THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

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MDAR
MASSACHUSETTS DEPARTMENT OF AGRICULTURAL RESOURCES

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Secretary

JOHN LEBEAUX
Commissioner

Dean A. Charter, MCA, Tree Warden
Town of Acton
472 Main Street
Acton, MA, 01720

June 29, 2015

Dear Mr. Charter:

Pursuant to 333 CMR 11.05 (4), this shall serve as a notice of approval of the **City of Acton's Vegetation Management Plan (VMP) as modified. The approval is given by the attending members of the ROW Advisory Panel.** Copies of the approved VMP should be mailed to the Chief Elected Official, Board of Health and Conservation Commission of each municipality covered by the plan.

This approval is subject to all the provisions of (333 CMR 11.00-all). It will remain in effect for the years 2016 through 2020, unless suspended, revoked, or modified.

Please be advised, **any violations of the Massachusetts Pesticide Control Act, MGL, Chapter 132 B or the Regulations promulgated thereunder, 333 CMR inclusive, may subject the responsible party or parties to agency action and referral of this matter to the Office of the Attorney General, Commonwealth of Massachusetts or the local District Attorney's office for civil or criminal prosecution.**

Thank you for your time and efforts in this program.

Sincerely,

John Lebeaux
Commissioner

Vegetation Management Plan (VMP)

Town of Acton, MA

2016-2020

APPROVED JUNE 29, 2016

Prepared By:
Dean A. Charter, MCA, Tree Warden
Town of Acton – Municipal Properties Department
472 Main Street
Acton, MA 01720

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Statement of Goals and Objectives

This Vegetation Management Plan (VMP) establishes criteria for the Town of Acton to control vegetation along municipal Rights of Way (ROW) in compliance with the ROW Management Regulations (333 CMR 11.00) as promulgated by the Massachusetts Department of Agricultural Resources.

The primary objective of this VMP is to provide the public with safe and unobstructed ROWs while utilizing an Integrated Vegetation Management (IVM) program and minimizing reliance upon herbicides. Vegetation maintenance is necessary along public ROWs to control unwanted vegetation that may pose a public nuisance, result in safety hazards or cause damage to structures and infrastructure. The goal of the program is to control undesirable vegetation while maximizing environmental protection and minimizing herbicide use. The plan's success will be based upon periodic monitoring and inspection which is expected to result in:

- protection of the public and environment;
- control of target vegetation;
- reduction in volume of chemical application;
- reduction in frequency of chemical application; and
- protection of sensitive areas.

This VMP will serve as a technical guidance for individuals involved in ROW vegetation management and as an accessible source of information for residents and public officials.

In the past, the Municipal Properties Department had undertaken some very limited herbicide applications in public landscape area (such as weed control in parking areas and Poison Ivy control in areas adjacent to public use areas). This Vegetation Management Plan envisions a more comprehensive, and targeted approach to management of vegetation along public rights of way.

It is a stated goal of the Acton Board of Selectmen and the Acton 20/20 Master Plan (adopted by Town meeting) that Acton be a "walkable" community. Pursuant to that, the Board of Selectmen in 2014 adopted a "Complete Streets" policy that states, in part: "Complete Streets is an approach to community transportation using design principles to ensure the safety, comfort, and accessibility for users of all ages, abilities, and income levels for all the users of our streets, trails, and transit systems, including pedestrians, bicyclists, transit riders, motorists, users of wheelchairs and other power-driven mobility devices…." Moreover, the Policy states: "the Town recognizes that all building and infrastructure projects, both new or reconstruction, as well as **routine maintenance** projects, are potential opportunities to apply Complete Streets design principles. The Town will, to the maximum extent practical, design, construct**, maintain**, and operate all properties over which is has any control to provide for comprehensive and integrated networks of travel consistent with Complete Streets principles. (emphasis added).

According to Corey York, PE, Public Works Director and Town Engineer, there are presently 107 miles of public roadway in Acton, and 49.9 miles of sidewalk. The Strategic Plan calls for adding a minimum of 12.7 miles of sidewalk, and currently there

are 16.7 additional miles of sidewalk and paved bikeways designed or under construction, including the Bruce Freeman Rail Trial and the Assabet River Rail Trial, both of which will be maintained by the Town of Acton once constructed. Several years ago Town Meeting approved an additional Certified Arborist position and there is now a dedicated two person woody vegetation management crew. A Vegetation Management Plan that provides for the full spectrum of control strategies to maintain the Rights of Way and achieve the stated town goals is a necessity. The Board of Selectmen fully expect that in the long term all areas of town will be safely accessible by foot along sidewalks, trails and maintained road shoulders, in addition to traditional clearances for motor vehicles. Proper maintenance of ROW vegetation is critical to accomplish this goal.

Target Vegetation

Target vegetation will be limited to species that pose a safety hazard, compromise infrastructure, are a public nuisance, or are invasive and may have detrimental effects on natural resources.

Hazard Vegetation

Hazard vegetation poses a risk to public safety and represents vegetation that impedes movement along public ways. Hazard vegetation may obscure sightlines, obscure signs, obscure vehicular movement, create windfall hazards, block storm drains and cause winter shading (causing ice/reduced melting). Hazard vegetation may include but is not limited to trees, tree limbs and shrubs.

Nuisance Vegetation

This category includes vegetation that could cause problems to the general public, employees or contractors and generally include poisonous and noxious plant species. Nuisance vegetation poses a risk to safety and health often due to dermal contact with plants that are poisonous, heavily-thorned or densely colonized. Target vegetation in this category is primarily Poison Ivy and other nuisance vegetation within 10 feet of the edge of pavement.

Detrimental Vegetation

Detrimental vegetation includes grasses and woody plants that are destructive or compromise the function of infrastructure by growing in cracks along the roadway, pavement/bridge joints, medians/traffic islands, and drainage structures/drainageways.

Invasive Vegetation

Invasive species can colonize a space and virtually eliminate the biodiversity of an area. This can result in changes in wildlife due to habitat change, impede natural hydrologic function and cause an overall change in the natural functions of an area. Certain vines, such as Oriental Bittersweet (Celastrus orbitulatus) can overwhelm even large trees, killing them by shading or breaking them due to overloading. Additionally, vining type invasive plants can conceal hidden defects in trees or reach over to contact utility lines. Japanese Knotweed (Fallopia japonioca) thickets can present a roadside fire hazard. MultiFlora Rose (Rosa multiflora) can cause injury to pedestrians and cyclists due to prolific thorns and arching branches. Managing invasive species via mechanical means can be ineffective and/or detrimental depending on the species, making the colonization

stronger. In these situations, the use of an herbicide may be necessary. Working in conjunction with the Conservation Commission and/or private groups, there may be opportunities to remove invasive vegetation and encourage the growth of native species. Vegetation listed on the MA Department of Agricultural Resources *Massachusetts Prohibited Plant List* are included in this category.

Vegetation Management Methods & Actions to Minimize Herbicides

Vegetation management methods will include both non-chemical techniques and chemical application where necessary as well as an IVM Program to minimize herbicide use. Vegetation management may involve the following methods:

- Physical Control – Street-sweeping, sealing cracks, repaving.
- Mechanical Methods – hand cutting, mowing, burning, stump grinding, selective trimming.
- Chemical Control –foliar herbicide treatments & cut stump surface treatment.

The control methods selected will be chosen based on a variety of factors and with the goal to achieve a long-term, low maintenance vegetation management program.

<u>Physical Control</u>

Physical control methods will rely primarily on pavement maintenance.

Pavement maintenance will consist of sealing cracks and general ROW repairs including repaving and installing new sidewalks. The Town completes routine street sweeping yearly and in certain areas after heavy precipitation and after construction as needed.

<u>Mechanical Control</u>

Mechanical control methods may include hand cutting, mowing, burning, stump grinding, and/or selective trimming.

Hand Cutting

Hand cutting consists of the mechanical cutting of target species using chain saws and brush saws. Target species are cut as close to the ground as practical. Hand cutting is used in order to protect environmentally sensitive sites. It is also used on target vegetation greater than twelve feet in height. Hand cutting is used on those restricted sites where terrain, site size or sensitivity renders mowing impossible or impractical. Hand cutting may be practiced at any time during the year.

Mowing

Mowing consists of the mechanical cutting of target vegetation using push mowers, large rider mowers, rear deck mowers, flail type side arm mowers, brush mowers, edgers and line trimmers. Selection of specific equipment is based on terrain, target vegetation size and equipment availability. Mowing will be used in areas where terrain and target stem size permit safe and efficient use of the above machinery. Mowing will be the principal

method for vegetation control along road shoulders and where herbicide use is prohibited. Mowing will be conducted seasonally when weather conditions allow.

Selective Trimming

Selective trimming consists of the mechanical pruning of the tops of encroaching limbs of tall trees that may hamper roadway access. Trimming will be accomplished using aerial lifts via trucks or tractors, or if terrain or obstruction prevent equipment access, by climbing crews.

Burning

Burning can be used on a selective basis to control grassy weeds growing in curb lines and pavement cracks. A hand held, propane fired torch is used to ignite the weed and destroy the weed and growth point. This requires two operators, one with the torch and the second following along with a back pack "Indian Pump" to wet down the area afterwards. It can only be used in limited areas where the chance of grass fire is slight. It cannot be used in dry or windy conditions. A permit for such use has been approved by the Acton Fire Department.

Stump Grinding

All stumps generated from hand cutting operations that are more than six inches in diameter are ground out to a depth of four inches below grade. The grindings generally are levelled off and left in place to eliminate a tripping hazard. Grinding stumps limits the possibility of stump suckering, and eliminates the chance of a stump damaging the roadside mowing equipment.

<u>Chemical Control</u>

Chemical control methods involve foliar treatment and cut stump surface treatments.

Foliar Treatment

Foliar treatments involve the selective application of an herbicide diluted in water, to the foliage. Several types of equipment for foliar treatments may be used. These could include: backpack sprayers, hand-held pump sprayers or a motorized truck-mounted sprayer. Foliar treatments with backpack and hand-held pump sprayers are used on low-density target vegetation. The herbicide solution will be diluted to the lowest possible percent that will provide effective control of target species. Motorized application equipment may be used for foliar treatment on areas where the vegetation density is high and the use of a backpack spray may not be as effective.

These foliar applications will take place when plants are in full leaf and actively growing, and in accordance with the product label. When used according to the Town's application program, foliar treatments are an effective and efficient method to control the whole target plant. Controlling the whole target plant reduces the potential of resprout from live root systems.

Cut Stump Surface Treatment

Cut stump treatments consist of mechanical cutting of target species using chain saws followed by herbicide treatment applied with a squirt bottle, a hand pump sprayer, or

painted on the freshly cut surface of the stump. The cutting procedure is identical to that outlined in the Hand Cutting section of this VMP. Cut stump application can be effective during the dormant period, however may not be effective during times of sap flow (i.e., maples and birches during the months of February through early April), as flowing sap will limit the herbicide from being absorbed into the stump down to the roots. Certain types of herbicide formulations are limited to freshly cut stumps to be effective. Great care must be taken to limit the uptake of cut stump herbicides by non-target vegetation.

Monitoring – All roadsides will be surveyed prior to any scheduled treatment program. Monitoring will be conducted by foot and/or by vehicle. Monitoring of areas may result from requests from the public. All monitoring records will be maintained by the Municipal Properties Department.

Maintenance – All roads will be cleaned using a street sweeper. Cracking asphalt and sidewalks and other ROW defects will be repaired. The use of ground cover will be used where appropriate to assist in the prevention of vegetation growth. The use of groundcover can sometimes help outcompete and/or crowd out poison ivy and some invasive species.

Record Keeping – A log of areas surveyed will be maintained by the Town for future planning and reference. Areas maintained either through physical repair, mechanical or chemical control will be recorded.

Control Tactics – The decision to use one or a combination of vegetation control techniques will depend on the site-specific situation. The control tactics selected will control target vegetation in the most environmentally and efficient manner.

Table 1. Summary of Control Methods

Target	Conditions	Control Methods
Grasses	Where landscape, traffic and safety conditions allow.	Physical Control Mechanical (mowing)
Low Growth Species	Where landscape, traffic and safety conditions allow. Species not poisonous	Physical Control Mechanical (mowing)
Low Growth Species	Landscape prevents mowing Species not poisonous	Mechanical (hand cutting) Chemical (depending on situation)
Grasses & Low Growth Species	Within cracks or joints Safety eliminates use of mechanical methods	Chemical (foliar)
Low Growth Species	Poison Ivy or other nuisance species within 10 feet of ROW	Chemical (foliar)[1]
Tall Growth	Individual trees or branches	Mechanical (hand cutting or selective trimming)
Tall Growth	Plants >12 feet and landscape allows	Mechanical (hand cutting) and stump grinding
Tall Growth	Plants >12 feet and species are persistent and/or invasive	Mechanical (hand cutting) and stump grinding, or

		Chemical (cut stump surface treatment)[1]

[1]Except in no spray areas.
[2]Low Growth – herbaceous growth (generally 3-4' high, grasses, vines, short woody growth)
Tall Growth – woody vegetation greater than 4'

Justification of Herbicide Use

This plan focuses on the minimization of herbicide use within ROWs. Vegetation management along public ways is necessary to control unwanted vegetation that pose a public nuisance, obstructs views and creates a traffic or pedestrian hazard. By following the proposed vegetation management methods and IPM approach discussed in this plan, physical and mechanical treatment controls most plants that interfere with traffic, visibility and safety. Chemical controls are necessary in management situations where topography, access, growth rate, species specific factors, worker safety, or environmental/social concerns limit the potential for control by physical or mechanical methods.

Chemical controls are often the preferred method or only method of control for plants which pose a health hazard for the technician in the field, either directly or as a function of location. Poison Ivy, for example, is extremely hazardous to handle, biologically resistant to mechanical removal and can pose a serious threat. Individuals attempting to control curbside plants and weeds by pulling them or trimming them can put a technician in danger from traffic and is generally not effective for long term control.

In many situations, poisonous plant species such as Poison Ivy, cannot be effectively controlled by mowing. Due to the low growing nature of Poison Ivy, and the fact that it grows along stolons and reproduces both by fine and fibrous rhizomes as well as by berry, it is nearly impossible to control through cultivation, hand pulling or mowing at the height generally used in roadside mowing operations. Moreover, the climbing characteristics of this plant over stone walls, tree trunks and guardrails, make mechanical control out of the question for safety and economic reasons. In some locations, the use of herbicides may help develop herbaceous communities that out-compete Poison Ivy and otherwise promote natural control of these plants.

Mowing will control 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 difficult and sometime dangerous to remove by mechanical treatment methods. These areas include, but are not limited to, cracks in asphalt, along guardrails, paved traffic islands, sidewalks and curbs. In these instances, grass can be identified as target vegetation.

Woody vegetation (low and high growth species) growing along the ROW that interfere with pedestrian or vehicle safety is controlled by a variety of techniques. Pruning or ground cutting using hand tools or chain saws primarily controls large woody vegetation. Depending upon the species of plant removed and its proximity to other vegetation, these stumps may be treated with an herbicide to prevent resprouting, although they often can be removed mechanically.

Small woody plants that are growing along the road shoulder in an accessible location will usually be mowed along with the roadside grass. Woody plants that are growing over obstacles that would impede the mower, or have a viney growth habit and are not practical to hand cut or chip, or that grow very rapidly, can be controlled through the use of the foliar application of herbicides.

Finally, invasive species elimination is sometimes warranted to promote the growth of a more diverse mix of vegetative species, reduce sedimentation and improve natural drainage and wildlife habitat. Invasive species are rarely controlled with ground cutting techniques and generally need to be eliminated via herbicide application to restore an area.

Identification of Sensitive Areas

Sensitive areas are defined within 333 CMR 11.00 as areas within ROWs in which public health and environmental concerns warrant special protection to further minimize risks of unreasonable adverse effects of herbicides. These include public groundwater sources, Class A public surface water sources, associated surface water bodies, tributaries, Class B drinking water intakes, private wells, state listed species habitat, wetlands, waters over wetlands, riverfront areas, certified vernal pools, inhabited areas and agricultural areas. The Acton Conservation Commission will be consulted to assist in identifying sensitive areas. For the purposes of identification, sensitive areas can be separated into two categories: areas that are readily identifiable in the field and areas that are not readily identifiable in the field.

Sensitive areas that are not readily identifiable in the field include public groundwater supplies, private water supplies and public surface water supplies. Additional sources available to identify these areas include:

- Massachusetts Department of Environmental Protection (MassDEP) Water Supply Maps (1:25,000)
- MassDEP Wetlands Conservancy Maps (scale 1:1,000)
- Municipal maps and records including those from the Health Department to identify private water supplies
- Regional Planning Agency maps and records
- U.S. Fish and Wildlife Service National Wetlands Inventory Maps
- Ortho photo Information – MassDEP (1:5,000)
- Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program
- Available MassGIS maps
- Acton GIS maps

Sensitive areas that are readily identifiable in the field include surface waters, wetlands, rivers and agricultural areas. The methods utilized to identify these sensitive areas will include:

- MassGIS spatial data maps to locate any of these sensitive areas that may already be identified on these maps.
- Prior to commencement of herbicide application operations, the treatment crew will be provided the marked topographic map.
- The treatment crew will visually survey the area to be treated for any additional sensitive areas as well as areas where the ground is bare or has limited re-growth from previous herbicide applications.
- Sensitive areas will be identified and marked in the field prior to application.

The following is a description of how the sensitive areas will be identified for required protection:

- Consult appropriate reference materials and sources to determine the precise locations of sensitive areas.
- Mark boundaries of each area on U.S. Geological Survey (USGS) topographical maps, CAD (Computer Aided Drafting) drawings or GIS output.
- Prior to commencement of herbicide application operations, treatment crew will be provided with above maps identifying sensitive areas.
- Appropriate Municipal Properties Department staff will deploy in advance of the main herbicide application operation to locate and flag these boundaries or the boundaries of the appropriate no-spray areas.
- No spray areas will be identified with red or orange paint on the curb or in roadway at start and finish of no spray areas or with orange flags marked in the same manner, as appropriate.

Table 2. Sensitive Area Restrictions

Sensitive Area	No Spray Areas	Limited Spray Areas	Where Identified
Wetlands and Water Over Wetlands	Within 10 feet	10 – 100 feet; 12 months must elapse between applications; Selective low pressure, using foliar techniques or basal or 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 applications; Selective low pressure, using foliar techniques or basal or cut-stump applications	YOP Maps and identify on site
Public Ground Water Supply	Within 400 feet (Zone I)	Zone II or IWPA (Interim Wellhead Protection Area which is the Primary Recharge Area); 24 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications	YOP Maps

Public Surface Water Supply	Within 100 feet of any Class A public surface water source	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	YOP Maps
	Within 10 feet of any tributary or associated surface water body located outside of the Zone A	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 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	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	
Private Water Supply	Within 50 feet	50 – 100 feet; 24 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications	In YOP will list and identify on site
Riverfront Area	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, using foliar techniques or basal or cut-stump applications	YOP Maps and identify on site
Agricultural and Inhabited Areas	N/A	0 – 100 feet; 12 months must elapse between application; Selective low pressure, using foliar techniques or basal or cut-stump applications.	Identify on site
State-listed Species Habitat[1]	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

[1]Includes Estimated Habitats of Rare Wildlife and the Priority Habitats for State-Listed Species as shown on the most recent edition of the Massachusetts Natural Heritage Atlas prepared by the Natural Heritage and Endangered Species Program (NHESP) within the Massachusetts Division of Fisheries and Wildlife.

Operational Guidelines for Applicators Relative to Herbicide Use

As required by regulations, application to roadside ROW requires a valid Category 40 pesticide certification from the Department of Agricultural Resources. The applicator(s) will be a Town employee and/or certified contractor working under the supervision of the Town of Acton Tree Warden. All applicators and their supervisors will have a copy of the VMP and Yearly Operational Plan (YOP) with them at all times for reference during the herbicide application. In addition to the applicable rules and regulations, applicators will adhere to the following operational guidelines. Only herbicides listed on the current ROW Sensitive Area Materials List will be used.

Weather

Herbicide application will be restricted during certain adverse weather conditions, such as rain or wind. Herbicide applications will not be conducted during periods of moderate or heavy rainfall. Foliar applications can be effective in light mist situations; however any measurable rainfall that creates leaf runoff will wash the herbicide off target vegetation. If foliar applications are interrupted by unexpected rainfall, the treatment will not resume until the rain ends and active leaf runoff has ceased. Cut stump treatments will not be conducted during measurable precipitation events. Cut stump treatments will cease during measurable precipitation and will not resume until precipitation has ceased.

To minimize off-target drift, the applicator will comply with the following restrictions:

- The applicator will periodically observe the application of the foliar treatment to insure that there is no significant movement of the herbicide. If the applicator can see the herbicide moving off target, the application will immediately stop until the wind has subsided enough to permit further applications.
- Herbicide solution to be used for a foliage application may contain low drift agents. Low drift agents may be added to the foliage herbicide solutions as per the low drift agent label. In moderate wind conditions, as per label recommendations, more low drift agent may be added, at the discretion of the applicator to control increased drift.
- Foliar treatment will not be made to target vegetation that exceeds approximately twelve feet in height.

Equipment Calibration

Foliar application equipment will be calibrated prior to application and in accordance with manufacturer's recommendations. Foliar application equipment will be calibrated to maintain pressures not exceeding sixty pounds per square inch at the nozzle. Applicator nozzles will be adjusted to apply a coarse spray pattern.

Cut stump treatment squirt bottle applicators or hand pump sprayers will be adjusted to deliver an herbicide solution that minimizes herbicide splash and overspray.

Sensitive Area Restrictions

In defined sensitive areas, there exists a no-spray area where herbicide use is prohibited and a limited spray area where herbicide use is allowed under certain conditions. In places around sensitive areas where herbicide use is allowed, only the minimum labeled rate of application for the control of target species can be applied.

Qualifications of Individual Developing & Submitting a Plan

Mr. Dean Charter is the Town of Acton Tree Warden and has over forty years of experience in arboriculture and right of way management. He is a Massachusetts Certified Arborist (#1082), and is certified by the International Society of Arboriculture (#NE-0333A). He has held Massachusetts Certification # 4353 since 1974, including subcategories 35, 36, 37, 40, & 47. Additionally, he has completed the University of Massachusetts 4 day Invasive Plant Management course. He will oversee plan implementation.

Alternative Land Use Options

Every effort will be given for alternative land use options. However, there are specific criteria to be met for adoption of alternative land use options. The alternative land use option must control the nuisance vegetation in a similar manner, environmentally and effectively as allowed in this VMP.

Remedial Plan to Address Spills and Related Accidents

All mixing and loading of herbicides will be conducted at the facility where the herbicides are stored, either at a secure Town facility if the application is completed by a Town employee or offsite if the application is being completed by an outside contractor. Only the amount of herbicide necessary to carry out the vegetation control, based on monitoring results, will be mixed to ensure that there will be no waste and minimize potential problems. The vehicles carrying out the spray operations will be equipped with a bag of absorbent, 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 and fact sheets will be carried on-site by the applicator.

As soon as any spill is observed, immediate action will be taken to contain the spill and protect the spill area. The cause of the spill must be identified and secured. Spill containment will be accomplished by covering the spill with absorptive clay or other absorptive material or, for large spills, building clay or soil dikes to impede spill progress. Until completely remediated, the spill area will be protected by the placement of barriers and by the delineation of the spill area by crew members. 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 placing it in leak proof containers, removed from the site and disposed of properly. Dry herbicides, such as granulars, will be swept up or shoveled up directly in leak proof containers for proper disposal. All contaminated soil will be placed in leak proof containers, removed from the site and disposed of properly. Activated charcoal will be incorporated into the soil at the spill location per label instructions. Any minor spill will be reported to the Massachusetts Department of Agricultural Resources, Division of Crop & Pest Services.

Major spills will be handled in a similar manner as minor spills, except in cases where the spill cannot be contained and/or removed by the crew. In this case the MassDEP Incident Response Unit and the Massachusetts Department of Agricultural Resources, Division of Crop & Pest Services must be contacted.

Emergency first responders (including but not limited to fire and police) should be immediately notified of a major spill and/or any size incident deemed a possible risk to public health, safety and the environment.

MassDEP will be contacted when there is a spill of a regulated quantity, regardless of major or minor spill status and in accordance with 310 CMR 40.0000 Massachusetts Contingency Plan.

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 Manufacturer

DOW	(800) 992-5994
Dupont	(800) 441-3637
Monsanto	(314) 697-4000
NuFarm	(877) 325-1840

- Massachusetts Pesticide Bureau Main # (617) 626-1720
  Michael McClean (617) 626-1781
- Massachusetts Department of Environmental Protection
  Emergency Response (888) 304-1133
- Department of Public Health
  Environmental Toxicology Program (617) 624-5757
- Massachusetts Poison Control Center
  24-Hour Hotline (800) 222-1222
- Town of Acton Municipal Properties Department 978-929-7744
- Town of Acton Health Department 978-929-6632
- Town of Acton Natural Resources Department 978-929-6634
- Acton Water District 978-263-9107
- Concord Water Department (Lake Nagog issues) 978-318-3250
- Massachusetts DOT, District 4 508-754-7204
- Town of Acton Fire Department 978-264-9645 or 911
- Town of Acton Police Department 978-264-9638 or 911
- Chem-Trec 800-424-9300
- National Pesticide Information Center 800-858-7378
- National Animal Poison Control Center 888-426-4435

Monitoring Plan

On an annual basis, the Town will evaluate the success of the vegetation management program. The goal of this monitoring plan is to evaluate the relative success of vegetation control efforts. Following treatment, after an appropriate period of time, treatment areas will be revisited. The survivorship or regrowth of nuisance vegetation will be recorded

and evaluated periodically to determine whether the program is meeting its goals. Any changes will be reflected in the next year's YOP as applicable.

Notification Procedures

Once approved, a copy of the VMP will be provided to the Town Manager, 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 Municipal Properties Department will notify the Town Manager, Board of Health, Acton Water District, 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.