TOWN OF WILMINGTON
DEPARTMENT OF PUBLIC WORKS

VEGETATION MANAGEMENT PLAN

January, 2020 - December, 2024

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EXECUTIVE SUMMARY and PREVIOUS 5-YEAR PLAN RESULTS

The Town of Wilmington has developed a five year Vegetation Management Plan (VMP) to ensure compliance with Rights of Way (ROW) management regulations 333CMR11 for the control of hazard, detrimental, nuisance, and invasive vegetation in order to promote safe travel. The town recently finished executing its first 5-year VMP (January 2014-December 2018) and wishes to re-file for a new 5-year term for the period of January 2020 through December 2024. The methods proposed by the VMP include mechanical, chemical, cultural (good housekeeping techniques), and developmental control (through ongoing Community Development Technical Review Committee reviews of proposed site projects throughout Town). The number one priority of the plan is public safety.

The VMP proposes an integrated approach whereby priority areas are identified for control, control methods are implemented in an environmentally responsible manner, and ongoing monitoring is performed in order to alter the treatment plans as needed.

A public hearing for the VMP, which was advertised in Wilmington's *Wilmington Advocate* and *Town Crier* newspapers and also advertised in the April 10, 2019 edition of the *Environmental Monitor*, was held on May 23, 2019 at Wilmington Town Hall. Public comments were accepted on the VMP up through May 24, 2019.

Furthermore, a Request for Determination of Applicability (RDA) was filed with the Wilmington Conservation Commission to approve the wetlands boundary pursuant to the requirements of 310CMR10.05. A public meeting for the RDA was held on March 6, 2019 and the Commission approved the GIS delineation with the understanding that it would be used only for the purposes of the VMP and that the Conservation Agent would have the option to walk areas of proposed treatment during pre-mark efforts to fine-tune delineation lines.

Vegetation management efforts for the previously approved 5-year VMP (2014-2018) included various mechanical and cultural practices including roadside flail mowing, street sweeping (removing road crack weeds with the sweeper broom), trimming and pruning by the Town's Tree Division, and careful disposal practices at the Town's yardwaste and compost center. In addition, foliar chemical control of roadside vegetation was applied sparingly on some arterial and connector roadways. The below table summarizes 2014-2018 spray efforts.

Multi-Year Comparison of Total Volumes 2014 through 2018

VMP Year #	Year	Herbicide Used	Total Concentrate Volume (gallons)	Total Mix Volume (gallons)	Total Roadside Spraying Distance (Linear Feet)
1	2014	5% Glyphosate (DOW Rodeo)	13.75	275	64,212
2*	2015	5% Glyphosate (DOW Rodeo)	5.0	100	27,828
3	2016	5% Glyphosate (DOW Rodeo)	9.5	180	41,936
4*	2017	5% Glyphosate (DOW Rodeo)	3.75	75	14,760
5	2018	5% Glyphosate (DOW Rodeo)	5.0	100	17,554

** Year 2 and Year 4 indicate shortened spray routes due to 24-month no spray restrictions in Zone 2 areas*

Woburn St & Concord St (Prior to implementing VMP)

Woburn St & Concord St (After implementing VMP; Mechanical & Chemical Controls)

Woburn St & Cherokee Ln – (Prior to implementing VMP)

Woburn St & Cherokee Ln – (After implementing VMP; Chemical Control)

Marion Street – (Prior to implementing VMP)

Marion Street – (After implementing VMP)

INTRODUCTION

This Vegetation Management Plan (VMP) has been developed by the Wilmington Department of Public Works (DPW) to ensure compliance with Rights-of-Way (ROW) Management Regulations (333 CMR 11.00) for control of hazard, detrimental, nuisance and invasive vegetation within the Town of Wilmington controlled ROW, which includes approximately 110 miles of roadway and sidewalks. In order to provide consistency between town-controlled roadways and state-controlled roadways in Wilmington, the format of Wilmington's VMP closely follows the format of past statewide Vegetation Management Plans for the Massachusetts Department of Transportation (MassDOT).

IDENTIFICATION AND QUALIFICATIONS OF APPLICANT

Jamie M. Magaldi, PE, MCA
Operations Manager
Wilmington Department of Public Works
121 Glen Road
Wilmington, MA 01887

Mr. Magaldi currently serves as the Operations Manager for the Town of Wilmington Department of Public Works (DPW) and is charged with managing the Department's six operational divisions (Highway, Parks & Grounds, Tree, Cemetery, Garage, and Water & Sewer) consisting of approximately forty employees, four of whom are licensed pesticide applicators. Mr. Magaldi also serves as project manager for many of the DPW's internal projects and was appointed Tree Warden for the Town of Wilmington in 2013. He holds a Category 40 (Rights of Way) and 36 (Shade Tree) Certified Applicator's License #42472.

Mr. Magaldi is a professional civil engineer registered in Massachusetts and is also a Massachusetts Certified Arborist. He is a member of the Massachusetts Tree Wardens and Foresters Association, American Public Works Association, Massachusetts Highway Association, Massachusetts Arborists Association and the Society of Municipal Arborists. Mr. Magaldi also holds a Bachelor's of Science degree in Civil Engineering from Merrimack College of North Andover, MA.

STATEMENT OF OBJECTIVES

The Town of Wilmington Vegetation Management Plan (VMP) was developed in accordance with the revised 333 CMR 11.00 Right of Way Management Regulations effective September of 2005 and revised in March of 2007 implemented by the Massachusetts Department of Agricultural Resources (MDAR). The plan is intended to provide an approved set of criteria and standards for the Town of Wilmington to control ROW vegetation which conforms to the regulatory requirements of 333 CMR 11.00 and includes the use of pre-approved sensitive area herbicides within the ROW.

The management and control of roadside vegetation is an extremely important responsibility of the DPW's Highway Division. Left uncontrolled, roadside vegetation can impede normal maintenance operations, obstruct motorists' line of vision, threaten pedestrian safety and jeopardize capital investments such as pavements, sidewalks, guardrails, and utilities. Although maintaining a neat and aesthetically pleasing appearance is also of concern, the major objective of the Vegetation

Management Plan is to provide a safe and unobstructed public ROW for vehicular and pedestrian travel.

DESCRIPTION OF TARGET VEGETATION

The Wilmington Department of Public Works Highway Division will prioritize a road plan for control of target vegetation based on control necessity, roadway volumes, and speeds. As approved VMPs for other municipalities state, early identification and timely removal of unwanted species is the easiest, most effective, most environmentally responsible, and least costly method of weed control.

Target vegetation along roadways falls into one or more of the following categories: hazard vegetation, detrimental vegetation, nuisance vegetation, and invasive vegetation. The vegetation may then fall into the physical sub-categories of either annual or perennial, woody shrubs and vines, or tree growth. It's important to note that some categories of target vegetation may by themselves rule out a specific control method. For example, certain species may be spread quite easily by mechanical mowing, thus should be controlled by another means.

TARGET VEGETATION CATEGORIES

1. *Hazard Vegetation*. This category represents the highest priority target vegetation as it related directly to public safety. Hazard Vegetation includes vegetation obscuring sightlines, growing over guardrails, creating obstacles to signs or vehicular movement, interfering with critical utilities such as traffic signals, posing windfall hazard over vehicular or pedestrian ways, or creating winter shade leading to icing conditions. In the winter, shadows cast on roadways by evergreen trees can delay melting (especially in "low salt" areas) resulting in possibility of hazardous road conditions and an increase in the amount of de-icing chemicals (road salt) applied.

2. *Detrimental Vegetation.* Vegetation including weeds, grasses, and woody plants that are destructive to or compromise the function of highway structures, including grasses in pavement and bridge joints, medians barriers and traffic islands, as well as vegetation growing in and along drainage structures thus compromising and clogging drainage ways.

3. *Nuisance Vegetation.* Vegetation along roadways that could potentially affect the general public and/or DPW employees maintaining the ROW, such as Poison Ivy (*Toxicodendron radicans*). Poison Ivy and other nuisance vegetation growing within 30 feet of the edge of roadway pavement or sidewalk or other infrastructure requiring maintenance within a Town right-of-way is considered a hazard and will be prioritized accordingly.

4. *Invasive Vegetation.* Non-native species that have spread into native or minimally managed plant systems. Because they tend to be non-native species, there are few local diseases or pests to help control them. Invasive vegetation tends to spread quickly and thrive in disturbed conditions, outcompeting and displacing native species. Specific target invasive plants include but are not limited to Tree of Heaven (*Ailanthus altissima*), Japanese Knotweed (*Polygonum cuspidatum*), Multiflora Rose (*Rosa multiflora*), Oriental Bittersweet (*Celastrus orbiculatus Thunb*.), and Russian Olive (*Eleagnus angustifolia*).

Figure 1 – Hazard Vegetation at intersection of Concord Street and Woburn Street
Hazard vegetation obstructs site distance at critical intersections.

Figure 2 – Detrimental Vegetation at Cherokee Lane Subdivision
Detrimental grass damages Town infrastructure and is unsightly.

Figure 3 – Nuisance and Invasive Vegetation on Marion Street
Nuisance vegetation creates a public safety hazard to workers and pedestrians.

Figure 4 –Hazard Vegetation blocking a traffic signal at Woburn Street and Salem Street
Hazard vegetation obstructs critical utilities.

INTEGRATED ROADSIDE VEGETATION MANAGEMENT

To maintain control over roadside vegetation, the Department of Public Works plans to implement an integrated roadside vegetation management program (VMP). Similar to the working Integrated Pest Management (IPM) programs currently being utilized within the Wilmington School Department, the key components of this strategy will be to:

1. **Identify** priorities for vegetation control.

2. **Implement** the control methods in an environmentally responsible manner.

3. **Monitor** the plan in order to judge effectiveness and alter as needed.

Controls methods shall include the following:

1. **Mechanical** – The physical removal by mowing, street sweeping, machine pulling / trimming, or hand pulling / selective trimming. This control method is time consuming and expensive from a labor and materials perspective. Mechanical control tends to be most effective in relatively small and isolated areas. When relied on as the primary target vegetation control method, it is proven inefficient as it cannot keep up with the rate of growth during ideal weather conditions. Mechanical control is currently the Department's primary control method, as a skid-steer mounted flail mower attachment is used for long runs of vegetation control, with labor forces supplementing the flail mower using gas-powered hand tools, trimmers and clean up tools. This operation typically occupies 4 to 5 workers who could otherwise be working more efficiently on another job, tends to irritate the traveling public as smoke and dust can be generated on dry days, and puts a work crew at unnecessary safety risk at sight-distance hindered public ways and intersection. The Town also owns two street sweepers, one mechanical sweeper and one vacuum sweeper, and has continually met the goal of sweeping all roadways at least once per year. The rotating brooms of the sweepers have helped control younger vegetation from establishing within roadway cracks and along sides of roads.

Figure 5 –Mechanical flail mower currently in use by Wilmington DPW crews

2. **Chemical** – The application of low volume foliar herbicide treatments and cut-stump treatment. Herbicides shall be limited to select ROWs where the placement of personnel and equipment in or around the roadway would jeopardize the safety of the motoring public and maintenance personnel, where access to target vegetation restricts using mechanical control, or where

   Foliar Treatment is the application of water-diluted and drift controlled herbicides to fully developed leaves, stems, or blades of a plant. This control method is generally the most effective and economical method, particularly in areas where mechanical methods preclude the safe placement of men and equipment. It is also the best technique to control nuisance vegetation that presents a public safety hazard to pedestrians, and inspection and maintenance crews. Wilmington DPW will utilize only low volume, low pressure foliar treatment herbicide applications that have been pre-approved for use by the MDAR in "Sensitive Areas."

   Stem Treatment (cut-stump) is any technique which applies herbicide to the stump or stem of the target vegetation. This method is often not practical in moderate or heavy stem densities but offers the opportunity to chemically treat undesirable vegetation in sensitive or difficult to access sites where other methods are not possible. Wilmington DPW will consider the use of cut stump treatment although does not anticipate this will be the primary control method due to the inefficiencies of using this method in large areas.

   As herbicides can be the most effective and environmentally sound means for preventing the re-growth of target vegetation, chemical controls are an essential part of Wilmington's VMP program.

3. **Cultural** – The practice of reducing and controlling vegetation problems by utilizing good housekeeping techniques and evaluating new BMPs.

4. **Roadside Development** – Utilization of design methods which provide physical barriers or sustainable low maintenance landscapes. These methods will be considered as part of the Town's review of proposed projects under the current Community Development Technical Review Committee. The intent of this control method is to eliminate or reduce the potential for the growth of target vegetation, thus eliminating or reducing the need for control.

Each one of these control methods will not work effectively by themselves for long term vegetation management. As a combined integrated approach, they complement one another in terms of effectiveness and environmental responsibility. The methods listed above will be chosen by Wilmington DPW personnel familiar with the right of way, based on a variety of factors including, but not limited to, public/employee safety, location, environment, and terrain. The control method will be chosen on a case by case basis to attempt to achieve a long term, low maintenance, sustainable vegetation management program. These methods will be identified further in Wilmington's Yearly Operations Plans (YOPs).

Similar to the Wilmington School Department's working IPM, the goal of the VMP is to minimize the use of chemical controls, where applicable, through minimizing areas of application, quantity of chemicals, and frequency of applications. Chemical control techniques within the right of way shall be limited to dangerous intersections, roadways with high traffic volume, and primary roads in Wilmington where safety of motorists and town maintenance employees precludes the use of mechanical methods, and also where access to target vegetation by mechanical means is restricted. Chemical control will also be used to control poison ivy along roadsides and sidewalks within 30 feet of pavement, or within 30 feet of any Town structure or appurtenance.

Over the 5-year period of this plan, the Department of Public Works will monitor and evaluate the success of the program and integrate appropriate new and alternative methods into the VMP and Yearly Operational Plans (YOP).

TABLE 1 - SUMMARY OF CONTROL METHODS

TARGET	CONDITIONS	CONTROL METHODS
Grasses	Where terrain and traffic conditions allow	Mechanical (mowing)
Grasses And Low Growth	Under guardrail; or Pavement Cracks; or Joints Where: -Traffic volumes and speeds pose a hazard to motorists and maintenance employees or contractors	Chemical (low volume foliar treatment)
Low Growth	-Terrain allows; and -species are not persistent or invasive	Mechanical (mowing)
Low Growth	-Terrain prevents mowing; and -Species are not persistent	Mechanical (hand cutting)

	or invasive	
Low Growth	Terrain prevents mowing, species are persistent and invasive	Chemical (low volume foliar treatment)
Poison Ivy	Poison Ivy that is within thirty feet of pavement, or any town structure or appurtenance	Chemical (low volume foliar treatment)
Tall Growth	-Individual trees or branches	Mechanical (selective trimming)
Tall Growth	-Plants >12 feet; or -Terrain too steep; and -Species are not persistent or invasive	Mechanical (hand cutting)
Tall Growth	Plants >12 feet; and -Species are persistent and invasive	Chemical (cut-stump treatment)

JUSTIFICATION OF HERBICIDE USE

Many of the species growing on roadsides, under guardrails, at dangerous intersections and along traffic islands are invasive and persistent, and cannot be adequately controlled without at least partial chemical treatment. The DPW has yet to encounter a community, through its network of peers, which has had success with vegetation management by eliminating the use of herbicides altogether. Past attempts at full mechanical control in Wilmington have been unsuccessful due to the growth rate and volume of target vegetation. The responsible use of herbicides is a vital component of a successful VMP which will be decided after careful identification of target vegetation and consideration of the safest, most efficient, and most economical control method.

HERBICIDE APPLICATION METHODS

Wilmington DPW will generally utilize the two methods of herbicide application: foliar treatment and cut stump treatment.

Foliar Treatment is the application of water-diluted and drift controlled herbicides to fully developed leaves, stems, or blades of a plant. Proposed treatment used shall be low pressure, below 60 psi at the nozzle, and spray equipment will be calibrated according to the manufacturer's label. Low pressure nozzles will be used to produce the largest possible droplet size and a drift control agent shall be added at the rate recommended on the label to keep spray drift to an absolute minimum. Areas include roadside, in pavement cracks, traffic islands perimeter, around drainage structures, sign posts and under and around guardrails. Applications will be made in accordance with manufacturer's recommendations.

For vegetation over 12 feet in height which cannot be effectively controlled by foliar treatment, mechanical means will be used along with possible cut stump treatment. It is not expected that this

type of herbicide treatment will be used frequently within the limits of Wilmington right-of-ways as much of the target vegetation is under 12 feet in height. However, when cut stump treatment is utilized, a portable pressurized container or hand-paint method will be used to apply the herbicide to the freshly cut stump. Applications will be made in accordance with manufacturer's recommendations.

IDENTIFYING AND PROTECTING SENSITIVE AREAS

According to 333 CMR 11.04, sensitive areas are defined as "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". These include, but are not necessarily limited to: public groundwater supplies, public surface water supplies, private drinking water supplies, surface waters, wetlands, rivers, inhabited areas and agricultural areas.

Some sensitive areas can be identified in the field during application. For those that are not easily identified (public groundwater supplies, private water supplies, public surface water supplies), the Wilmington DPW will be using the following resources:

1. Massachusetts Department of Environmental Protection (DEP) Water Supply Maps (1:25,000); delineating the perimeter of public watersheds and the location of public wells.

2. Massachusetts DEP Wetland Conservancy Maps (scale 1:1,000).

3. Municipal maps and records.

4. Regional Planning Agency maps and records.

5. U.S. Fish and Wildlife Service National Wetlands Inventory Maps, available from the University of Massachusetts, Cartographic Information Research Services in Amherst. Conservancy Program.

6. Identification of public and private well locations will be requested in writing from the Board of Health.

7. Natural Heritage and Endangered Species Program.

For areas that are easily identifiable in the field (surface waters, wetlands, rivers, agricultural areas), Wilmington DPW will be using the following identification methods:

1. Consultation with Wilmington's GIS data layers and Mass GIS spatial data maps

2. Consultation with wetlands maps on file with Wilmington's Planning and Conservation Office.

Herbicide application crews will be provided with a map of the area they are treating so that a "best effort" assessment may be made to determine the location of sensitive areas, as well as to re-

survey areas that have been previously treated to determine if re-treatment is necessary. The Town's GIS department will work to refine the maps based on field observations and on-site consultations with the Town's Conservation Agent. A copy of the Yearly Operational Plan will also be provided to the crew.

The Wilmington DPW will assign a qualified point person in advance of the main herbicide application operation to identify spray areas and no-spray areas, and also to provide supervision on adherence to regulations pertaining to these areas. Pavement markings will be made to be identified by the treatment crew. This redundancy will help insure that only the appropriate areas are treated.

SENSITIVE AREA RESTRICTIONS

TABLE 2 – SENSITIVE AREA RESTRICTION GUIDE

SENSITIVE AREA	NO-SPRAY AREA	LIMITED SPRAY AREA	WHERE IDENTIFIED
Wetlands and Water over Wetlands	Within 10 feet (Unless provisions of 333 CMR 11.04(4)(c) are followed)	10 - 100 feet: 12 months must elapse between applications; selective, low pressure foliar techniques or by cut-stump applications	YOP Maps and identify on site
Certified Vernal Pool	Within 10 feet	10 feet to the outer boundary of any Certified Vernal Pool Habitat; 12 months must elapse between application; selective, low pressure foliar techniques or by cut-stump applications	YOP Maps and identify on site
Public Ground Water Supply	Within 400 feet (Zone I)	Zone II or IWPA (Primary Recharge Area): 24 months must elapse between applications; selective, low pressure foliar techniques or by cut-stump applications	Maps
Surface Waters	Within 10 feet from mean annual high water line	10 feet from the mean annual high water line and the outer boundary of the Riverfront Area; 12 months must elapse between applications; Selective, low pressure foliar techniques or by cut-stump applications	YOP Maps and Identify on site
Agricultural & Inhabited Areas	N/A	0 - 100 feet: 12 months must elapse between application; Selective low pressure foliar techniques or by cut-stump applications	Identify on site
State Listed Species Habitat: No application within habitat area except in accordance with a Yearly Operational Plan approved in writing by the Division of Fisheries and Wildlife			YOP Maps

TABLE 2 – SENSITIVE AREA RESTRICTION GUIDE (CONTINUED)

SENSITIVE AREA	NO-SPRAY AREA	LIMITED SPRAY AREA	WHERE IDENTIFIED
Private Water Supply	Within 50 feet	50 – 100 feet 24 months must elapse between applications; Selective low pressure, using foliar techniques or by cut-stump applications	In YOP well list and identify on site
Public Surface Water Supply	Within 100 feet of any Class A public surface water source ---------- Within 10 feet of any tributary or associated surface water body located outside of the Zone A ---------- Within 100 feet of any tributary or associated surface water body located within the Zone A of a Class A public surface water source ---------- Within a lateral distance of 100 feet for 400 feet upstream of any Class B Drinking Water Intake	100 feet to the outer boundary of the Zone A; 24 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications ---------- 10 feet to the outer boundary of the Zone A; 24 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications ---------- Within a lateral distance of between 100 – 200 feet for 400 feet upstream of intake; 24 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications	YOP Maps

OPERATIONAL GUIDELINES FOR HERBICIDE APPLICATORS

Applicators including Wilmington maintenance employees (and potentially contractors) who apply herbicide to ROWs must hold a valid Massachusetts Pesticide Applicator's License with on-site supervision by an individual that holds a Massachusetts Pesticide Commercial Certification in Rights-of-Way (Category 40). In addition, applications will be selective in order to meet certain weather requirements.

In order to increase effectiveness and to reduce the risk of the herbicide running off or overdrifting, (herbicide will not be applied during rainfall or excessive wind). If foliar applications are interrupted by unexpected rainfall, the treatment will not resume until the rain ends and active leaf runoff has ceased.

The spraying equipment will be calibrated for low-pressure foliar application to maintain a pressure not to exceed 60 psi at the nozzle.

MITIGATION MEASURES

Ongoing monitoring of treatment effectiveness will be a part of the Town's VMP. An inventory of all treated roadsides will be taken, with information on the prevailing type of vegetation, terrain, highway condition, control method, type of chemical used, quantity used, and results achieved will be included. Specific treatment areas will be compared to themselves during subsequent years of the plan for accurate comparison. The goal of the overall plan will be to establish an easily maintainable, stable plant population that will not interfere with vehicles or pedestrians, while exercising the most sustainable and environmentally friendly control method to efficiently and cost effectively control the target vegetation.

Monitoring records will track the details of each application session including specific route treated, the control method, who the applicator was, the weather, the amount of material used, and how long the treatment took. Chemically treated areas shall be monitored after the necessary translocation period of the herbicide to determine the effectiveness of the applications and to monitor any off target injury and migration of the spray solution.

Once approved, a copy of the VMP will be provided to the Town Administrator, Board of Health and Conservation Commission. Upon approval of the VMP and YOP and 21-days in advance of the application of herbicide to a ROW, the Town will notify the Department, Board of Health, water supplier, Town Administrator and Conservation Commission of the application. Notification will include: method and location of application, herbicide fact sheet, EPA registration number for herbicide and applicator contact information. Additionally, at least 48-hours prior to a ROW herbicide application, the applicant will publish in a local newspaper the following information: methods and location of pesticide application, approximate dates of herbicide application, name of herbicide(s) to be used, description/purpose of application and contact information for designated individual representing the Town whom citizens can contact.

ALTERNATIVE LAND USE OPTIONS

The Town of Wilmington DPW will review and evaluate new and innovative alternative land uses within its ROW, where applicable and feasible. 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 since the land is currently being used or maintained and does not meet the types of target vegetation defined in the VMP.

REMEDIAL PLAN TO ADDRESS SPILLS AND RELATED ACCIDENTS

All mixing and loading of herbicides will occur at the storage facility in amounts of herbicide necessary to carry out that day's work. This will minimize waste and the need of excess handling. The spray vehicle will be equipped with a clipboard log of the herbicides on board, a bag of adsorbent, absorbent booms, a broom and a shovel in case of a minor spill.

Major Spills
Major spills involve reportable quantities of hazardous materials as defined by the Department of Environmental Protection (DEP) 310 CMR 40.0000. Related accidents include fire, poisoning and automobile accidents. The following protocol will be followed for major spills and accidents:

1. Administer proper first aid and call an ambulance and/or Massachusetts Poison Information Center in cases involving injury due to poisoning.

2. Call the police and/or fire department in cases involving automobile accidents or fire.

3. Avoid breathing fumes of burning herbicides.

4. Put out all sources of fire. Do not light flares, cigarettes, etc. which can ignite certain herbicides.

5. If possible, control the spill by stopping the leak or source of spill.

6. Confine the spread of liquids with a dike composed of soil or other absorptive materials.

7. Call ChemTrec, Massachusetts Pesticide Bureau or chemical manufacturer for assistance (see phone listing below) if unable to handle the spill or the material is unfamiliar.

8. Notify the DEP if water bodies are contaminated, and for releases or threatened releases of reportable quantities of hazardous material.

9. Notify the District Hazardous Material Coordinator.

10. Clean up spill:

a. If the spill occurs in a public location, isolate the spill areas and deny unauthorized entry until cleanup is complete.

b. Absorb spilled liquids with sand, absorptive clay, spill control gel, vermiculite, pet litter, sawdust or other absorptive material. Wear proper protective clothing and equipment.

c. Sweep or shovel contaminated absorbent into a leak proof, sealable container for proper disposal.

d. Dry herbicides, such as dust, granular and pellets can be directly swept or shoveled into leak proof sealable containers without absorptive materials.

e. Speedy-Dry or equivalent absorbent material.

f. Dispose of contaminated material at an approved location.

Minor Spills
Minor spills involve less than reportable quantities of hazardous materials, but are treated similar in terms of personal exposure.

In the event of a spill, information on safety precautions and clean up procedures may be gathered from the following sources:

- Herbicide label
- Herbicide MSDS sheet
- Herbicide Manufacturers / Agencies

Dow (517) 636-4400
Dupont (800) 441-3637
American Cyanamid Co. (201) 835-3100
Massachusetts MDAR - Pesticide Bureau (617) 626-1700
Massachusetts DEP Incident Response Unit (888) 304-1133
ChemTrec (800) 424-9300
Massachusetts Poison Control Center (800) 682-9211
MA Department of Public Health, Bureau of Environmental Health's Environmental Toxicology Program (617) 339-8351

Wilmington Department of Public Works (978) 658-4481
Wilmington Public Safety (Police / Fire) (978) 658-5071

HERBICIDE ALTERNATIVES

The Town of Wilmington will continue to monitor its own VMP to determine effectiveness and progress, and will also work with other municipalities and state agencies to learn about advancements in vegetation management which may reduce or eliminate herbicide use. The agricultural industry puts considerable effort in researching herbicide alternatives, but there is currently no accepted and proven practice available which completely eliminates the use of herbicides from a successful VMP. Wilmington will continue to consider updates to the VMP as strides are made in the industry.

EVALUATION AND RECOMMENDATIONS

The Town of Wilmington VMP evaluation goals are similar to the goals of MassDOTs VMP on Wilmington roadways providing consistency between vegetation management work within Town.

On an annual basis, the Town of Wilmington will evaluate the vegetation management program for effectiveness, environmental responsibility, and cost effectiveness. This evaluation will include reporting of control measures Town wide, as well as names and quantities of herbicides used, total area treated, and comparable effectiveness of treatment. The condition of the roadside will be evaluated. Finally, the evaluation will make recommendations including any possibilities for reducing mechanical and/or chemical controls and will be included in the Yearly Operational Plan of the following year.