush mowers, edgers and/or trimmers. Equipment selection is based on site, terrain, and target vegetation size. Mowing is used in most areas where terrain and target stem size permit efficient use of the equipment and in areas where herbicide use is prohibited by regulation. Mowing is the principle vegetation control measure on the shoulders of roads and grassy islands. Mowing may be used at any time of the year except when deep snow precludes operations.

3. **Selective Pruning**: the mechanical pruning of the tops or encroaching limbs of tall vegetation which may cause a hazard or hamper access. The equipment includes aerial lifts mounted on trucks or tractors. If terrain or obstructions prevent equipment access, selective pruning may also be achieved using climbing crews. Selective pruning may be done at any time of the year and may provide a viable alternative to the removal of vegetation.

Chemical (Herbicide Applications) Methods

1. **Foliar Treatments:** the application of herbicides diluted in water, to the leaves, stems, needles or blades of target vegetation. The equipment consists of backpack and vehicle mounted sprayers; both use low pressure at the nozzle per 333 CMR 11.02. Foliar applications take place when leaves are fully developed in the spring until early fall and the beginning of leaf abscission—i.e., when leaves begin dropping.

    a. **Hand-held and backpack sprayers:** backpack, hand held canister sprayers or squirt bottles. This technique is excellent for spot treatments, such as localized Poison Ivy infestations. It is not as effective as other methods on high density target vegetation.

    b. **Vehicle mounted sprayers** use truck, tractor and/or ATV mounted equipment that delivers the herbicide solution through nozzles attached to a hose or boom-mounted apparatus. This technique is used along roadways that have good access and where obstructions, terrain or site sensitivity do not exclude the equipment.

2. **Pre-emergent Treatments:** the use of pre-emergent herbicides using the same equipment described in the foliar treatments above. Pre-emergent applications are used where season long vegetation control requires “vegetation-free conditions” such as along curbing, sidewalks, under guiderails/guardrails and on paved traffic islands. This method is used from the early spring to early fall.

3. **Cut Stump Treatment (CST):** the mechanical cutting of target species followed by an herbicide treatment to the phloem and cambium tissue of the stumps. CST treatments prevent re-sprouts, thereby reducing the need to re-treat the same vegetation. The CST mixture is diluted in water, basal oil or a non-freezing agent and is ideally made to

freshly cut stumps. Application equipment includes low-volume, backpack or hand-held sprayers, hand held squirt bottles, paintbrushes, or sponge applicators. This method is used where maximum control is desirable; to reduce the visual impact of vegetation management treatments, and/or to reduce the potential of adverse impacts to desirable vegetation because of its selectivity. CST may be used at any time of the year provided snow depths do not prevent cutting the stumps below three inches in height. It is best to avoid during the season of high sap flow, or in moderate to heavy rains. It is not practical in moderate to heavy stem densities.

4. **Low Volume Basal Treatment:** the selective application of an herbicide, diluted in specially formulated oil, to wet the entire lower twelve to eighteen inches of the target plant stems. Using a hand-held or backpack sprayer, the oil enables the herbicide solution to penetrate the bark tissue and translocate within the plant. Low volume basal treatments are highly selective and used when vegetation density is low and in areas where extreme selectivity is necessary. It can be used any time of year except when snow is too deep, in extremely wet weather and/or during spring sap flow.

5. **Plant Growth Regulators/Broadleaf Control (PGR):** the selective application of herbicides to slow down the growth of grasses and remove broadleaf plant species. The principal use of this treatment method in Waltham is to control broadleaf plant species—many of which are invasive or nuisance plants—where they are out-competing desirable grasses despite regular mowing on sites such as roadside embankments. PGR treatments have the advantage of controlling the target broadleaf species without damaging the desirable grass species. They are used in the same time frame as foliar treatments, using the same types of equipment.

Final Note: Anti-drift Adjuvants are added to the mix or solution in foliage and pre-emergent applications to help reduce the potential exposure to non-target organisms. They reduce the break-up of sprays into fine droplets which increases selectivity and deposition onto target plants.

7. JUSTIFICATION OF HERBICIDE USE AND SUMMARY OF CONTROL STRATEGIES

By following the IVM protocol listed in Section 5, physical and mechanical treatment methods control many plants that interfere with traffic, visibility and safety. Chemical controls are, however, necessary in management situations where topography, access, growth rate, certain species-specific factors, applicator safety, or environmental/social concerns limit the potential for control by physical or mechanical methods.

To begin with, Waltham will use herbicides on the Massachusetts Department of Agriculture's (MDAR) *Sensitive Area Materials List* in most locations. The general characteristics of these herbicides are: low toxicity to humans and other animal species; short term soil persistence; biodegradation of active ingredients; and low mobility. The specific herbicide formulations and mixtures will be listed in the Yearly Operational Plans (YOPs). The manufacturers' labels and Herbicide Fact Sheets approved by the MDAR will be included in the appendices of the YOPs.

Chemical controls are often the preferred method or only method to control plants that pose a health hazard for the technician in the field, either directly or due to their location. Poison Ivy, for example, is extremely hazardous to handle; it is not managed either safely or effectively by mechanical means and can pose a serious threat to anyone who inhales the smoke if it is burned. Likewise, attempting to control curbside plants and weeds by pulling them or trimming them can put a technician in danger from traffic and is ineffective for long term control.

Mowing controls most grasses. Herbicide applications, however, are used where mechanical control is not feasible due to location, stem density and/or height. Although grass is more often a desirable vegetative cover along public ways, in areas where it is a target, it is both difficult and sometime dangerous to remove by mechanical treatment methods. These areas include, but are not limited to, cracks in asphalt, along guiderails, paved traffic islands and sidewalks and curbing. In these instances, grass can be identified as target vegetation.

Herbicide applications are the ideal treatment method to control nuisance vegetation. Once established, poisonous and invasive vegetation are particularly difficult to control. Maintaining public ways by mechanical techniques can help control target vegetation by preventing its establishment, however, once established, hand-cutting this vegetation is less effective and more of a risk to the applicator than the use of herbicides.

Invasive vegetation is difficult to control. For example, Japanese Knotweed propagates primarily underground by rhizomes. Even, a half inch rhizome floating down a river or moved in top soil will start an infestation. In other words, digging up and removing the soil both spreads the plant and does not guarantee its removal from the site. As a result, herbicides are the most effective way to stop its spread.

This does not mean that mechanical methods are not an effective part of an IVM approach to treating Japanese Knotweed; this is the advantage of IVM. Mowing Japanese Knotweed in the early summer makes the plant much easier to treat with herbicides in the early fall during its ideal treatment window. Mowing the plant keeps it short at the time of treatment allowing for easy walking through the area and allowing the applicator to effectively direct the herbicide onto the foliage of the knotweed and nowhere else.

Poisonous plant species, such as poison ivy, are best controlled by herbicides. Poison Ivy, low when young, tall vines when mature, is nearly impossible to control through cultivation, hand pulling or roadside mowing operations. These climbing vines grow over stone walls, tree trunks and guiderails, making mechanical control out of the question for safety and economic reasons. In some locations, the judicious use of herbicides may also help develop herbaceous communities that out-compete poison ivy.

Woody vegetation over twelve feet in height that causes safety issues for pedestrian or vehicles can and will be treated mechanically by pruning or ground cutting using hand tools or chainsaws. Sometimes, the stumps of woody vegetation will be physically removed, depending upon the species of plant and its proximity to other vegetation. Stumps may also be treated with an herbicide (CST) to prevent re-sprouting.

Small woody plants, under twelve feet in height growing along the road shoulder in an accessible location will usually be mowed or cut and possibly treated with herbicides (CST). However, low volume foliar applications may be applied where woody plants or vines grow over obstacles, can't be hand cut and chipped, are resistant to control by mechanical means or where the target vegetation grows very rapidly.

Taking all these factors into consideration, the following table is a reference for control strategies organized by target plant species types; please note that the restrictions listed in Section 8 apply to all control strategies:

Table 1: Summary of Control Strategies

Target	Method	Details	Restrictions
Nuisance Vegetation	Foliar	Spot treatment using backpack method in most cases, unless extremely thick or (although rare) in locations where grasses and herbaceous growth are also being treated	Within 10 feet of the public way
Grasses & Herbaceous Growth	Mowing	Controls most sites; in no-spray *Sensitive Areas*	Topography, obstructions, density of growth
	Foliar	Spot treatment or in locations listed above	Where mowing is practical, in no-spray *Sensitive Areas*
	Pre-Emergent	Where season long vegetation control is most practical, and season long vegetation free conditions need to be maintained	Where mowing is practical, in no-spray Sensitive Areas
Broadleaf Vegetation in Grassy Areas	PGR	To control broad leaf vegetation in grassy areas without damaging the desirable grass species	*Sensitive Areas*: no-chemical sensitive areas; limit spray *Sensitive Areas* unless using approved herbicides
Low Growing Woody Vegetation	Mowing	Controls most sites; in no-spray *Sensitive Areas*	Topography, obstructions, density of growth
	Foliar	Where terrain prevents mechanical treatment methods; same as grasses and herbaceous growth; rapid resprouting species; invasive plant species	Where mowing is practical, in no-spray *Sensitive Areas*
	Hand Cutting	Where terrain prevents mowing; resprouting is not a concern; in no-spray S*ensitive Areas*	Where the safety of the operator is a factor
	CST	Where terrain prevents mowing; re-sprouting is a concern	Same as hand cutting; in no-spray *Sensitive Areas*
	Basal	Where terrain prevents mowing; where stem densities make hand cutting impractical; for invasive species	Same as hand cutting; in no-spray *Sensitive Areas*

Tall Growing Woody Vegetation	Selective Trimming	Where the visibility or interference issues do not warrant removal; option for *Sensitive Areas*	Where removal is warranted; where operator safety issues limit access to the tree
	Foliar	Where terrain prevent mechanical treatment methods; same as grasses and herbaceous growth; rapid resprouting species; invasive plant species	Vegetation over twelve (12) feet tall; Where mowing is practical, in no-spray *Sensitive Areas*
	Hand Cutting	Where terrain or stump diameter prevents mowing; resprouting is not a concern; in no-spray *Sensitive Areas*	Where the safety of the operator is a factor
	CST	Where terrain prevent mowing; on species over twelve (12) feet tall that are capable of resprouting	Same as hand cutting; in no-spray *Sensitive Areas*
	Basal	Where terrain prevents mowing; where stem densities make hand cutting impractical; for invasive species	Species over twelve (12) feet tall; same as hand cutting; in no-spray *Sensitive Areas*

Herbicides are a vital component of Waltham's IVM program as there are areas where they are the best choice to control vegetation effectively, safely and with less frequency because of their ability to control the whole plant including the roots. For example, weeds growing in sidewalks hold a significant potential for causing trips or falls and on a larger scale damage infrastructure through their root systems. There is also a legitimate aesthetic value to this treatment. Adventitious vegetation growth (i.e., unplanted/unplanned) is not part of the aesthetic design of sidewalks. To fulfill the requirements of 333 CMR 11.01(2), this plan must improve the cultural value of the sites being treated while taking into account cultural beliefs about the treatment methods: "…taking into account the economic, social and environmental costs and benefits of the use of any pesticide."

In summary, not only will Waltham monitor its vegetation it will also monitor its IVM program, records are kept regarding which treatments are applied to which sites. This information will be regularly reassessed so treatment prescriptions may be altered as the conditions at the various sites change over time. The plan will also maintain the flexibility necessary to accommodate unique situations and the need for more appropriate techniques as the industry changes.

8. DEFINITION, IDENTIFICATION AND TREATMENT OF SENSITIVE AREAS

The definition of sensitive areas regulated by 333 CMR 11.04 is as follows:

> …any areas within Rights-of-Way, including No-Spray and Limited-Spray Areas, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects.

Protecting these environmentally sensitive areas is accomplished by defining specific sensitive areas and establishing treatment restrictions within these borders based on the relative sensitivity of each site and the requirement to minimize any unreasonable adverse impacts within that area.

Sensitive areas regulated by 333 CMR 11.00 include the following:

<u>Water Supplies:</u>

- Zone I's
- Zone II's
- IWPA's (Interim Wellhead Protection Areas)
- Class A Surface Water Sources
- Tributaries to a Class A Surface Water Source
- Class B Drinking Water Intakes
- Private Wells

<u>Surface Waters:</u>

- Wetlands
- Water Over Wetlands
- The Mean Annual High-Water Line of a River
- The Outer Boundary of a Riverfront Area
- Certified Vernal Pools

<u>Cultural Sites:</u>

- Agricultural Areas
- Inhabited Areas

<u>Wildlife Areas:</u>

- Certified Vernal Pool Habitat
- Priority Habitat.

These sensitive areas consist of no-spray areas in which herbicide use is prohibited, and larger, limited spray areas where herbicide use is permitted under certain conditions. Treatment in the limited spray areas require the use of herbicides from the *Sensitive Area Materials List*, available at http://www.mass.gov/eea/agencies/agr/pesticides/rights-of-way-sensitive-area-materials-list.html. Treatment crews will also follow the application restrictions in 333 CMR 11.04, including applications at no more than the minimum labeled herbicide application rate for the control of target species.

TABLE 2: CONTROL STRATEGIES FOR SENSITIVE AREAS

Table Compiled by Jeffrey M. Taylor, Vegetation Control Service, Inc.

Sensitive Area	Limited Spray or No-Spray Areas (feet)	Control Method	Time Limits Between Treatment(s)
Public Ground Water Supplies	400'	Mechanical Only	None
Primary Recharge Area	Designated buffer zone or 1/2-mile radius	Mechanical, Approved Herbicides*	24 months
Public Surface Water Supplies (Class A & Class B)	100'	Mechanical Only	None
	100'-400'	Approved Herbicides	24 months
Tributary to Class A Water Source, within 400' upstream of water source	100'	Mechanical Only	None
	100'-400'	Approved Herbicides	24 months
Tributary to Class A Water Source, greater than 400' upstream of water source	10'	Mechanical Only	None
	10'-200'	Approved Herbicides	24 months
Class B Drinking Water Intake, within 400' upstream of intake	100'	Mechanical Only	None
	100'-200'	Approved Herbicides	24 months
Private Drinking Water Supplies	50'	Mechanical Only	None
	50'-100'	Approved Herbicides	24 months
Surface Waters	10'	Mechanical Only	None
	10'-100'	Approved Herbicides	12 months
Rivers	10' from mean annual high-water line	Mechanical Only	None
	10'-200'	Approved Herbicides	12 months
Wetlands	10'	Mechanical Only	None
	100' or with approved Wetlands Determination 10'-100' [per 310 CMR 0.05(3)(a) & 310 CMR 0.03(6)(b)][#]	Low-pressure Foliar, CST, Basal, Approved Herbicides	24 months
Inhabited Areas	100'	Approved Herbicides	12 months
Agricultural Area (Crops, Fruits, Pastures)	100'	Approved Herbicides	12 months
Certified Vernal Pools	10'	Mechanical Only when water is present	None
Certified Vernal Pool Habitat	10'-outer boundary of habitat	No treatment without approval	
Priority Habitat	No treatment outside the 4-foot paved road exemption without approval of the Natural Heritage Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife (NHESP)		

*Massachusetts approved herbicides for sensitive sites

Identification Methods

Two simple descriptions guide the complex identification of the sensitive areas defined in 333 CMR 11.04: *Readily identifiable in the field* and *Not readily identifiable in the field.* Readily identifiable in the field areas will be identified, where appropriate, marked, and treated according to all applicable restrictions listed in 333 CMR 11.00. Not readily identifiable in the field areas will likewise be marked and treated when appropriate, but they are identified using data marked on maps and collected in the YOP and notification processes before the time of treatment.

The individuals assigned the task of identifying and treating sensitive areas in the field will use the appropriate sources and methods from the following list:

- City maps, records and institutional knowledge;
- Massachusetts Department of Environmental Protection water supply maps available through MassGIS (https://www.mass.gov/orgs/massgis-bureau-of-geographic-information);
- Water Department, MDAR, and Waltham Board of Health information and identified private wells along the ROWs;
- Correspondence, meetings and input—from the chief elected official, board of health, conservation commission, public water suppliers and the public—within the forty-five day YOP and twenty-one day municipal right-of-way notification letter review and comment periods and the 48 hour newspaper notification (under 333 CMR 11.06 & 11.07 and Chapter 85 of the Acts of 2000);
- An individual who verifies, identifies and, where appropriate, marks sensitive areas and any additional areas that may require special precautions;
- USGS topographical maps;
- Information from MassGIS;
- When necessary, confidential information from the Natural Heritage Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife (NHESP);
- A copy of the YOP and VMP.

The YOPs will contain maps with the most current data available at the time of printing. The maps are a resource and a tool for both the public and the applicators; therefore, they contain the data needed to identify, mark and treat sensitive areas appropriately.

Sensitive areas are located on the maps using a combination of the base USGS topographic maps and the most current data available through MassGIS such as public water supplies and certified vernal pools, along with municipal and private data for items such as private wells. At the time of treatment, additional sensitive area information that is collected through the review and notification processes (333 CMR 11.06-11.07) will be added to the information utilized by the applicators.

Sensitive areas will be identified and marked in the field by trained and experienced city and contractor staff members.

Priority Habitat of State-Listed Species

321 CMR 10.14(8) Massachusetts Endangered Species Act Regulations, Part II, exempts road maintenance from the permit process under the following condition:

> [321 CMR 10.14(8)] the maintenance, repair or replacement, but not widening, of existing paved roads, shoulder repair that does not exceed four feet from an existing travel lane, paved driveways, and paved parking areas, but not including parking areas on barrier beaches, coastal beaches, coastal dunes, or salt marshes, as defined by the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40 and 310 CMR 10.00), and not including actions that are likely to result in changes in storm water drainage….

If Waltham needs to treat areas along paved roadways outside of the 4-foot limit or spot treat Poison Ivy in known Priority Habitats, a copy of the YOP will be sent for approval to the NHESP.

9. OPERATIONAL GUIDELINES RELATIVE TO HERBICIDE USE

Regulatory Restrictions

- Follow the restrictions of all applicable state and federal regulations;
- Follow the guidelines and requirements in this VMP and the YOPs;
- Pesticide applicators must hold a valid pesticide license from the MDAR;
- All application crews must be supervised by an individual with a Category 40 pesticide license;
- Pesticide applicators will keep the appropriate records according to state and federal regulations that at a minimum include:
    - Date, name and address of vegetation management contractor(s)
    - Identification of site or work area
    - List of crew members
    - Type of equipment and hours used, both mechanical and chemical
    - Method of application and description of target vegetation
    - Amount, concentration, product name of herbicide(s), adjuvants and dilutants (EPA registration numbers must be on file)
    - Weather conditions
    - Notation of any unusual conditions or incidents, including public inquiries;
- Foliar treatments will not be made to target vegetation that exceeds twelve feet in height.

Rain

- No herbicide applications will be conducted during periods of moderate or heavy rainfall.
- Foliar and pre-emergent applications are effective in light mist, however measurable rainfall that creates leaf runoff will wash the herbicide off target vegetation, therefore, if foliar and pre-emergent applications are interrupted by unexpected rainfall, the treatment will not resume until the rain ends and active leaf runoff ceases.

- No CST or basal applications during measurable precipitation events.
- CST or basal applications interrupted by measurable rainfall will not resume until precipitation has ceased.

Wind

Excessive wind can create drift during foliar and pre-emergent applications and significant herbicide drift can cause damage to desirable vegetation on or off the public ways. CST and basal applications, on the other hand, are much less affected by wind because they are applied in such a close proximity to the ground.

To minimize off-target drift, during foliar and pre-emergent applications, the applicator will comply with the following restrictions:

- During periods of wind strong enough to bend the tops of the main stems of trees on the public ways, the applicator will constantly observe the application to prevent movement of the herbicide beyond the target area. The application will stop immediately if the applicator observes herbicide moving off target, until the wind subsides enough to permit further applications.

- All herbicide mixes will contain drift-retardant agents per the drift retardant agent label. In moderate wind conditions, as per label recommendations, more drift retardant may be added, at the discretion of the applicator, to control herbicide drift.

Equipment Calibration

- Foliar and pre-emergent application equipment will be calibrated at the beginning of the season, and as necessary during the season with changes to chemical mixes, treatment types, spray wands/tips, prior to touch-up application treatment(s), and in accordance with manufacturer's recommendations.
- Foliar application equipment will be calibrated to maintain pressures not exceeding sixty psi at the nozzle.
- Cut stump treatment squirt bottle applicators or hand pump sprayers will be adjusted to deliver the herbicide solution to the target zone.

General Guidelines

- All mixing and loading of herbicides will be conducted at the DPW's or contractors' central facility.
- Proper Personal Protective Equipment (PPE) will be worn according to the Product Label(s)
- Mix only the estimated amount of herbicide necessary to carry out the vegetation control, based on monitoring results to ensure that there will be no waste and minimize potential problems.

- The vehicles carrying the spray operations will be equipped with appropriate spill kits including a bag of adsorbent material and/or activated charcoal, leak-proof containers, a broom and a shovel in case of minor spills.
- A clipboard log of the herbicides on the vehicle will be kept on the vehicle.
- Herbicide labels, fact sheets, the VMP, current YOP and *Herbicide Spill Check List* (Appendix 5) will be on-site.

10. ALTERNATIVE LAND USE PROVISIONS

Currently, Waltham does not offer Alternative Land Use provisions under 333 CMR 11.05(2)(i), except where abutters maintain their own vegetation. Since the treatment areas are located either in downtown or suburban neighborhoods, there is no need for alternative land use provisions. For example, a common practice of abutters to roadways is to mow and maintain road shoulders. In this instance, the monitoring program would reveal that the area does not warrant vegetation control.

11. REMEDIAL PLAN TO ADDRESS SPILLS AND RELATED ACCIDENTS

This section is offered as a general procedural guide for responding to chemical spills or related accidents (related accidents include but are not limited to fire, poisoning and vehicle accidents). The following is, therefore, a guide to the items that will be available to the applicator on site in the event of a chemical spill or emergency.

Although education and attention will constantly be directed at accident and spill prevention, in the event of a spill, immediate action will be taken to contain the spill and protect the spill area (Appendix 5: *Herbicide Spill Check List* shall be available on-site to the applicator). Until clean, the spill area will be protected by placing barriers, flagging or crew members at strategic locations, as appropriate. If a fire is involved, care will be taken to avoid breathing fumes from any burning chemicals.

Minor spills will be remedied by soaking up the spill with adsorption clay or other adsorptive material and placed in leak proof containers, removed from the site and disposed of properly. Dry herbicides will be swept up or shoveled up directly into leak proof containers for proper disposal. When applicable, all contaminated soil will be placed in leak proof containers, removed from the site and disposed of properly. When applicable, activated charcoal will be incorporated into the soil at the spill location at a rate of several pounds per thousand square feet to inactivate any herbicide residue. Reportable spills will be reported to the MDAR Pesticide Division.

The Massachusetts Department of Environmental Protection will be contacted when there is a spill of a reportable quantity, regardless of major or minor spill status and in accordance with 310 CMR 40.0000, Massachusetts Contingency Plan.

Types of Chemical Spills that Require Action

Chemicals include, but are not limited to the following:

- Herbicides
- Bar and Chain Oil
- Motor and Hydraulic Oil/Fluids
- Diesel Fuel
- Gasoline
- Title 3 Hazmat Materials

Required Spill Response Equipment

As a minimum, the treatment crew will have available on the job site:

- YOP with Emergency Contact List
- PPE (Personal Protective Equipment) per Product Label
- SDS (Safety Data Sheet)
- Product Label
- Product Fact Sheets (when applicable)
- Appropriate adsorbent material
- Shovel
- Broom
- Flagging
- Leak Proof Container
- Heavy-duty Plastic Bags

Personal Contact

In the event of **Personal Contact** with hazardous chemicals:

- Wash affected area with plenty of soap and water
- Change clothing which has absorbed hazardous chemicals
- If necessary, contact a physician
- If necessary, contact the proper emergency services
- If necessary, follow the procedures for Major or Minor Spills as outlined in Appendix 5
- Avoid breathing the fumes of hazardous chemicals

Reference Tables (information subject to change as necessary)

Table 3: Herbicide Manufacturers

MANUFACTURER	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Albaugh Inc.	(800) 247-8013	
BASF Corporation	(800) 832-4357	
Bayer Environmental Science	(800) 334-7577	
Corteva Agriscience	(800) 992-5994	
Monsanto	(314) 694-4000	
Nufarm	(877) 325-1840	Medical Emergencies
Zhejiang Tide Crop Science Co. Ltd.	(800) 424-9300	Medical Emergencies (Chemtrec)

Table 4: State Agencies

STATE AGENCY	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Massachusetts Pesticide Bureau	(617) 626-1784	A.S.A.P. (within 48 hours)
Massachusetts Department of Environmental Protection, Emergency Response Section	Main Office: (888) 304-1133 (after hours number)	For emergencies involving reportable quantities of hazardous materials; required info: City/Town, street address, site name (if applicable), material
MA Department of Public Health, Bureau of Environmental Health's Environmental Toxicology Program	(617) 339-8351	
Massachusetts Poison Information Centers	(800) 682-9211	For medical emergencies involving suspected or known pesticide poisoning symptoms

Table 5: Emergency Services:

EMERGENCY SERVICE	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Fire/ Police	911	
ChemTrec	(800) 262-8200	
Clean Harbors	(800) 645-8265	
Pesticide Hotline	(800) 858-7378	PST: 8:00 am-12:00 pm, web: www.NPIC.orst.edu

Table 6: City of Waltham contacts in case of a spill or accident:

Stewart LaCrosse
Assistant Director of Consolidated Public Works

K. Thompson
City of Waltham Tree Warden

Department of Consolidated Public Works
The City of Waltham
165 Lexington Street, Waltham, MA 02452
(781) 314-3800

Waltham Fire/ Police Department	911
Waltham Environmental Specialist – Sheryl Waddick	(781) 314-3296
Waltham Health Department	(781) 314-3305

12: THE QUALIFICATIONS OF THE INDIVIDUALS SUPERVISING, DEVELOPING, AND SUBMITTING THE VMP

A. Individual Supervising the VMP:

Stewart LaCrosse | *Assistant Director of Consolidated Public Works*
Department of Consolidated Public Works
The City of Waltham
165 Lexington Street, Waltham, MA 02452
Tel: 781-3314-3800

B. Individual who wrote and developed the VMP:

Andrew S. Powers
Vegetation Management Specialist
Vegetation Control Service, Inc.
2342 Main Street
Athol, Massachusetts 01331

Mr. Powers' qualifications extend from his work experience in the field of herbicide application, crew management, and permitting and consulting:

Mr. Powers' holds B.S. in Forest Management from the University of New Hampshire. He has worked full time since 1998 for Vegetation Control Service, Inc., a consulting, and service company that provides vegetation management programs for utilities, government agencies, municipalities, private business and landowners throughout New England and New York. He currently holds supervisory level pesticide certifications in all New England states and New York and is an ISA Certified Arborist. His experience includes both field and administrative experience in rights-of-way and industrial weed control programs. Since 2010, he has written or co-authored Vegetation Management Plans for utilities and municipalities both in Massachusetts and throughout New England.

APPENDIX 1:

333 CMR 11.00, RIGHTS-OF-WAY REGULATIONS

333 CMR: PESTICIDE BOARD

333 CMR 11.00: RIGHTS OF WAY MANAGEMENT

Section

11.01: Purpose
11.02: Definitions
11.03: General Provisions
11.04: Sensitive Area Restrictions
11.05: Vegetation Management Plan (VMP)
11.06: Yearly Operational Plan (YOP)
11.07: Public Notification
11.08: Notice of Modification and Revocation
11.09: Right-of-appeal
11.10: Penalties
11.11: Rights-of-way Advisory Panel

11.01: Purpose

The purpose of 333 CMR 11.00 is to establish a statewide and uniform regulatory process which will minimize the uses of, and potential impacts from herbicides in rights-of-way on human health and the environment while allowing for the benefits to public safety provided by the selective use of herbicides. Specific goals of 333 CMR 11.00 are to:

(1) Ensure that an Integrated Pest Management (IPM) approach to vegetation management is utilized on all rights-of-way covered by 333 CMR 11.00.
(2) Establish standards, requirements and procedures necessary to prevent unreasonable risks to humans or the environment, taking into account the economic, social and environmental costs and benefits of the use of any pesticide.
(3) Ensure ample opportunity for public and municipal agency input on potential impacts of herbicide application to rights-of-way in environmentally sensitive areas.
(4) Establish a mechanism for public and municipal review of rights-of-way maintenance plans.

11.02: Definitions

For the purposes of 333 CMR 11.00, unless the context clearly requires otherwise, the following definitions shall apply:

Agricultural Area includes, but is not limited to, actively cultivated gardens, greenhouses, orchards, fields, pastures, and other areas under cultivation or agricultural management.

Applicant, any person representing any federal, state or local government or agency, utility, railroad or pipeline; that intends to maintain a right-of-way in the Commonwealth by application of herbicides.

Associated Surface Water Body, as identified on the most current available maps prepared by the Department of Environmental Protection, any body of water that is hydrologically connected to a Class A surface water source.
Ballast, the coarse gravel or crushed rock on which the ties, tracks and switching, signaling and communication devices of a railroad are laid.

Broadcast, any non-selective herbicide application technique which results in application to all vegetation within a target area.

Certified Vernal Pool, a confined basin depression, certified and mapped by NHESP pursuant to the provisions of 310 CMR 10.57(2)(a)5. and 6., which, at least in most years, holds water for a minimum of two continuous months during the spring and/or summer, and which is free of adult fish populations.

11.02: continued

Certified Vernal Pool Habitat, that vernal pool habitat which has been certified and mapped by NHESP pursuant to the provisions of 310 CMR 10.57(2)(a) 5. and 6. or, in the event that such habitat has not been mapped, the area extending 100 feet horizontally outward from the boundary of any Certified Vernal Pool.

Class A Waters, waters which are designated as a source of public water supply, as defined in 314 CMR 4.05(3)(a).

Class B Drinking Water Intakes, intakes to Class B waters suitable as sources of public water supply with appropriate treatment, as defined at 314 CMR 4.05(3)(b) and as identified on the most current available maps prepared by the Department of Environmental Protection.

Department, the Department of Agricultural Resources.

FIFRA, the Federal Insecticide, Fungicide and Rodenticide Act, Public Law 92-516.

Foliar Treatment, any technique which applies herbicide to leaves of target vegetation.

Inhabited Area, any area where people generally live, work or gather, including, but not limited to, any residence, school, hospital, park or recreational facility.

Interim Wellhead Protection Area (IWPA), for public water systems using wells or well fields that lack a Department of Environmental Protection-approved Zone II, an interim wellhead protection area, as that term is defined in the Massachusetts drinking water regulations, 310 CMR 22.02, and as identified on the most current available maps prepared by the Department of Environmental Protection, shall apply. Generally, this is a ½- mile radius for sources whose approved pumping rate is 100,000 gallons per day or greater. For smaller sources, the radius in feet is determined by multiplying the approved pumping rate in gallons per minute by 32 and adding 400.

Limited Application Waiver, a waiver from the requirements of 333 CMR 11.05 and 11.06, granted at the Department's sole discretion pursuant to 333 CMR 11.03(14), when the reason for the application is emergency public health or safety or when the application is for one time only.

Limited Spray Area, any area that is both within a Right-of-Way and within:

(a) any Zone II or IWPA;
(b) a distance of between 100 feet and 400 feet of any Class A Surface Water Source;
(c) a distance of between ten and 200 feet of any tributary or associated surface water body where the tributary or associated surface water body runs outside the Zone A for the Class A surface water source;
(d) a lateral distance of between 100 and 200 feet for 400 feet upstream, on both sides of the river, of a Class B Drinking Water Intake;
(e) a distance of between 50 and 100 feet of any identified Private Well;
(f) a distance of between 10 and 100 feet of any Wetlands or Water Over Wetlands;
(g) a distance of between ten feet from the mean annual high-water line of any river and the outer boundary of the Riverfront Area;
(h) a distance of between ten feet from any Certified Vernal Pool and the outer boundary of any Certified Vernal Pool Habitat; and
(i) a distance of 100 feet of any Agricultural or Inhabited Area.

Low Pressure, pressure under 60 pounds per square inch (psi).

11.02: continued

Maps, United States Geological Survey maps of scale 1:25,000 or other maps, as determined by the Department, which are of such accuracy and scale to provide sufficient detail so that sensitive areas can be delineated.

NHESP, the Natural Heritage and Endangered Species Program within the Massachusetts Division of Fisheries and Wildlife.

No-spray Area, any area that is both within a Right-of-Way and within:

(a) any Zone I;
(b) 100 feet of any Class A Surface Water Source;
(c) 100 feet of any tributary or associated surface water body where the tributary or associated surface water body runs within 400 feet of a Class A surface water source;
(d) ten feet of any tributary or associated surface water body where the tributary or associated surface water body is at a distance greater than 400 feet from a Class A surface water source;
(e) a lateral distance of 100 feet for 400 feet upstream, on both sides of the river, of a Class B Drinking Water Intake;
(f) 50 feet of any identified Private Well;
(g) ten feet of any Wetlands or Water Over Wetlands;
(h) ten feet of the mean annual high-water line of any river; and
(i) ten feet of any Certified Vernal Pool.

Person, an individual, association, partnership, corporation, company, business organization, trust, estate, the Commonwealth or its political subdivisions, administrative agencies, public or quasi-public corporation or body, or any other legal entity or its legal representatives, agent or assignee, or a group of persons.

Person Aggrieved, any person who, because of an act or failure to act by the Department may suffer an injury in fact which is different either in kind or magnitude from that suffered by the general public and which is within the scope of the interests identified in 333 CMR 11.00. Such person must specify in writing sufficient facts to allow the Department to determine whether or not the person is in fact aggrieved.

Private Well, any private drinking water supply identified by the local Board of Health, the well owner or the Department of Agricultural Resources. Private Well Registry, a registry of private wells located within 100 feet of a right-of-way which is maintained by the Department of Agricultural Resources. Homeowners must notify the Department by completing a registration form which is available directly from the Department or online at the Department website.

Public Water Supplier, as defined at 310 CMR 22.02(1), any person who owns or operates a public water supply system.

Public Ground Water Source, a source of water for a Public Water Supply System, as that term is defined in the Massachusetts drinking water regulations at 310 CMR 22.02.

Right(s)-of-way (ROW), any roadway, or thoroughfare on which public passage is made and any corridor of land over which facilities such as railroads, powerlines, pipelines, conduits, channels or communication lines or bicycle paths are located.

Rights-of-way Advisory Panel, a panel established to advise the Department on issues relating to 333 CMR 11.00 and to fulfill specific functions as detailed within 333 CMR 11.05 and 11.11.

River, a river as defined at 310 CMR 10.04 and as identified on the most current available maps prepared by the Department of Environmental Protection.

Riverfront Area, a riverfront area as defined at 310 CMR 10.58(2) and as identified on the most current available maps prepared by the Department of Environmental Protection. In general, this term shall mean the area between the mean annual high-water line of a perennially flowing river and a parallel line 200 feet away.

11.02: continued

Selective Application, any application of herbicides, in such a manner that the delivery to the target vegetation is optimized and delivery to non-target vegetation and the environment is minimized.

Sensitive Areas, as defined in 333 CMR 11.04, any areas within Rights-of-Way, including No Spray and Limited-Spray Areas, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects.

State-listed Species, any species on the Massachusetts list of Endangered, Threatened, and Special Concern Species as described in the Massachusetts Endangered Species Act (M.G.L c. 131A; 321 CMR 10.02). State-listed Species Habitat, the Estimated Habitats of Rare Wildlife (310 CMR 10.59 and 10.37) and the Priority Habitats for State-listed Species (321 CMR 10.02) as shown on the most recent edition of the Massachusetts Natural Heritage Atlas prepared by NHESP.

Stem Treatment, any technique including, but not limited to, stump, basal, stem, injection, banding, frill, or girdle and any other technique which delivers herbicide at low pressure to the stump, base or stem of the target vegetation.

Surface Water Source, any lake, pond, reservoir, river, stream or impoundment designated as a public water supply in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, as identified on the most current available maps prepared by the Department of Environmental Protection.

Target Vegetation, any plant species which has the potential to interfere with the operation and safety of the right-of-way.

Touch-up Application, any limited application of herbicides following an initial treatment, which is necessary to achieve the desired vegetation control.

Tributary, as identified on the most current available maps prepared by the Department of Environmental Protection, any body of running, or intermittently running, water which moves in a definite channel, naturally or artificially created, in the ground due to a hydraulic gradient, and which ultimately flows into a Class A surface water source, as defined in 314 CMR 4.05(3)(a).

Vegetation Management Plan (VMP), a long-term management plan for the applicant's right-of way system which describes the intended program for vegetation control over a five-year period.

Vernal Pool see Certified Vernal Pool.

Water Over Wetlands, the ocean or any estuary, lake or pond as defined at 310 CMR 10.04.

Wetlands, any of the following areas as defined in 310 CMR 10.02(1)(a), (b), (c) and (f):

(a)	Any bank, any freshwater wetland, any coastal wetland, any beach, any dune, any flat any marsh, or any swamp;	bordering on	the ocean any estuary any creek any river any stream any pond or any lake

(b) Land under any of the water bodies listed in 333 CMR 11.02: Wetlands (a); and
(c) Land subject to tidal action.

11.02: continued

Wetlands Determination, a written determination of the boundaries of Wetlands and boundaries of areas within 100 feet of Wetlands in accordance with the regulations of the Department of Environmental Protection (DEP) at 310 CMR 10.05(3)(a)1. and 2. 310 CMR 10.03(6)(b) requires applicants not eligible for a public utility exemption to submit these determinations with their VMPs if they will apply herbicides within 100 feet of wetlands and will not submit a Notice of Intent under M.G.L. c. 131, § 40, the Wetlands Protection Act. In order to obtain a Wetlands Determination, the applicant should submit a request to the conservation commission on maps of a scale that will enable the conservation commission or Department of Environmental Protection to find and delineate the boundaries of Wetlands and buffer zones within the vicinity of the right-of-way herbicide management area. To be considered "valid", the Wetlands Determination should be made no sooner than six months immediately prior to the submission of the Vegetation Management Plan. The Wetlands Determination shall cover the period of the Vegetation Management Plan only and shall expire at the end of the five-year period of that Vegetation Management Plan.

Yearly Operational Plan (YOP), the yearly operational plan which describes the detailed vegetation management operation for the calendar year consistent with the terms of the long-term Vegetation Management Plan.

Zone A, as identified on the most current available maps prepared by the Department of Environmental Protection, the protective land area for a Surface Water Source, Class A water source, Tributary, or Associated Surface Water Body defined in 310 CMR 22.02 as:

(a) the land area between the Class A surface water source and the upper boundary of the bank;
(b) the land area within a 400-foot lateral distance from the upper boundary of the bank of a Class A surface water source, as defined in 314 CMR 4.05(3)(a); and
(c) the land area within a 200-foot lateral distance from the upper boundary of the bank of a Tributary or Associated Surface Water Body.

Zone I, as identified on the most current available maps prepared by the Department of Environmental Protection and as defined at 310 CMR 22.02, the protective radius required around a public water supply well or wellfield. For public water system wells with approved yields of 100,000 gallons per day (gpd) or greater, the protective radius is 400 feet. Tubular wellfields require a 250-foot protective radius. Protective radii for all other public water system wells are determined by the following equation: Zone I radius in feet = (150 x log of pumping rate in gpd) –350.

Zone II, as identified on the most current available maps prepared by the Department of Environmental Protection and as defined at 310 CMR 22.02, the aquifer recharge area for a public water supply well or wellfield.

11.03: General Provisions

(1) No person shall use an herbicide for the purpose of clearing or maintaining a right-of-way unless appropriately certified by the Department or licensed by the Department and working under the on-site supervision of an appropriately certified applicator.

(2) No person shall use an herbicide for the purpose of clearing or maintaining a right-of-way except in accordance with a Vegetation Management Plan (VMP) and a Yearly Operational Plan (YOP) as approved by the Department. The YOP shall be available at the work site at all times during herbicide applications and be made available to the Department and municipal officials including the Conservation Commission and Board of Health upon reasonable request.

(3) No person shall handle, mix or load an herbicide concentrate on a right-of- way within 100 feet of a sensitive area.

11.03: continued

(4) The perimeter of any sensitive areas which are not readily identifiable on the ROW shall be identified with a clearly visible marker system, consistent with the VMP, prior to any herbicide application.

(5) No foliar application of herbicides shall be used to control vegetation greater than 12 feet in height except for side trimming.

(6) No herbicide shall be applied when the wind velocity is such that there is a high propensity to drift off target and/or during measurable precipitation, and no person shall apply herbicides in such a manner that results in drift into any No-spray Area.

(7) No person shall apply herbicides by aircraft for the purpose of clearing or maintaining a right-of-way.

(8) No touch-up applications shall be carried out except under the following conditions:

(a) Touch-up applications must occur within 12 months of the initial application.

(b) All applicable public notification procedures of M.G.L. c. 132B, § 6B, as outlined in 333 CMR 11.07(1) and (3), are followed.

(c) No more than 10% of the initially identified target vegetation on the applicant's right-of way in any municipality may be treated and the total amount of herbicide applied in any one year shall not exceed the limits specified by the label or Yearly Operational Plan.

(d) The Department may impose such additional restrictions or conditions on the use of herbicides as it deems necessary to protect public health and the environment.

(9) The Department will maintain mailing lists of individuals and groups desiring to obtain notices on various aspects of the Program.

(10) No person shall apply any herbicide identified as a Potential Ground Water Contaminant pursuant to 333 CMR 12.00 to a right-of-way.

(11) No person shall use an herbicide for the purpose of clearing or maintaining a right-of-way unless that person has obtained the most current available map of public ground water sources from the Department of Environmental Protection.

(12) No person shall use an herbicide for the purpose of clearing or maintaining a right-of-way unless that person has done one or more of the following:

(a) obtained a current list of identified Private Wells within 100 feet of the right-of-way from the Board of Health, or

(b) obtained a current list of all private wells, within 100 feet of the right of way from the Department of Agricultural Resources private well registry; or

(c) followed an alternative Private Well identification method outlined in an approved YOP.

(13) The applicator shall provide any employee of any state agency, or authority as defined in M.G.L. c. 3, § 39, when such employee is, within a right-of-way, using pesticides, supervising the use of pesticides, or present during the use of pesticides, with personal protective equipment and clothing. Applicators should note that other federal or state laws or regulations pertaining to pesticide applications may require this personal protective equipment to include protections according to Material Safety Data Sheets (MSDS's), the product label, and any other supporting technical data supplied by the manufacturer.

(14) Notwithstanding the provisions of 333 CMR 11.03(2) or other provisions of 333 CMR 11.00, the Department may, at its sole discretion, issue Limited Application Waivers to applicants wishing to apply herbicides to clear or maintain rights-of-way without VMPs or YOPs, but only under the following conditions:

11.03: continued

(a) The applicant must demonstrate either: 1. that the application will not occur more than once in a five-year period unless a VMP and a YOP are prepared and all other requirements of 333 CMR 11.00 are met; or 2. that the application is necessary to protect public health or safety.
(b) The applicant must still adhere to all public notification requirements established at 333 CMR 11.07(1) and (3).
(c) The applicant must provide the Department with a letter establishing the concurrence of the chief elected official or board of selectmen of the municipality where the application is to be made.
(d) The applicant may only use herbicides on the Department's "Herbicides Recommended for Use in Sensitive Areas List."
(e) If the application could impact Wetlands, the Department recommends that the applicant send a copy of its application for a Limited Application Waiver to the Department of Environmental Protection's Division of Wetlands and Waterways no less than 21 days before the proposed application.
(f) It should be noted that, with certain exceptions for public utilities, wetlands regulations at 310 CMR 10.03(6)(b) currently require Wetlands Determinations prior to any application within 100 feet of a Wetland.

Limited Application Waivers shall be issued solely at the Department's discretion, and the Department may impose such additional restrictions or conditions on the use of herbicides as it deems necessary to protect public health and the environment.

11.04: Sensitive Area Restrictions

(1) General. In any sensitive area:

(a) No more than the minimum labeled rate of herbicide for the appropriate site, pest, and application method shall be applied.
(b) Herbicides shall only be applied selectively by low pressure, using foliar techniques or basal or cut-stump applications, or other method approved for use by the Department.
(c) No person shall apply herbicides for the purpose of clearing or maintaining a right-of way in such a manner that results in drift to any area within ten feet of standing or flowing water in a wetland; or area within 400 feet of a public drinking water supply well; or area within 100 feet of any Class A surface water used as a public water supply; or area within 50 feet of a Private Well.
(d) Only herbicides specified by the Department as acceptable for use in sensitive areas pursuant to the Cooperative Agreement executed between the Department of Agricultural Resources and the Department of Environmental Protection on July 1 and 2, 1987, or future amendments thereto, shall be used in sensitive areas. Applicants proposing to use an herbicide which has been registered for use on rights-of-way but has not yet been evaluated pursuant to the provisions of the Cooperative Agreement may request that such herbicides be evaluated pursuant to said provisions. For an herbicide that has been evaluated pursuant to the provisions of the Cooperative Agreement, applicants proposing to use such herbicide in a manner inconsistent with the terms and conditions of use imposed in the guidelines may request a modification or waiver of such terms or conditions. A request for such modification or waiver shall provide a detailed rationale for use, with all relevant data including but not limited to environmental fate, efficacy and human health effects of the proposed herbicide. Such herbicides and/or uses shall be subject to the evaluation standards adopted by the Departments of Agricultural Resources and Environmental Protection in the Cooperative Agreement.
Commentary. Applicants not eligible for the public utilities exemption from the Wetlands Protection Act outlined at 310 CMR 10.03(6)(a), who wish to apply pesticides registered for use in Massachusetts to rights-of-way, may choose to apply herbicides determined to be suitable for use in sensitive areas in accordance with the provisions of the Cooperative Agreement mentioned above or, alternatively, such applicants may proceed pursuant to the provisions of 310 CMR 10.00 as authorized by M.G.L. c. 131, § 40.

(e) The Department may impose such additional restrictions or conditions on the use of herbicides within or adjacent to sensitive areas as it determines necessary to protect human health or the environment. Such changes may be proposed by a municipal agency or individual during the public comment period.
(f) In the event of a question or dispute as to which setback applies to a sensitive area, the most restrictive setback shall apply.

(2) Water Supplies

(a) Public Ground Water Sources.
1. No herbicides shall be applied within a Zone I.
2. No herbicides shall be applied within a Zone II or IWPA unless:
a. A minimum of 24 months has elapsed since the last application to the site; and
b. Herbicides are applied selectively by low pressure, using foliar techniques or basal or cut-stump applications.

(b) Class A Public Surface Water Sources, Associated Surface Water Bodies, Tributaries and Class B Drinking Water Intakes.
1. No herbicides shall be applied within 100 feet of any Class A public surface water source.
2. No herbicides shall be applied within 100 feet of any tributary or associated surface water body located within the Zone A of a Class A public surface water source, or within ten feet of any tributary or associated surface water body located outside of the Zone A of the Class A public surface water source.
3. No herbicides shall be applied within a lateral distance of 100 feet for 400 feet upstream of any Class B Drinking Water Intake.
4. No herbicides shall be applied within a distance of between 100 feet from any Class A surface water source and the outer boundary of any Zone A, or within a distance of between ten feet and the outer boundary of the Zone A for any tributary or associated surface water body located outside of the Zone A of a Class A surface water source, or within a lateral distance of between 100 and 200 feet for 400 feet upstream of a Class B Drinking Water Intake, unless:
a. A minimum of 24 months has elapsed since the last application to the site; and
b. Herbicides are applied selectively by low pressure, using foliar techniques or basal or cut-stump applications.

(c) Private Wells.

1. No herbicides shall be applied within 50 feet of an identified Private Well.
2. No herbicides shall be applied within a distance of between 50 feet and 100 feet of an identified Private Well, unless:
a. A minimum of 24 months has elapsed since the last application to the site; and
b. Herbicides are applied selectively by low pressure, using foliar techniques or basal or cut-stump applications.

(3) State-listed Species Habitat.
(a) Any person proposing to apply an herbicide within any State-listed Species Habitat who does not have a current Yearly Operational Plan approved in writing by the Division of Fisheries and Wildlife pursuant to 321 CMR 10.14(12), shall submit all necessary materials required for review pursuant to 321 CMR 10.18.
(b) The management of vegetation within existing utility rights-of-way shall be exempt from the requirements of 321 CMR 10.18 through 10.23, provided that the management is carried out in accordance with a Yearly Operational Plan approved in writing by the Division of Fisheries and Wildlife, pursuant to 321 CMR 10.14(12).
(c) No person shall apply an herbicide within State-listed Species Habitat unless the application is approved by the Division of Fisheries and Wildlife pursuant to 333 CMR 11.04(3)(a) and (3)(b), and such approval is submitted to the Department.

11.04: continued

(4) Wetlands, Waters Over Wetlands, Riverfront Areas, and Certified Vernal Pools.

(a) No herbicide shall be applied on or within ten feet of a Wetland or Water Over a Wetland, within ten feet of the mean annual high-water line of any River, or within ten feet of any Certified Vernal Pool.

(b) No herbicide shall be applied on or within a distance of between ten feet and 100 feet of any Wetland or Water Over a Wetland, within a distance of ten feet from the mean annual high-water line of any River and the outer boundary of any Riverfront Area, or within a distance of ten feet from any Certified Vernal Pool and the outer boundary of any Certified Vernal Pool Habitat unless:

1. A minimum of 12 months has elapsed since the last application to the site; and
2. Herbicides are applied selectively by low pressure, using foliar techniques or basal or cut-stump applications.

(c) Notwithstanding 333 CMR 11.04(4)(a) and (b), public utilities providing electric, gas, water, telephone, telegraph and other telecommunication services (and other applicants, if consistent with all relevant provisions of the Massachusetts Wetlands Protection Act and its regulations in effect at the time of application) may apply herbicides on or within ten feet of a Wetland in accordance with the following conditions:

1. Submission of a study, the design of which is subject to prior approval by the Departments of Agricultural Resources and Environmental Protection, evaluating impacts of the proposed vegetation management program utilizing herbicides on or within ten feet of Wetlands, and comparing those impacts to those which would result if only non-chemical control methods were used in these areas. The study must detail vegetation management practices and use patterns specific to those used by the type of entity submitting the study; and

2. A finding by the Department, after consultation with the Rights-of-way Advisory Panel, that the proposed vegetation management program utilizing herbicides on or within ten feet of Wetlands will result in less impacts to the Wetlands than mechanical control.

3. Notwithstanding the above, no herbicides shall be applied on or within ten feet of any standing or flowing water in a Wetland.

(5) Inhabited and Agricultural Areas. No foliar herbicide shall be applied within 100 feet of any Inhabited Area or any Agricultural Area unless:

(a) A minimum of 12 months has elapsed since the last application to the site; and

(b) Herbicides are applied selectively by low pressure, using foliar techniques or basal or cut-stump applications.

11.05: Vegetation Management Plan (VMP)

(1) General.

(a) Unless otherwise specified by the Department, all VMPs should be submitted by the applicant no later than September 1ST prior to the calendar year of the proposed first year of maintenance. All approved VMPs shall be effective for a five-year period unless otherwise modified or revoked by the Department.

(b) The VMP shall be presented on forms and/or format approved by the Department.

(2) Requirements. The VMP shall include, but not be limited to, the following:

(a) General statement of goals and objectives of the VMP.

(b) Identification of target vegetation.

(c) Intended methods of vegetation management and rationale for use, including vegetation control techniques, equipment proposed for use, timing of applications and alternative control procedures.

(d) Discussion of justification for proposed herbicide applications, including a description of the alternative control methods considered and the reasons that they were rejected.

(e) Methods, references and sources for identifying sensitive areas and control strategies proposed for sensitive areas. Applicants should note that the Department of Environmental Protection regulations at 310 CMR 10.03(6)(b) require Wetlands Determinations for applicants that are not eligible for a public utility exemption.
(f) Operational guidelines for applicators relative to herbicide use.
(g) Identification and qualifications of individuals developing and submitting a plan.
(h) A detailed description of the IPM Program, showing how it will minimize the amount and frequency of herbicide application.
(i) Description of alternative land use provisions or agreements that may be established with individuals, state, federal or municipal agencies that would minimize the need for herbicides, including the rationale for accepting or denying any reasonable request made by any individual.
(j) Description of a remedial plan to address spills and related accidents.
(k) For state agencies and authorities as defined in M.G.L. c. 3, § 39, a description of the applicant's policy to eliminate or, if necessary, reduce the use of pesticides for any vegetation management purpose along roadways, and a demonstration that, for the proposed application, the costs of non-chemical vegetation control significantly outweigh the benefits.

(3) Public Notice, Review and Comment.
(a) Upon receipt of the proposed VMP, the Department shall schedule and hold appropriate regional public hearings affording all interested parties the opportunity to comment, both at the hearings and in writing to the Department, on the proposed plan.
(b) At least 21 days prior to the public hearings, the Department shall publish notice of the hearings in the Environmental Monitor and regionally located newspapers and send notice to municipalities covered by the plan and to the appropriate mailing list. The notice will include locations where copies of the VMP can be reviewed.
(c) The public shall have no less than 45 days, starting from publication of the Environmental Monitor notice, to comment upon proposed VMPs, unless the Department extends the comment period for good cause.
(d) Wherever a chief elected official, Board of Health or Conservation Commission in a municipality covered by the proposed VMP requests a copy of the proposed plan, the applicant shall, at least 21 days prior to the end of the public comment period, respond to this request. The response must either include a copy of the proposed VMP, or an Internet address where the VMP may be viewed and a note that a hard copy will be provided promptly upon further request.

(4) Disposition of VMP.
(a) 25 copies of the proposed VMP shall be submitted to the Department. The Department shall distribute copies of the proposed VMP to each member of the Rights-of-way Advisory Panel. The Department may, at its sole discretion, allow electronic presentation of the VMP in lieu of some or all of the 25 copies that would otherwise be submitted pursuant to 333 CMR 11.05(4).
(b) Within 30 days of the end of the public comment period unless extended for good cause, the Rights-of-way Advisory Panel shall review the VMPs and recommend in writing to the Department approval, denial or modification of each VMP; if necessary, the Advisory Panel may request additional information from the applicant.
(c) Within 21 days of the end of the Rights-of-way Advisory Panel review period, unless extended by the Department for good cause, the Department will notify the applicant and the Advisory Panel in writing one of the following:
1. request for additional information or modification;
2. denial of VMP; or
3. approval of VMP.
(d) The VMP may be modified, withdrawn or amended by the applicant through a written request sent by certified mail to the Department.

11.05: continued

(e) Resubmission of a denied VMP, updating of a VMP, or a significant amendment to an approved VMP shall be processed according to 333 CMR 11.05.
(f) The applicant must send a copy of the approved VMP, or an Internet address where the VMP may be viewed and a note that a hard copy will be provided promptly upon further request, to the chief elected official, Board of Health, and Conservation Commission in each municipality covered by the plan.

(5) Time for Action. Non-action by the Department on a VMP within the time specified in 333 CMR 11.05 does not constitute approval of the submitted plan. In the event that the Department fails to notify the applicant of a decision within the time specified in 333 CMR 11.05(4)and upon written request from the applicant, the Commissioner must issue a finding within ten days of receipt stating the reason for the delay and providing an estimated completion date.

11.06: Yearly Operational Plan (YOP)

(1) General.
(a) The applicant is responsible for the accuracy and completeness of all information submitted with the YOP. The YOP shall be consistent with the objectives of the VMP and shall describe the intended operational program for that calendar year.
(b) The YOP shall be presented on forms and in a format approved by the Department.

(2) Requirements. The YOP shall include but not be limited to the following:
(a) Maps locating the rights-of-way and sensitive areas not readily identifiable in the field;
(b) Herbicides proposed including Environmental Protection Agency (EPA) Registration numbers, application rates, carriers and adjuvants;
(c) Herbicide application techniques and alternative control procedures proposed.
(d) The name, address and phone number of the company which will perform any herbicide treatment;
(e) Identification of target vegetation;
(f) The name, address and phone number of the individual representing the YOP applicant;
(g) Description of methods used to flag or otherwise designate sensitive areas on the right of-way;
(h) Herbicide Fact Sheets as approved by the Department; and
(i) Procedures and locations for handling, mixing and loading of herbicide concentrates.

(3) Public Notice, Review and Comment.
(a) Upon submittal of the YOP for approval, the Department will publish a notice in the Environmental Monitor. Said notice shall be provided by the applicant and shall include the information on the municipalities through which the rights-of-way pass, a brief description of the intended program, and the procedure for public review and comment. The Department shall send notification of the publication to the applicant and the appropriate mailing list.
(b) Upon submittal of the YOP to the Department, the applicant shall provide by certified mail under separate cover to the Board of Health, Conservation Commission, chief elected municipal official, and where applicable, the Massachusetts Water Resources Authority and Massachusetts Department of Conservation and Recreation, a copy of the proposed YOP (or an Internet address where the proposed YOP may be viewed and a note that a hard copy will be provided promptly upon request) and the Environmental Monitor notice for the municipality or municipalities in which the herbicide treatment is proposed. Community water suppliers shall receive electronic information or a one-page notification by mail which provides details about where to receive more information. The applicant shall maintain copies of the packet sent to municipalities and certified mail receipts. The applicant shall make copies of the packet, certified mail receipts, and any further correspondence regarding hard copies of YOPs in lieu of Internet viewing, available to the Department upon request.

11.06: continued

(c) The Department shall allow a 45-day comment period on proposed YOPs, unless extended for good cause, commencing with the publication of the notice in the Environmental Monitor and receipt of the proposed YOP and Environmental Monitor notice by each municipality.
(d) The Department may approve, deny or modify YOPs after the 45-day comment period has expired.

(4) Disposition of YOP.
(a) The applicant shall submit the YOP to the Department at least 90 days prior to the proposed commencement of application to allow completion of the comment and review period.
(b) The Department shall review the YOP to ensure that the YOP is consistent with the approved VMP. Any inconsistencies or deficiencies will be noted by the Department and returned with the YOP to the applicant.
(c) Where practical, the Department shall approve or deny the YOP within 90 days of receipt. The Department will provide notice of the decision to the applicant, municipal agencies and commentators in writing.
(d) The approved YOP in conjunction with the VMP shall govern the application of herbicide for a period not to exceed 12 months in accordance with other laws and regulations of the State and Federal governments and impose such conditions as necessary to minimize the risk of adverse effects on human health and the environment.

(5) Time for Action. Non-action by the Department on a YOP within the time specified in 333 CMR 11.06(4) does not constitute approval of the submitted plan. In the event that the Department fails to notify the applicant of a decision within the time specified and upon a written request from the applicant, the Commissioner must issue a finding within ten days of receipt stating the reason for the delay and providing an estimated completion date.

11.07: Public Notification

(1) At least 21 days in advance of application of herbicide to a right-of-way in any city or town, the applicant shall notify the Department, the board of health, and the local public water supplier and, by registered mail, the Mayor, City Manager or Chairman of the Board of Selectman, and the conservation commission in the municipality where the right-of-way lies. The notice shall include the following information: the approximate dates on which such herbicide application shall commence and conclude, provided however, that said application shall not commence more than ten days before nor conclude more than ten days after said approximate dates; the method and locations of application; a Department-approved Herbicide Fact Sheet on the active ingredient(s) of the herbicide(s) used; the EPA registration number(s) for the herbicide(s) used; the name, title, business address and phone number of the certified commercial applicator or licensed applicator, or the contractor, employer or employees responsible for carrying out the application. Where specific information required for this notice is already contained in the current YOP that is on file with the local official, the applicant may incorporate the appropriate pages of the YOP by reference in its notice to that official, indicating that these pages are also directly available from the applicant upon request.

(2) This public notice may run concurrently with the public notice and comment period in 333 CMR 11.06(3), provided that the notice is distributed at least 21 days prior to the herbicide application, and that, prior to the herbicide application, the public notice and comment period has closed and the Department has granted YOP approval without modifications. When the Department's final approval requires modifications or application dates are selected after YOP approval, separate notice under 333 CMR 11.07(1) is required.

(3) At least 48 hours prior to the application referred to in 333 CMR 11.07(1), the applicant must publish a conspicuous notice in at least one newspaper of general circulation in the city or town where the right-of-way lies. The notice must appear in the local section of the newspaper and measure at least four by five inches in size. The notice shall contain the following information: the method and locations of pesticide application; the approximate dates on which the pesticide application shall commence and conclude, provided that the applications shall not

11.07: continued

commence more than ten days before nor conclude ten days after said approximate dates; a list of potential pesticides to be used; a description of the purpose of the application; and the name, title, business address and phone number of a designated contact person representing the applicant from whom any citizen may request further information. The notice should apply only to the calendar year in which the notice is published. Upon request the notice must be made available to the Department.

11.08: Notice of Modification and Revocation

(1) The Department may suspend approval of any VMP or YOP, by written notice to the applicant and applicator, halting the application of herbicide to that right-of-way of the YOP. After 21 days if the applicant does not request a hearing, the Department may revoke or modify the VMP and YOP, if it finds:

(a) that the terms, conditions of restrictions thereof, are being violated or are inadequate to avoid unreasonable adverse effects on the environment or on human health; or

(b) that the applicant has made a false or misleading statement or has not provided information requested by the Department or Rights-of-way Advisory Panel; or

(c) that the applicant has violated any provision of the Massachusetts Pesticide Control Act or FIFRA, or any regulations, standards, orders or license issued under either.

(2) Upon notice of revocation or modification, the applicant may modify the YOP by written request to the Department. Applications to modify the YOP shall be submitted in the manner set forth in 333 CMR 11.06 and disposed of in the manner set forth in 333 CMR 11.06. The Department may waive all or part of the requirement if it determines that the proposed changes do not significantly change the terms of the approved YOP.

11.09: Right-of-appeal

Any person aggrieved by the decision of the Department to approve, deny, modify or revoke a VMP or YOP may request an adjudicatory hearing. The request for a hearing must be received by the Department within 21 calendar days after receipt of the decision. The request should state clearly and concisely the facts of the proceeding, the reasons the decision is alleged to be inconsistent with 333 CMR 11.00 and the relief sought by the adjudicatory hearing. The adjudicatory hearing before the Pesticide Board shall be conducted in accordance with the informal rules of adjudicatory proceeding as set forth in M.G.L. c. 30A.

11.10: Penalties

Any person who violates any provision of 333 CMR 11.00 shall be subject to the criminal and civil penalties set forth in M.G.L. c. 132B, § 14.

11.11: Rights-of-way Advisory Panel

(1) A Rights-of-way Advisory Panel shall be established to advise the Department on issues relating to 333 CMR 11.00 and to fulfill specific functions as detailed within 333 CMR 11.00.

(2) The Department shall request that the following members participate on the Rights-of-way Advisory Panel: the Commissioners/Secretaries or his/her designee of the Department of Environmental Protection, the Department of Public Health, and the Executive Office of Transportation; and a representative, respectively, from each of the following, all to be appointed by the Department Commissioner: the Massachusetts Association of Conservation Commissions, the Massachusetts Association of Health Boards, the Massachusetts Department of Conservation and Recreation, and an Environmental Advocacy Organization Representative, a member of the University of Massachusetts Extension who is well versed in weed science and Integrated Pest Management of weeds, a representative of the Massachusetts Railroad Association, a representative of a utility company and a commercial pesticide applicator.

11.11: continued

(3) Non-agency representatives shall remain on the panel for a term of five years. Any member absent from two or more consecutive meetings may be removed from the Advisory Panel at the discretion of the Commissioner of the Department, and a replacement requested from the representative agency, industry group, or association.

(4) The Advisory Panel shall meet at least once each year and shall hold further meetings upon the request of the Department of Agricultural Resources or at the request of any two members of the Advisory Panel.

(5) All Advisory Panel members shall serve without compensation.

REGULATORY AUTHORITY

333 CMR 11.00: M.G.L. c. 132B.

APPENDIX 2:

MGL 132B MASSACHUSETTS PESTICIDE CONTROL ACT

Statutes - Pesticides
MGL 132B Massachusetts Pesticide Control Act

Chapter 132B: Section 1. Title; purpose.

Section 1. This chapter shall be known and may be cited as the Massachusetts Pesticide Control Act.
The purpose of this chapter is to conform the laws of the commonwealth to the Federal Insecticide, Fungicide, and Rodenticide Act, Public Law 92-516, as amended, and the regulations promulgated thereunder and to establish a regulatory process in the commonwealth. The exclusive authority in regulating the labeling, distribution, sale, storage, transportation, use and application, and disposal of pesticides in the commonwealth shall be determined by this chapter.

Chapter 132B: Section 2. Definitions.
Section 2. Unless the context clearly requires otherwise, when used in this chapter, the following words and phrases shall have the following meanings:[a]

"Active ingredient", in the case of a pesticide other than a plant regulator, defoliant, or desiccant, an ingredient which prevents, destroys, repels, or mitigates any pest; in the case of a plant regulator, an ingredient which through physiological action accelerates or retards the rate of growth or rate of maturation or otherwise alters the behavior of ornamental or crop plants or the products thereof; in the case of a defoliant, an ingredient which causes the leaves or foliage to drop from a plant; and, in the case of a desiccant, an ingredient which artificially accelerates the drying of plant tissue.

"Administrator", the Administrator of the United States Environmental Protection Agency.

"Adulterated", when used with reference to a pesticide, any pesticide the strength or purity of which falls below the professed standard of purity as expressed on its labeling under which it is sold; a pesticide for which any substance has been substituted wholly or in part; or a pesticide from which any valuable constituent has been wholly or in part abstracted.

"Advisory council", a council established by regulations adopted by the department for the purposes set forth in section five.

"Agricultural commodity", a plant, or part thereof, or animal or animal product produced by a person primarily for sale, consumption, propagation, or other use by man or animals.

"Animal", all vertebrate and invertebrate species, including but not limited to man and other mammals, birds, fish and shellfish.

"Certified applicator", an individual who is certified under the provisions of section ten as authorized to use or supervise the use of any pesticide which is classified by the department as being for restricted use.

"Private applicator", a certified applicator who uses or supervises the use of any pesticide which is classified by the department as being for restricted use for purposes of producing any agricultural commodity on property owned or rented by him or his employer or if applied without compensation other than trading of personal services between producers of agricultural commodities on the land of another person.

"Commercial applicator", a certified applicator, whether or not he is a private applicator with respect to some users, who uses or supervises the use of any pesticide which is classified by the department as being for restricted use for any purpose or on any land other than as provided in the preceding paragraph.

"Licensed applicator", an individual who is licensed under the provisions of section ten as authorized to be present while pesticides classified by the department as being for restricted use are being applied under the direct supervision of a certified applicator, or to use or to be present to supervise the use or land of another for hire any pesticide classified by the department as being for general use.

"Beneficial insects", insects which, during their life cycle, are effective pollinators of plants, are parasites or predators of pests, or are otherwise beneficial.

"Board", the pesticide board, established by section three.

"Commissioner", the commissioner of food and agriculture.

"Defoliant", a substance or mixture of substances intended to cause the leaves or foliage to drop from a plant, with or without causing abscission.

"Department", the department of food and agriculture.

"Desiccant", a substance or mixture of substances intended to artificially accelerate the drying of plant tissue.

"Device", an instrument or contrivance, other than a firearm, intended to hold or dispense a pesticide and used in conjunction with a pesticide, the purpose of which is to trap, destroy, repel, or mitigate any pest or any other form of plant or animal life, other than man and other than bacteria, virus, or other micro-organism on or in living man or other living animals, but not including equipment used for the application of pesticides when sold separately therefrom.

"Director", the pesticides program director established by section four.

"Distribution" or "Distribute", to offer for sale, hold for sale, sell, barter, ship, deliver for shipment, or receive.

"Environment", includes water, air, land, and all plants and man and other living animals therein, and the interrelationships which exist among these.

"Federally registered pesticide", a pesticide which is registered pursuant to FIFRA.

"FIFRA", the Federal Insecticide, Fungicide, and Rodenticide Act, Public Law 92-516, as amended.

"Fungi" or "Fungus", non-chlorophyll-bearing thallophytes of a lower order than mosses and liver-worts, as, for example, rusts, smuts, mildews, molds, yeasts, and bacteria, except those on or in living man or other living animals, and except those in or on processed food, beverages, or pharmaceuticals.

"Imminent hazard", a situation in which the continued use of a pesticide would result in unreasonable adverse effects on the environment.

"Inert ingredient", an ingredient which is not active.

"Insect", a small invertebrate animal generally having the body more or less obviously segmented, for the most part belonging to the class insects, comprising six-legged, usually winged forms, as for example, moths, beetles, bugs, bees, flies, and their immature stages, and to other allied classes of arthropods whose members are wingless and usually have more than six legs, as for example, spiders, mites, ticks, millipedes, and wood lice.

"Label", the written, printed, or graphic matter, on or attached to, the pesticide or device or any of its containers or wrappers.

"Labeling", all labels and all other written, printed or graphic matter accompanying the pesticide or device at any time, or to which reference is made on the label or in literature accompanying the pesticide or device, but shall not include publications of the United States Environmental Protection Agency, the United States Department of Agriculture, or Interior, or Health, Education and Welfare, state experiment stations, state agricultural colleges, and other similar federal or state institutions or agencies authorized by law to conduct research or disseminate information in the field of pesticides, except as otherwise provided by regulation of the department.

"Land", land and water areas, including airspace, and structures, buildings, contrivances, and machinery appurtenant thereto or situated thereon, fixed or mobile.

"Licensed pesticide dealer", a person who distributes pesticides classified by the department as being for restricted use or pesticides whose uses or distribution are further restricted by regulations adopted by the department, with the approval of the board.

"Misbranded", (a) in the case of a pesticide or device, if the labeling bears any statement, design, or graphic representation relative thereto or to its ingredients which is false or misleading in any particular;

(b) in the case of a pesticide or device, if it is an imitation of, or is offered for sale under the name of, another pesticide or device;

(c) in the case of a pesticide or device, if any word, statement, or other information required by or under authority of FIFRA or this chapter to appear on the label or labeling is not prominently placed thereon with such conspicuousness, as compared with other words, statements, designs, or graphic matter in the labeling, and in such terms as to render it likely to be read and understood by the ordinary individual under customary conditions of purchase and use;

(d) in the case of a pesticide, if it is contained in a package or other container or wrapping which does not conform to standards established pursuant to FIFRA or this chapter;

e) in the case of a pesticide, if it does not contain a label bearing the registration number assigned under FIFRA to each establishment in which it was produced;

(f) in the case of a pesticide, if the labeling accompanying it does not contain directions for use which are necessary for effecting the purpose for which the product is intended and if complied with, together with any requirements imposed under FIFRA or this chapter, is adequate to protect health and the environment;

(g) in the case of a pesticide, if its label does not contain a warning or caution statement which may be necessary and if complied with, together with any requirements imposed under FIFRA or this chapter, is adequate to protect health and the environment;

(h) in the case of a pesticide, if its label does not bear an ingredient statement on that part of the immediate container, and on the outside container or wrapper of the retail package, if there be one, through which the ingredient statement on the immediate container cannot be clearly read, which is presented or displayed under customary conditions or purchase, except that a pesticide is not misbranded if the administrator has permitted the ingredient statement to be placed on another part of the container pursuant to FIFRA;

(i) in the case of a pesticide, if its labeling does not contain a statement of the use classification under which it is registered;

(j) in the case of a pesticide, if there is not affixed to its container, and to the outside container or wrapper of the retail package, if there be one, through which the required information on the immediate container

cannot be clearly read, a label bearing the name and address of the producer, registrant, or person for whom the pesticide is produced; the name, brand, or trademark under which the pesticide is distributed; the net weight or measure of the content, as required by the administrator; and the registration number assigned to the pesticide by said administrator pursuant to FIFRA;

(k) in the case of a pesticide containing any substance or substances in quantities highly toxic to man, unless the label shall bear, in addition to any other matter required by FIFRA or this chapter the skull and crossbones; the word "POISON" prominently in red on a background of distinctly contrasting color; and a statement of practical treatment, first aid or otherwise, in case or poisoning by the pesticide; and (%93) in the case of a pesticide, if its container does not bear a label, as required by the department pursuant to this chapter.

"Nematode", invertebrate animals of the phylum nemathelminthes and class nematoda, that is, unsegmented round worms with elongated, fusiform, or sac-like bodies covered with cuticle, and inhabiting soil, water, plants or plant parts. Nematodes may also be referred to as nemas or eel-worms.

"Person", an individual, association, partnership, corporation, company, business organization, trust, estate, the commonwealth or its political subdivisions, administrative agencies, public or quasi-public corporation or body, or any other legal entity or its legal representative, agent or assign, or a group of persons.

"Pest", an insect, rodent, nematode, fungus, weed, or any other form of terrestrial or aquatic plant or animal life or virus, bacterium, or other micro-organism, except viruses, bacteria or other micro-organisms on or in living man or other living animal, which is declared to be a pest by the administrator or by the department with the approval of the board.

"Pesticide", a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant; provided that the term "Pesticide" shall not include any article that is a "new animal drug" within the meaning of section 201 (w) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. s 321 (w), or that has been determined by the Secretary of the United States Department of Health, Education and Welfare not to be a new animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of section 201 (x) of such act (21 U.S.C. s 321 (x)).

"Plant regulator", a substance or mixture of substances intended, through physiological action, to accelerate or retard the rate of growth or rate of maturation, or to otherwise alter the behavior of plants or the produce thereof, but shall not include substances to the extent that they are intended as plant nutrients, trace elements, nutritional chemicals, plant inoculants, and soil amendments. Also, the term "plant regulator" shall not include any nutrient mixtures or soil amendments commonly known as vitamin-hormone horticultural products, intended for improvement, maintenance, survival, health, and propagation of plants, and as are not for pest destruction and are nontoxic, nonpoisonous in the undiluted package concentration.

"Produce", to manufacture, prepare, compound, propagate, process or repackage any pesticide or device.

"Producer", a person who manufactures, prepares, compounds, propagates, processes or repackages any pesticide or device.

"Protect health and the environment" or "protection of health and environment", protection against any unreasonable adverse effects on the environment.

"Registrant", a person who has registered any pesticide pursuant to the provisions of this chapter.

"Under the direct supervision of a certified applicator", unless otherwise prescribed by its labeling, a

pesticide shall be considered to be applied under the direct supervision of a certified applicator if it is applied by a competent person acting under the instructions and control of a certified applicator who is available if and when needed, and who is responsible for the pesticide applications made by that person, even though such certified applicator is not physically present at the time and place the pesticide is applied.

"Unreasonable adverse effects on the environment", an unreasonable risk to man or the environment, taking into account the economic, social and environmental cost and benefits of the use of any pesticide.

"Weed", a plant which grows where not wanted.

"Wildlife", vertebrate animals, excluding man, that are wild by nature, including fish, birds, mammals, reptiles and amphibians.

Chapter 132B: Section 3. Pesticide board.
Section 3. There shall be within the department of food and agriculture a pesticide board which shall consist of the commissioner of environmental protection or his designee, the commissioner of food and agriculture or his designee, the director of the division of food and drugs or his designee, the commissioner of fisheries, wildlife and recreational vehicles or his designee, the commissioner of environmental management or his designee, the commissioner of public health or his designee, and seven persons appointed by the governor one of whom shall have been engaged in the commercial production of a plant-related agricultural commodity for at least the preceding five years on land owned or rented by him, one of whom shall have been an active commercial applicator of pesticides for at least the preceding five years, one of whom shall have expertise in the health effects of pesticide use, one of whom shall be a physician, one of whom shall be experienced in the conservation and protection of the environment, and two of whom shall represent the public at large. The commissioner of food and agriculture or his designee shall be chairman of the board.

The appointive members of the board shall receive fifty dollars for each day or portion thereof spent in the discharge of their official duties and shall be reimbursed for their necessary expenses incurred in the discharge of their official duties. Each appointive member shall be appointed for a term of four years, except for persons appointed to fill vacancies who shall serve for the unexpired term. Any member shall be eligible for reappointment.

The board shall hold an annual meeting in March, and regularly at three other times annually, and from time to time at the call of the chairman or upon the request of any two members.

Seven members of the board shall constitute a quorum. The board may, by vote of a majority of its members then in office, adopt rules and regulations for the conduct of its business. Rules and regulations adopted may be amended or repealed by a two-thirds vote of its members.

The board in addition to other powers conferred in this chapter shall advise the commissioner of food and agriculture with respect to the implementation and administration of this chapter.

The pesticides program director established by section four shall attend meetings of the board, shall serve as secretary thereto, but shall have no vote in its deliberation.

Chapter 132B: Section 3A. Pesticide board subcommittee.
Section 3A. A subcommittee of the pesticide board shall be established and shall be charged with the responsibility of registering all pesticides for use in the commonwealth pursuant to section seven. Said subcommittee shall also be responsible for issuing all experimental use permits pursuant to section eight. Said subcommittee shall consist of five members, the director of the division of food and drugs, who shall act as chairman, the commissioner of the department of food and agriculture or his designee, the commissioner of the department of environmental management or his designee, the commissioner of public health or his designee, and one person appointed by the governor, who shall have been actively engaged in commercial application of pesticides for at least the preceding five years who shall be a

member of the pesticide board. Any person aggrieved by the decision of said subcommittee may appeal any such decision according to the provisions of section thirteen.

Chapter 132B: Section 4. Programs director.
Section 4. The pesticide regulatory functions conferred upon the department under the provisions of this chapter shall be under the administrative supervision of a pesticide programs director who shall be qualified by training and experience to perform such duties. Said director shall be appointed by the commissioner with the approval of the board for a term of five years. Said person shall be eligible for reappointment, but may be removed by the commissioner for cause. The position of director shall not be subject to the provisions of chapter thirty-one or the provisions of section nine A of chapter thirty. If an employee serving in a position which is classified under chapter thirty-one or in which he has tenure by reason of section nine A of chapter thirty shall be appointed director, he shall upon termination of his service as director be restored to the position which he held immediately prior to such appointment or to a position equivalent thereto in salary grade in the same state department; provided, however, that his service in such unclassified position shall be determined by the civil service commission in administering chapter thirty-one. Such restoration shall be made without impairment of his civil service status or tenure under section nine A of chapter thirty and without loss of seniority, retirement, or other rights to which uninterrupted service in such prior position would have entitled him. During the period of such appointment, the person so appointed from a position in the classified service shall be eligible to take any competitive promotional
examination for which he would otherwise have been eligible.

Chapter 132B: Section 5. Powers and duties of department.
Section 5. The department with the approval of the board may cooperate and enter into cooperative agreements and contracts with appropriate federal agencies, the agencies of other states, interstate agencies, other agencies of the commonwealth or its political subdivisions, or private or nonprofit organizations in matters related to the purposes of this chapter or FIFRA, and may receive from and dispense to such agencies such funds as may be available for the purposes of this chapter and FIFRA.

The department with the approval of the board shall take all action necessary or appropriate to secure for the commonwealth the benefits of FIFRA and other pertinent federal legislation.

The department with the approval of the board and subject to the provisions of chapter thirty A may from time to time adopt, amend or repeal such forms, regulations and standards as it deems necessary for the implementation and administration of this chapter.

The department with the approval of the board shall by regulation establish and formulate procedures whereby the advice or relevant advisory councils shall be sought incident to the development of policy or the adoption, amendment or repeal of regulations related to the administration of this chapter.

The department may with the approval of the board declare such pests and devices as it deems necessary to be subject to the provisions of this chapter.

Chapter 132B: Section 6. Prohibited distributions, etc.
Section 6. No person shall distribute a pesticide not registered pursuant to the provisions of section seven. This prohibition shall not apply to the transfer of a pesticide from one plant or warehouse to another plant or warehouse and used solely at such plant or warehouse as a constituent part to make a pesticide which is or will be registered pursuant to the provisions of this act; or the distribution of a pesticide pursuant to the provisions of an experimental use permit issued under section eight.

No person shall distribute a pesticide classified by the department as being for restricted use to a person not appropriately certified to use that pesticide. This prohibition shall not apply to the distribution of a pesticide to a competent individual acting under the direct supervision of an individual appropriately certified to use that pesticide.

No person shall distribute a pesticide that is adulterated or misbranded or a device that is misbranded.

No person shall distribute any pesticide unless it is in the registrant's or the producer's unbroken, unopened, and sealed container. This prohibition shall not apply to the repackaging of pesticides because of damage in transit.

No person shall distribute any pesticide that does not conform to any requirement of its registration or permit.

No person shall distribute any pesticide in containers that are unsafe due to damage or design.

No person shall detach, alter, deface, or destroy, wholly or in part, any label or labeling provided for in this chapter or in regulations adopted thereunder, or to add any substance to, or take any substance from, a pesticide in a manner that may defeat the purposes of this chapter or regulations adopted thereunder.

No person shall distribute, handle, dispose of, discard, or store any pesticide or pesticide container in such a manner as to cause injury to humans, vegetation, crops, livestock, wildlife, beneficial insects, to cause damage to the environment, or to pollute or contaminate any water supply, waterway, groundwater or waterbody.

No person shall act in the capacity of, or advertise as, or assume to act as a licensed pesticide dealer unless that person is in possession of a currently valid license issued by the department pursuant to the provisions of section nine. No person possessing a pesticide dealer license shall violate or allow to be violated any term, condition, restriction or provision of said license.

No person shall purchase or use a pesticide that is not registered by the department under the provisions of section seven; provided, however, that this prohibition shall not apply to the use of a pesticide consistent with the terms of an experimental use permit issued by the department under the provisions of section eight.

Chapter 132B: Section 6A. Prohibited activities.
Section 6A. No person shall use a registered pesticide in a manner that is inconsistent with its labeling or other restrictions imposed by the department. No person shall use a pesticide which is the subject of an experimental use permit inconsistently with the terms and conditions of said permit.

No individual certified or licensed as a pesticide applicator shall violate any provision, condition, term or restriction of his certification or license.

No person shall use a pesticide that has been classified by the department as being for restricted use unless he is an appropriately certified private applicator, an appropriately certified commercial applicator, or a competent individual acting under the direct supervision of an appropriately certified applicator.

Chapter 132B: Section 6B. Herbicides; application by utilities; notice.
Section 6B. No gas, electric, telephone or other utility company licensed to do business in the commonwealth shall spray, release, deposit, or apply any herbicide to any land which it owns or as to which it holds an easement or similar right and over which it maintains power, high tension or other lines without first notifying, by registered mail, the mayor, city manager or chairman of the board of selectmen and the conservation commission in the city or town where such land lies twenty-one days prior to such spraying.

The notice shall contain the following information: the approximate dates on which such spraying shall commence and conclude; provided, however, that said spraying shall not commence more than ten days prior nor conclude more than ten days after said approximate dates; the type of herbicide to be used and a copy of all information supplied by the manufacturers thereof to the utility relative thereto; the name and address of the contractor who will make the application for the utility or the name, title and business

address of the employee who will be responsible for carrying out the application if it is to be made by utility company employees.

Chapter 132B: Section 7. Registration.
Section 7. Pesticides, including pesticides that are federally registered may be registered by the subcommittee of the pesticide board for use in the commonwealth.

Each applicant for the registration of a pesticide shall annually file with the subcommittee an application providing thereon such information as said subcommittee shall require. Said subcommittee may require of applicants for pesticide registrations any information that it deems necessary to determine whether, or how, the pesticide should be registered.

An applicant desiring to register or reregister a pesticide shall pay such registration fee, not to exceed twenty-five dollars, as said subcommittee may by regulation require. All pesticide registrations shall be for a period not to exceed one year.

In the event that any person files with said subcommittee an application to reregister a pesticide which is registered on the date of application for reregistration and pays the appropriate fee therewith, such registration shall be deemed to be in effect until the earlier of the following two events shall occur, ninety days have elapsed after the registration was scheduled to expire, or the subcommittee notifies the applicant for reregistration that the registration has been renewed, modified or denied.

If said subcommittee determines that a pesticide, when used in accordance with its directions for use, warnings and cautions and for the uses for which it is registered, or for one or more such uses, or in accordance with a widespread and commonly recognized practice, will not generally cause unreasonable adverse effects on the environment, it may classify the pesticide, or the particular use or uses of the pesticide to which the determination applies, as being for general use.

If said subcommittee determines that a pesticide, when used in accordance with its directions for use, warnings and cautions and for the use for which it is registered, or for one or more of such uses, or in accordance with a widespread and commonly recognized practice, may cause, without additional restrictions, unreasonable adverse effects on the environment, including injury to the applicator, it may classify the pesticide or the particular use or uses to which the determination applies, for restricted use.

Said subcommittee shall register a pesticide if it determines that its composition is such as to warrant the proposed claims for it; its labeling and other material required to be submitted comply with the requirements of this chapter; it will perform its intended function without unreasonable adverse effects on the environment; and when used in accordance with widespread and commonly recognized practice it will not generally cause unreasonable adverse effects on the environment.

As part of the registration of a pesticide, said subcommittee may require that the pesticide be colored or discolored if such requirement is necessary for the protection of health or the environment, may classify for restricted use any pesticide or pesticide use classified for general use under FIFRA, and may include in the registration such conditions of use as it deems necessary.

If at any time it appears that a pesticide registration does not comply with the provisions of FIFRA, this chapter, or rules and regulations promulgated thereunder, or when used as registered, or a pesticide may cause unreasonable adverse effects on the environment, or a registered pesticide is an imminent hazard, the subcommittee as established in section three A, may, forthwith by an order suspend the registration of such pesticide. Notification of such order shall be sent to the applicant and shall be a public record.

Chapter 132B: Section 8. Experimental use permits.
Section 8. Any person may apply to the subcommittee for an experimental use permit for a pesticide. Each applicant for an experimental use permit shall file with the department an application providing thereon such information as the department may require. Each applicant for an

experimental use permit shall pay such registration fee, not to exceed twenty-five dollars, as the department may by regulation require.

The subcommittee may grant an experimental use permit to an applicant therefor if it determines that the applicant needs such a permit to accumulate information necessary to register a pesticide.

The subcommittee shall refuse to grant an experimental use permit if it believes that the pesticide applications to be made under the proposed terms and conditions may cause unreasonable adverse effects on the environment, or if it believes that the applicant or person to conduct the experimentation is not competent to conduct such experimentation without causing unreasonable adverse effects on the environment.

The subcommittee shall revoke any experimental use permit, at any time, if it believes that its terms or conditions are being violated, or that its terms and conditions are inadequate to avoid unreasonable effects on the environment.

Chapter 132B: Section 9. Dealers' licenses.
Section 9. A person may apply to the department to be a licensed pesticide dealer. Said applicants shall submit to the department a statement supplying such information thereon as the department may require. An applicant for such a license shall pay such registration fee, not to exceed twenty-five dollars, as the department may by regulation require, for each principal distribution center, branch outlet, or direct sales representative of an out-of-state distributor.

In the event that any person files with the department an application to renew a pesticide dealer's license which is in effect on the date of application for renewal and pays the appropriate fee therewith, such license shall be deemed to be in effect until the earlier of the following two events shall occur: ninety days have elapsed after the license was scheduled to expire; or the department notifies the applicant for renewal that the license has been renewed, modified or denied.

The department shall grant a pesticide dealer's license for a term not to exceed one year. The department shall grant such licenses subject to such terms, conditions and restrictions as it deems necessary or appropriate.

The department shall refuse to grant a pesticide dealer's license if it finds that the proposed distributor or his agent has acted in a manner inconsistent with the purposes for requirements of this chapter or FIFRA.

The department shall revoke any pesticide dealer's license, at any time, if it finds that its terms, conditions or restrictions are being violated or are inadequate to avoid unreasonable adverse effects on the environment.

As part of its determination to refuse to grant, or to revoke, a pesticide dealer's license the department may specify a period, not to exceed two years, within which the applicant may not reapply for a pesticide dealer's license. In the event that the department has specified a period for non-application, the department may later, at its discretion, shorten or waive such period.

Chapter 132B: Section 10. Certificates and licenses; issuance, suspension and revocation.
Section 10. Certifications and licenses to use pesticides may be issued to individuals by the department in accordance with the provisions, standards and procedures contained in and established pursuant to this chapter. Each certification and license issued pursuant to this section shall be valid only for the individual to whom it is issued, may not be transferred, and shall not continue in force and effect after the death of the individual to whom it is issued. All certifications and licenses shall be for a period not to exceed one year, unless sooner revoked or suspended.

The department may authorize individuals to use pesticides in classifications as a certified commercial applicator, a certified private applicator, and a licensed applicator provided, however, that the department shall require that all persons who are applicators of pesticides in public and private places used for

human occupation and habitation, except residential properties with three or less dwelling units, shall be so licensed or certified with such special designation.

The department may establish such categories and subcategories as it deems necessary to restrict or condition the scope of pesticide use permitted within each classification. The department may establish such standards and criteria, take such action and impose such requirements as it deems necessary to determine or redetermine levels of competence and experience to qualify for each classification and each category and subcategory thereof.

Each applicant for a certification or license shall annually file with the department an application providing thereon such information as the department may require.

Each applicant desiring to be certified or licensed shall annually pay such application fee, not to exceed twenty dollars, as the department may by regulation require.

In the event that any individual files with the department an application to renew a certification or license which is in effect on the date of the application for renewal and pays the appropriate fee therewith, such certification or license shall be deemed to be in effect until the earlier of the following two events shall occur: ninety days have elapsed after the certification or license was scheduled to expire; or the department notifies the applicant that the certification or license has been renewed, modified or denied.

The department may issue a certification or license to an applicant therefor if it determines that the applicant satisfies the criteria established for that certification or license and the category or subcategory for which the certification or license is sought. The department may thus issue a certification or license subject to such terms, conditions, restrictions and requirements as it deems necessary. The department may require that an applicant for a certification or license has obtained and maintains in effect a contract of liability insurance conforming to regulations established by the department.

The department shall prior to issuing a certificate or license evaluate each applicant to determine his competence with respect to the use and handling of pesticides, or to the use and handling of the pesticides or class of pesticides covered or to be covered by said individual's certification or license. Said evaluation shall include such examinations as the department may require. Examinations may be taken only upon payment of a fee, not to exceed ten dollars for each examination given, as the department may require by regulation approved by the board.

The department may revoke, suspend, cancel or deny any certification or license, or any class thereof, at any time, if it believes: that the terms or conditions thereof are being violated or are inadequate to avoid unreasonable adverse effects on the environment, or that the holder of or applicant for the certification or license has violated any provision of this chapter or FIFRA or any regulation, standard, order, license, certification or permit issued thereunder or that the holder or applicant for said certification or license is not competent with respect to the use and handling of pesticides, or to the use and handling of the pesticides or class of pesticides covered by said individual's certification or license. Any person whose certification or license is suspended or revoked hereunder shall also be subject to such other punishment, penalties, sanctions or liabilities as may be provided by law. As part of its determination to refuse to grant, to revoke, or to suspend a certification or license the department may specify a period, not to exceed two years, within which the applicant may not reapply for a certification or license. In the event that the department has refused to issue or has revoked or suspended such a certification or license, and has specified a period for non-application, the department may later, at its discretion, shorten or waive such period.

The department may, at its discretion, appropriately license or certify any person possessing a valid certification or license, or equivalent rating, issued by the pesticide control agency of any other state or the federal government whose standards for the issuance of such rating are not less stringent than those of the department, provided that the pesticide control agency of that state extends similar privileges to persons so licensed or certified by the commonwealth. Any person so licensed or certified shall be subject to the annual fee requirements of this section.

Chapter 132B: Section 11. Protection of health and environment; regulations.
Section 11. The department shall by regulation establish such restrictions and prohibitions upon the disposal and storage of pesticides, packages and containers of pesticides, and materials used in the testing or application of pesticides as it deems necessary to protect health and the environment.

Chapter 132B: Section 12. Departmental orders; hazards; adverse environmental effects; violations.
Section 12. Whenever it appears to the department that there is an imminent hazard, or a potential threat of unreasonable adverse effect on the environment, or a violation or a potential violation of any provision of this chapter or of any license, certification, permit, order, registration or regulation issued or adopted thereunder, the department may issue to such persons as it deems necessary an order requiring the production of samples and records, or an order imposing restraints on or requiring such action, as it deems necessary. Issuance of an order under this section shall not preclude and shall not be deemed an election to forego any action to recover for damages to interests of the commonwealth or, under section fourteen of this act, for civil penalties or for criminal fines and penalties.

Chapter 132B: Section 13. Adjudicatory hearings.
Section 13. Any person aggrieved by a determination by the department to register or not to register a pesticide, to suspend a pesticide registration, to issue, not issue or revoke an experimental use permit, to issue, deny, revoke or suspend any certification or license, or to issue an order, made under the provisions of this chapter, may request an adjudicatory hearing before the board under the provisions of chapter thirty A. Said determination shall contain a notice of a right to request a hearing and may specify a time limit, not to exceed twenty-one days, within which said persons may request a hearing before the board under the provisions of said chapter thirty A. If no such request is timely made, the determination shall be deemed assented to. If a timely request is received, the board shall within a reasonable time hold a hearing and comply with the provisions of said chapter thirty A. In hearings so held the board shall designate a hearing officer to preside over the hearing, to assemble an official record thereof, and to render a tentative decision as provided in paragraph (7) of section eleven of said chapter thirty A. The board shall make the final decision on the basis of the official record and tentative decision so rendered.

If, in making a determination which under the provisions of the preceding paragraph may be the subject of an adjudicatory hearing, the department finds that an imminent hazard or an unreasonable adverse effect on the environment could result pending the conclusion of the adjudicatory hearing requested thereon, the department may order that the determination shall become provisionally effective and enforceable immediately upon issuance, and shall remain so notwithstanding and until the conclusion of any adjudicatory hearing procedures timely requested. In the event that the department has thus made a determination provisionally effective, it may later, at its discretion, shorten the duration of or waive such order.

As part of a final decision in an adjudicatory proceeding held under the provisions of this section, the board may specify a reasonable time period within which the matter may be barred from further proceedings before the department or the board. In the event that the board has so specified a time period, the board may later, at its discretion, shorten or waive such period.

A person aggrieved by a final adjudicatory determination of the board may obtain judicial review thereof pursuant to the provisions of chapter thirty A.

Chapter 132B: Section 14. Violations; penalties; injunctions.
Section 14. Any person who knowingly violates any provision of section six 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, for each such violation, or shall be subject to a civil penalty not to exceed twenty-five thousand dollars for each such violation, which may be assessed in an action brought on behalf of the commonwealth in any court of competent jurisdiction. Each day of violation shall constitute a separate offense.

Any person who violates any provision of section six A or six B or who violates any regulation adopted under the provisions of this chapter, (a) shall be punished by a fine of not more than one thousand dollars, or imprisonment for not more than six months, or both such fine and imprisonment, for the second and each subsequent offense knowingly committed, or (b), shall be subject to a civil penalty not to exceed ten thousand dollars for any offense, which may be assessed in an action brought on behalf of the commonwealth in any court of competent
jurisdiction. Each day of violation shall constitute a separate offense.

Any person who violates any order issued under the provisions of this chapter, (a) shall be punished by a fine of not more than twenty-five thousand dollars or imprisonment for not more than two years, or both such fine and imprisonment, for each violation knowingly committed, or (b) shall be subject to a civil penalty not to exceed twenty-five thousand dollars for each violation, which may be assessed in an action brought on behalf of the commonwealth in any court of competent jurisdiction. Each day of violation shall constitute a separate offense.

The superior court shall have jurisdiction to enjoin violations of, or grant such relief as it deems necessary or appropriate to secure compliance with, any provision of this chapter or the terms of an order, license, certification, registration, permit or regulation issued or adopted thereunder.

Chapter 132B: Section 15. Departmental personnel, agents and inspectors; powers; evidence; confidential information.
Section 15. For the purpose of administering the provisions of this chapter, personnel or agents of the department and its inspectors shall have access and entry at reasonable times to any premises pursuant to a search warrant duly issued by a court of competent jurisdiction, provided that no sample of a pesticide obtained in the course of such inspection and no result of any analysis or test of any such sample shall be received in evidence in any criminal proceeding under this chapter unless the sample shall have been taken and the analysis or test conducted by a chemist in the agricultural extension service of the University of Massachusetts authorized by the department. Personnel or agents of the department may take such samples as are reasonably necessary to accomplish the purpose of their investigation and inspection. Any information relating to secret processes, methods of manufacture, production or use obtained in the course of such inspection shall be kept confidential upon request, when not required to be disclosed incident to the enforcement of this chapter. This section shall not be construed to abrogate any of the powers and duties, as defined by general or special law or common law, of any agency or political subdivision of the commonwealth.

APPENDIX 3:
CHAPTER 85, SECTION 10

CHAPTER 85 OF THE ACTS OF 2000

SECTION 10.

Said chapter 132B is hereby further amended by striking out section 6B, as appearing in the 1998 Official Edition, and inserting in place thereof the following section:

Section 6B.

a. No gas, electric, telephone or other utility company licensed to do business in the commonwealth, nor any agency of the commonwealth or any of its political subdivisions, nor any authority, as defined in section 39 of chapter 3, nor any private entity or their agent, shall spray, release, deposit or apply any pesticide to any land which it owns, or as to which it holds an easement or similar right and over which it maintains power, high tension or other lines, or to any roadway, railway, or other transportation layout, without first notifying the department and, by registered mail, the mayor, city manager or chair of the board of selectmen and the conservation commission in the city or town where such application is to occur 21 days before such spraying, release, deposit or application, and without first publishing conspicuous notice in at least one newspaper of general circulation in each city or town where such land lies at least 48 hours prior to such spraying, release, deposit or application. Such notice shall appear in the local section of the newspaper and measure at least four by five inches in size. The published notice shall include: the method and locations of pesticide spraying, release, deposit or application; the approximate dates on which spraying, release, deposit or application shall commence and conclude, but such spraying, release, deposit or application shall not commence more than ten days before nor conclude more than ten days after such approximate dates; a list of potential pesticides to be used; a description of the purpose of the spraying, release, deposit or application; and the name, title, business address and phone number of a designated contact person from whom any citizen may request further information.
b. The notice to the city or town where the affected land lies shall contain the following information: the method and locations of pesticide spraying, release, deposit or application; the approximate dates on which such spraying, release, deposit or application shall commence and conclude, but such spraying, release, deposit or application shall not commence more than ten days before nor conclude more than ten days after such approximate dates; the type of pesticide to be used and a copy of all information supplied by the manufacturers thereof relative to the pesticide; a department-approved fact sheet and United States Environmental Protection Agency registration number for each pesticide; the name, title, business address and phone number of the certified commercial applicator, certified private applicator or licensed applicator, or the contractor, employers or employees responsible for carrying out the pesticide spraying, release, deposit or application.
c. Notwithstanding any other provision of law, all agencies of the commonwealth and all authorities, as defined in section 39 of chapter 3, shall develop policies to eliminate or, if necessary, reduce the use of pesticides for any vegetation management purpose along any roadway.
d. Any employee of any state agency, or authority, as defined in section 39 of chapter 3, when spraying, releasing, depositing or applying pesticides, supervising the use of pesticides, or when present during the spraying, release, deposit or application of pesticides, shall be provided with personal protection equipment and clothing in conformance with all federal and state laws and regulations pertaining to pesticide applications. This shall include, but not necessarily be limited to, protections according to Material Safety Data Sheets (MSDS), the product label, and any other supportive technical data provided by the manufacturer.

APPENDIX 4:
TREATMENT NOTIFICATION PROCESS PER 333 CMR 11.06-11.07

Appendix 4: TREATMENT NOTIFICATION PROCESS PER 333 CMR 11.06-11.07

A VMP serves as a guiding document for Waltham's IVM program. In the process of planning herbicide applications for any given year within the five-year time frame of the VMP, Waltham will also fulfill the requirements in 333 CMR 11.06, *Yearly Operational Plan (YOP)* and 11.07, *Public Notification* (See Appendix 1). No herbicide applications may occur without these additional actions, completed in the appropriate mandated time frames.

Following the requirements in 333 CMR 11.06, a YOP describes and locates the herbicide application program for the current year, including details of potential areas of retreatment ("touch-up") from the past year. The YOP will be submitted to the appropriate agencies and officials, along with a copy of the Environmental Monitor Notice (EMN), sent via certified return receipt or within the city, hand delivered with a sign off sheet, allowing for the 45-day review period before receiving approval from the MDAR, Pesticide Bureau. The 45 day review countdown starts upon receipt of the YOP by the appropriate agencies and officials. The YOP may be sent out in hard copy or posted online. If posted online, a written notice must be sent out via certified return receipt (or hand delivered…) along with the EMN, with notice that a hard copy will be made available upon request.

Following the requirements in 333 CMR 11.07, additional notice must be sent to the appropriate agencies and officials, at least 21 days before herbicide applications may begin, containing additional details about the program including the approximate treatment dates. This notice may run concurrently with the 45-day review period and be sent in the same envelope. It must also be sent via certified return receipt or be hand delivered within the city. Additionally, at least 48 hours before herbicide applications commence, a 4x5 notice must be published in the local section of a paper of local/regional circulation.

The agencies and officials included in the notification and/or review process include:

Commonwealth of Massachusetts Agencies:

1. MDAR, Pesticide Division (YOP, 21 Day Notice, EMN, Ad-copy).

If applicable the YOP is sent to:

1. Natural Heritage Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife (NHESP)
2. Massachusetts Water Resource Authority
3. Department of Conservation and Recreation (DCR).

Officials that receive the YOP, 21 Day Notice and EMN:

1. Chief Elected Official
2. Conservation Commission
3. Board of Health
4. Municipal Public Water Supplier.

Other:

1. A YOP is a public document and must be made accessible either online or in hard copy to anyone who requests access.
2. DEP defined Public Water Suppliers are sent a one page letter under 333 CMR 11.06 detailing how they can request information on the program.

APPENDIX 5:
HERBICIDE SPILL CHECK LIST

APPENDIX 5: HERBICIDE SPILL CHECK LIST

REPORTABLE SPILLS (Spills of reportable quantity of material): FOLLOW STEPS 1-11
NON-REPORTABLE SPILLS: FOLLOW STEPS 1-4, 7-11 as appropriate & contact the Waltham DPW representative.

Order	ACTION		Done (√)
1	Use any and all Personal Protective Equipment (PPE) as directed by product label or Safety Data Sheet (SDS)		
2	Cordon-off spill area to unauthorized people and traffic to reduce the spread and exposure of the spill		
3	Identify source of spill and apply corrective action, if possible stop or limit any additional amounts of spilled product.		
4	Contain spill and confine the spread by damming or diking with soil, clay or other absorbent materials.		
5	Report spills of "reportable quantity" to the Mass. DEP and MDAR:		
	MDAR, Pesticide Bureau	(617) 626-1700	
	Massachusetts Department of Environmental Protection, Emergency Response Section	Main Office: (888) 304-1133 (after hours number)	
		Northeast Region: (978) 694-3200	
6	If the spill cannot be contained or cleaned-up properly, or if there is a threat of contamination to any bodies of water, immediately contact any of the following applicable emergency response personnel:		
	local fire, police, rescue	911	
	Waltham DCPW Representative: **Stewart LaCrosse**	(781) 314-3800	
	Albaugh Inc.	(800) 247-8013	
	BASF Corporation	(800) 832-4357	
	Bayer Environmental Science	(800) 334-7577	
	Corteva Agriscience	(800) 992-5994	
	Monsanto	(314) 694-4000	
	Nufarm	(877) 325-1840	
	Zhejiang Tide Crop Science Co. Ltd.	(800) 424-9300	
	Chemtrec	(800) 424-9300	
	If there is a doubt as to who should be notified, contact State Police, Andover Barracks	(978) 475-3800	
	Remain at the scene to provide information and assistance to responding emergency clean-up crews		
7	Refer to the various sources of information relative to handling and cleanup of spilled product		
8	If possible, complete the process of “soaking up” with appropriate absorbent materials		
9	Sweep or shovel contaminated products and soil into leak proof containers for proper disposal at approved location		