

**Yearly Operational Plan (YOP)**  
**Haverhill Massachusetts**  
**2010**

**Prepared By:**

**City of Haverhill**  
**Neil Kelleher/Park & Tree Department/General Foreman/Deputy Tree Warden**  
**Roland Goudreault/Highway Department/Foreman/Deputy Tree Warden**  
**500 Primrose Street**  
**Haverhill MA**  
**(978) 374-2364**  
**[highway@cityofhaverhill.com](mailto:highway@cityofhaverhill.com)**

## **Yearly Operational Plan**

The purpose of 333 CMR 11.00, Rights of Way Management, is to promote the implementation of integrated pest management techniques and to establish standards, requirements, and procedures necessary to minimize the risk of unreasonable adverse effects on human health and the environment associated with the use of herbicides to maintain streets, road, sidewalks and paths. These regulations establish procedures that guarantee ample opportunity for public and municipal agency review and input on the right-of-way maintenance plans.

A yearly operational plan (YOP) must be submitted to the Department of Agricultural Resources (Department) every year herbicides are intended for use to maintain rights-of-way. The YOP provides a detailed program for vegetation management for the year. A five year Vegetation Management Plan (VMP) was approved by the Department and is available for review at the office of the DPW, Board of Health, Conservation Commission, and the Mayor's office.

Upon receipt of this YOP, the Department publishes a notice in the Environmental Monitor. The Town must provide a copy of the proposed YOP and Environmental Monitor notice to the Board of Health, Conservation Commission, and the Mayor's office for the City of Haverhill Herbicide treatment is proposed. The Department allows a 45-day comment period on the proposed YOP beginning with the publication of the notice and receipt of the YOP and Environmental Monitor notice by the City.

Public notification of herbicide application to the streets is made at least 21 days in advance of the treatment by a separate notice. Notice is made to the Department of Agricultural Resources, Mayors Office, Board of Health, and the Conservation Commission in the City Of Haverhill.

Any comments on this YOP should be made to the person designated herein as the person supervising the YOP or the person performing the treatment.

## **Municipal Yearly Operational Plan**

This Yearly Operational Plan, approved by the Massachusetts Department of Agricultural Resources pursuant to Rights-of-Way Management Regulations (333 CMR 11.00), has been adopted by the roadway vegetation management program in the City of Haverhill. The undersigned hereby acknowledges that the conditions of the Yearly Operational Plan will be adopted and complied with.

Municipality:                   Haverhill Massachusetts

Name:                           Neil Kelleher/Roland Goudreault

Agency:                       DPW

Address:                       500 Primrose St Haverhill Ma

Telephone / Fax:               (978) 374-2364 / (978)374-2362

Email:                          highway@cityofhaverhill.com

Signature:                      \_\_\_\_\_

Date:                             \_\_\_\_\_

Wetland Determination  
Issued by:                      \_\_\_\_\_

**Individual Supervising YOP**

Name and Title: Neil Kelleher, General Foreman  
Department: Park & Tree  
Address: 500 Primrose Street  
Telephone: (978) 374-2364  
Signature: \_\_\_\_\_

**Municipal Department Performing Herbicide Treatment**

City employees, herbicide applicators, and private contractors will perform the herbicide treatment. Applicators are certified by the Massachusetts Department of Agricultural Resources in the applicator category: City will have an individual on site with a category 40 (rights-of-way).

Certified Applicator: Neil Kelleher Lic#25395

Certified Applicator Roland Goudreault Lic#28560

Company or Department: DPW  
Address: 500 Primrose Street  
Telephone Number: (978)374-2364  
Email: highway@cityofhaverhill.com

**Private Herbicide Performing Herbicide Treatment**

Certified Applicator: Harry Williston

Vegetation Control Services

2342 Main Street

Athol, MA 01331

Telephone Number: (978) 249-5348

Fax: (978) 249-4784

## Yearly Operational Plan

The following information is provided as details of the YOP of the City Of Haverhill in accordance with the requirements of 333 CMR 11.06 (2).

### Herbicides Proposed

The following herbicide(s) are proposed for use in calendar year 2009.

Glyphosate Products Including Round up Pro      EPA# 524-475

Application Rates 1 to 2% Low Volume Foliar Applied Spray to be applied with a 100 gal hydraulic truck mounted sprayer, a 4 gal back pack style sprayer or 3.5 gal pump sprayers

The Material Safety Data Sheets and the herbicide fact sheet for the above listed herbicides are attached to this YOP.

### Herbicide Application Techniques and Alternative Control Procedures

The herbicide(s) will be applied in accordance with the instructions in the attached manufacturer's information. Alternative control procedures, applicable at the designated "No Spray Zones" will consist of hand cutting, mowing, or selective trimming. Other alternative controls will include routine street sweeping along with crack and road repairs.

Low volume foliar treatments will be made using the equipment described below. The herbicide solution is applied to lightly wet the target plant. This technique has few limitations with the exception being reduced effectiveness on tall, high-density target vegetation, not expected at all under this YOP.

Cut stump treatments consist of mechanical cutting of target species using chain saws immediately followed by herbicide treatment applied with a squirt bottle, a hand pump sprayer, or painted on the freshly cut surface of the stump. The herbicide is limited to freshly cut surface of the remaining stump. Cut stump treatments will general be preformed to trees greater than 12 feet tall and re-sprout.

#### Spray Bottle/ Paint brush

All equipment used for vegetation management programs must be maintained in good working condition, and should be of adequate design and ability to produce the professional quality of work that the City requires. Because the City recognizes the vast variety and performance of herbicide application equipment, dictating how that equipment should be calibrated to deliver precise amounts of herbicide to effectively control a host of vegetation conditions is literally impossible. Therefore, the City insists that the contractor provide the most appropriate application equipment, calibrated to effectively and legally control target vegetation.

The City of Haverhill will be responsible to ensure that vegetation management activities are conducted in a professional, safe, efficient manner, with special attention directed towards minimal environmental impact. The contractor is qualified, licensed and certified to apply herbicides. "Qualified" means those personnel who have been trained to recognize and identify target and non-target vegetation and are knowledgeable in the safe and proper use of both mechanical and chemical vegetation management techniques. All personnel applying herbicides in Massachusetts must be licensed in the Commonwealth and must work under the on-site supervision of a certified applicator. All contract personnel will also follow all Label instructions regarding Personal Protective Equipment (PPE).

The City will rely on city employees listed in the YOP for vegetation management applications, and require in a contractual agreement, that the City comply with all applicable federal and state laws and regulations. These include, but are not limited to, applicable OSHA, FIFRA and DOT regulations, 333 CMR 1-15.00, Rights-of-Way Management, Chapter 132B, Chapter 85 of the Acts of 2000 (see Appendix IV) and 321 CMR 10.00 as managed by NHESP.

Herbicides will only be applied in a safe and judicious manner, in compliance with all-applicable State and Federal pesticide regulations.

Applicators will at all times exercise good judgment and common sense during herbicide treatment activities, and will immediately cease operations if adverse conditions or other circumstances warrant.

Herbicides will NOT be applied during the following adverse weather conditions:

- A. During high wind velocity, per 333 CMR 11.03
- B. Foliar applications during periods of dense fog, or moderate to heavy rainfall
- C. Foliar applications of volatile herbicides during periods of high temperatures (90 plus degrees Fahrenheit) and low humidity
- D. Cut Stump applications when deep snow (i.e. 6 inches plus or ice frozen on stem or stump) prevents adequate coverage of target plants to facilitate acceptable control

The City of Haverhill or a representative of the City must complete daily vegetation management reports that include:

- A. Date, name and address of applicator
- B. Identification of site or work area
- C. List of crew members
- D. Type of equipment and hours used, both mechanical and chemical
- E. Method of application and description of target vegetation
- F. Amount, concentration, product name of herbicide(s), adjuvants, and dilutants (EPA registration numbers must be on file)
- G. Weather conditions
- H. Notation of any unusual conditions or incidents, including public inquiries
- I. Recording and/or verification of sensitive areas on ROW maps

### Identification of Target Vegetation

The target vegetation for this YOP will be poison ivy and other vegetation growing between curbing and sidewalks throughout the town.

Vegetation management crews will exercise care to insure that low-growing desirable vegetation and other non-target organisms are not unreasonably affected by the application of herbicides.

### Public Nuisance Vegetation

Public nuisance vegetation includes vegetation that grows along public roads and paths that cause allergic or other problems. The overwhelming majority of plant material to be controlled is poison ivy.

### Nuisance Grass

In most instances grass is a desirable plant species. Along the shoulders of roads, grass growth is encouraged and maintained through mechanical mowing. However, in some instances, grasses may grow in areas where control is limited to the use of herbicides. These areas include cracks in asphalt, along guardrails, and between sidewalks and adjacent curbing. In these instances, grass will become target vegetation.

### Vegetation Posing a Risk to Safety

The vegetation that hampers visibility or impedes movement along roads and trails is considered posing a risk to public safety. M.G.L. Chapter 87, Section 5 authorizes tree wardens to have control of “all public shade trees, shrubs, and growths” along public ways. Mowing and/or hand cutting shall control most plants that interfere with traffic and visibility. However, due to topography, rate of growth, or physical characteristics, certain plant species are best controlled by herbicides.

Vegetation best controlled by herbicides fall into two separate categories: low growing species and tall growing species. Tall growing species include mostly trees. Hardwood and softwood species that are capable of interfering with pedestrian and traffic safety are either selectively pruned, ground cut, occasionally conditions warrant the treatment of the cut stumps with an herbicide to prevent re-sprouting. When vegetation is less than 12 feet tall it may be foliar treated

### Description of Methods Used to Flag or Otherwise Designate Sensitive Areas

The sensitive areas detailed herein are easily recognizable in the field as described and will be marked with an orange painted line in the street.

Attached is a list of all Rights-of-Way that will be included in the 2009 YOP. It is the intention of the City of Haverhill to spray the vegetation along the curb lines of all the sidewalks in town. A map identifying these streets is also included. A separate sheet identified the Sensitive Areas where “No Spray Zones” have been established, all of which are clearly identified by structures, houses, or other field methods.

With the assistance of our Conservation Commission Agent and the Water Department, sensitive areas will be identified and marked along the ROW prior to any herbicide application.

## Sensitive Area Restrictions

333 CMR 11.04

### CONTROL STRATEGIES FOR SENSITIVE AREAS

Sensitive Area	Minimum Buffer Zone (feet)	Control Method	Restriction Code
Public Ground Water Supplies	400'	Mechanical Only	None
Primary Recharge Area	Designated buffer zone or 1/2 mile radius	Mechanical, Recommended Herbicides*	1
Public Surface Water Supplies (Class A & Class B)	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	1
Tributary to Class A Water Source, within 400' upstream of water source	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	1
Tributary to Class A Water Source, greater than 400' upstream of water source	10'	Mechanical Only	None
	10'-200'	Recommended Herbicides	1
Class B Drinking Water Intake, within 400' upstream of intake	100'	Mechanical Only	None
	100'-200'	Recommended Herbicides	1
Private Drinking Water Supplies	50'	Mechanical Only	None
	50'-100'	Recommended Herbicides	2
Surface Waters	10'	Mechanical Only	None
	10'-100'	Recommended Herbicides	2
Rivers	10' from mean annual high water line	Mechanical Only	None
	10'-200'	Recommended Herbicides	2
Wetlands	100' (treatment in wetlands permitted up to 10' of standing water)**	Low-pressure Foliar, CST, Basal Recommended Herbicides	1
Habitated Areas	100' (for high-pressure foliar only)	Recommended Herbicides	2
Agricultural Area (Crops, Fruits, Pastures)	100' (for high-pressure foliar only)	Recommended Herbicides	2
Certified Vernal Pools	10'	Mechanical Only	None
Certified Vernal Pool Habitat	10'-outer boundary of habitat	As recommended by NHESP in their permit process, no treatment without written permission	
Priority Habitat	As recommended by NHESP in their permit process, no treatment without written		

permission
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Restriction Code "1": A minimum of twenty-four months shall elapse between applications

Code "2": A minimum of twelve months shall elapse between applications

\*Massachusetts recommended herbicides for sensitive sites

†Per "The Wetlands Impact Study," 10/1995 (see Appendix III)

### Procedures and Locations for Handling, Mixing and Loading of Herbicide Concentrates

The herbicide will be mixed in the controlled environment at the DPW Yard, located at 500 Primrose Street, Haverhill, MA, 01830.

Although it is expected that all the mixed herbicide will be used, any remaining will be stored at the Highway Garage in accordance with manufacturer's instructions. The absorbent product "Speedi-Dri" will be available for use at the locations of application. If there is a leak in the hose, the pump will be immediately shutoff. Equipment used will be washed at the Highway Garage

Herbicides will be handled and applied only in accordance with the label instructions. Contractors will strictly adhere to all mandated safety precautions directed towards the public, the applicator and the environment.

### Emergency Contacts

Haverhill Highway Department	978 374-2364
Haverhill Fire Department	978 373-3833
Haverhill Police Department	978 373-1212
Massachusetts Pesticide Bureau	617-626-1781
Bureau Environmental Health Assessment	617-624-5757
Mass. Department of Environmental Protection Incident Response Unit	617-556-1133 888-304-1133
Chem Trec	800-424-9300
EPA Pesticide Hotline	800-858-7378
Massachusetts Poison Control Center	800-682-9211