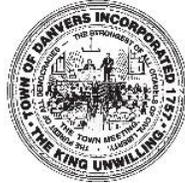


2016 Yearly Operational Plan (YOP)

Town of Danvers . DPW



Electric Division

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1. INTRODUCTION

In compliance with the Massachusetts Department of Agricultural Resources (DAR) Rights-of-Way Regulations (333 CMR 11.00), this Yearly Operational Plan (YOP) provides notification of Danvers Electric's intent to utilize an integrated vegetation management plan that includes the use of herbicides on electric rights-of-way (ROW) in 2016. Our Integrated Vegetation Management program is outlined in our five year Vegetation Management Plan. All ROWs where Danvers Electric Division maintains poles and structures are included in this YOP in case they need spot treatment.

This YOP identifies target vegetation; the herbicides, rates and methods of application; alternative control methods; the individual responsible for supervising the YOP, and the qualified contractors that will perform the application. It explains how sensitive areas; and sites where herbicides are either restricted or not permitted are identified, appropriately marked, treated and protected. It addresses procedures for the mixing, handling and loading of herbicide concentrates. It includes Herbicide Fact Sheets and Labels, a list of emergency resources and telephone numbers, and maps including known sensitive areas.

The YOP process provides for a forty-five day public review and comment period, in conjunction with the twenty-one day municipal rights-of-way notification period. These review periods gives the community an opportunity to provide information that will help identify additional areas that may require specific precautions or protection. Finally, notice will be published in general circulation newspapers at least 48 hours before the scheduled application.

2. LOCATION OF INTENDED TREATMENTS & IDENTIFICATION OF TARGET VEGETATION

Pursuant to the policy and intent set forth in the VMP, Danvers Electric Division plans to complete herbicide applications at utility pole and structure locations where the vegetation obscures the ROW corridors and grows tall enough to interfere with the safe efficient and legal operation on an electrical power line. All ROWs where Danvers Electric Division maintains poles and structures are included in this YOP in case they need spot treatment.

3. IDENTIFICATION OF TARGET VEGETATION FOR HERBICIDE APPLICATIONS

All vegetation that obscures the ROW corridors and grows tall enough to interfere with the safe, efficient and legal operation of an electrical power line must be removed. In the wire zone, trees and brush are targeted, and native, low growing plant communities that have a mature height less than three feet are established. In the border zone, incompatible trees and brush are targeted, and the growth of native trees and shrubs that have a mature height less than 15 feet is encouraged (see VMP for details on Wire Zone-Boarder-Zone).

The primary target is all trees species within the cleared width of the ROW; except in Priority Habitats that are under the purview of the Natural Heritage and Endangered Species Program of the Department of Fish and Game (NHESP), which will be treated on a case by case basis.

Examples of targets include, but are not limited to:

Alder	Aspen	Beech	Birch
Cherry	Hemlock	Hickory	Locust
Pine	Maple	Oak	Sassafras

Certain plant species, therefore, are generally encouraged on the ROW through the use of integrated vegetation management (IVM) standards (excluding invasive plant species) where:

- Most herbaceous growth is acceptable and encouraged
- Shrubs that mature less than 15 feet in height are only targets where due to their location or attributes they interfere with the function of the ROW.

Certain categories of non-tree species are targets under some circumstances, because of their location and/or their nature. Dense woody vegetation, shrubs and vines are targets where they are capable of interfering with the inspection and maintenance of the poles, wires, and along access roads, paths and gates which need to be kept clear, especially for emergencies. Danvers Electric Division intends to control noxious plant species including invasive, poisonous plants and vines at their facilities, near utility poles and structures. Invasive plant species have become an increasing concern throughout Massachusetts in areas that include ROW corridors where they can spread rapidly and move into the adjacent landscape. Danvers Electric Division plans to use herbicides to spot treat poisonous plants at sites along its ROWs identified as having a high risk of posing a health hazard. Noxious vegetation, likewise, poses a risk to the safety and health of all individuals working on or traversing a ROW and it can impede a rapid response in an emergency.

Examples of non-tree species generally considered targets, include, but are not limited to:

Autumn Olive	Honeysuckle	Japanese Knot Weed	Virginia Creeper	Willow
Hawthorne	Sumac (Staghorn and Poison)	Common Reed	Grapevines	Greenbriar
Purple Loosestrife	Buckthorn	Multiflora Rose	Oriental Bittersweet	Poison Ivy

4. PROPOSED HERBICIDE TREATMENT METHODS

Under Danvers Electric Division's IVM program, combined with mechanical "prep-cutting," mowing and side-trimming activities, herbicide applications will be applied on foot using selective low pressure foliage treatments with backpack sprayers and cut stump or basal treatments. Experienced, Massachusetts licensed applicators will perform the selective herbicide treatments.

Danvers Electric Division's herbicide program is a selective program scheduled to sustain acceptable

vegetation control at minimal application rates. Using backpack sprayers, very small amounts of herbicide are applied directly to the leaves, stumps or bark of the target vegetation. The average per acre rate of herbicide mix for Danvers Electric Division's foliar program is in the ounces per gallon range.

Town of Danvers personnel or contract personnel will utilize the most appropriate technique for the vegetation species, height, density, site and mandated restrictions. These methods as described in detail in the VMP, are briefly reviewed below:

Low Volume Foliage techniques utilize hand-operated pumps or motorized, backpack sprayers. In both cases, the amount of herbicide solution applied only dampens or lightly wets the target vegetation.

Low-Volume Stem Basal techniques use the selective application of herbicides to the lower 6"-8" of the plant stem. The herbicide concentration is applied with low-pressure, backpack sprayers with special wand attachments and positive shut-off nozzle tips with small orifices.

Cut Stump Surface Treatment (CST): the application of an herbicide mixture to the cut surface of a stump immediately following or during a cutting operation. Application equipment includes low-volume, backpack, hand-pump sprayers; hand held squirt bottles; paintbrushes; or sponge applicators.

A. Guidelines:

- All Sensitive Area restrictions will be followed
- Foliar and Basal treatments are used within the cleared width of the ROW for tree and shrub target species under 12 feet in height
- CST treatments are used in conjunction with hand-cutting and in situations including but not limited to; trees and shrubs that cannot be foliar treated, at road buffers, and around structures such as poles and gates.
- Only mechanical treatment methods will be used in no spray Sensitive Areas, including but not limited to; hand cutting, trimming and mowing.

B. Treatment of Wetlands

Herbicide applications in wetlands will be performed in accordance with 333 CMR 11.04 (4)(c)(2) relative to ROW management. Targets will be selectively treated with herbicides on the DAR's Sensitive Area Material List and will not be applied within ten (10) feet of standing or flowing water.

C. Treatment of State-Listed Priority Habitats

All vegetation management activities will be completed in compliance with the Massachusetts Endangered Species Act (MESA; MGL c. 131 A) and its regulations, 321 CMR 10.00.

5. IDENTIFICATION OF SENSITIVE AREAS AND CONTROL STRATEGIES PROPOSED

This section defines sensitive areas encountered along rights-of-way, provides references and sources for identifying sensitive areas, outlines the method used to identify sensitive areas, and lists the control strategies proposed for sensitive areas.

The Massachusetts Department of Environmental Protection (DEP) and DAR have developed a list of recommended herbicides (See Appendix B) for use in sensitive areas within rights-of-way. These herbicides are characterized by their low toxicity, mobility, and persistence. Danvers Electric will use only chemicals from this list when treating in sensitive areas.

Sensitive areas are defined in 333 CMR 11.04, "any areas, within rights-of-way, including but not limited to the following, in which public health, environmental or agricultural concerns warrant special protection to further minimize risks of unreasonable adverse effects.+ See the following Table.

Sensitive Area Restriction Guide (333 CMR 11.04)

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, 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 (Primary Recharge Area); 24 months must elapse between applications; Selective low pressure, using foliar techniques or basal or cut-stump applications	YOP Maps

Sensitive Area	No Spray Area	Limited Spray Area	Where Identified
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 well list and identify on site
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;	YOP Maps and identify on site

Sensitive Area	No Spray Area	Limited Spray Area	Where Identified
		Selective low pressure, using foliar techniques or basal or cut-stump applications	
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	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

6. METHODS FOR IDENTIFYING SENSITIVE AREAS AND WETLANDS

Prior to any herbicide application, Sensitive Areas will be identified and when necessary marked in the field by an experienced vegetation management point person. The map in Appendix C are a resource and a tool as they contain the data necessary to identify, mark, and treat Sensitive Areas appropriately.

Two descriptions guide the identification of the Sensitive Areas listed in 333 CMR 11.02:

- A. Readily identifiable in the field areas: will be treated and marked according to all applicable restriction listed in 333 CMR 11.00 and the VMP.
- B. Not readily identifiable in the field areas are identified by the use of the data marked on our maps and additional data collected in the YOP and notification processes before the time of treatment.

7. REMEDIAL SPILL AND EMERGENCY PLAN

Education and attention will constantly be directed at accident and spill prevention, however, in the event of an unfortunate incident a spill response check list is included in Appendix D. Additional details can be found in the VMP.

8. PROPOSED HERBICIDES TO BE USED IN 2016

Herbicide & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration (per 100gal. water)
Garlon 4 Ultra	Triclopyr	62719-527	2-6 qts per 100 gals water
Glystar Original	Glycophate	42750-61	2 gal per 100 gals water

9. HERBICIDE APPLICATION LOGS

Danvers Electric Division and/or its contractor will complete daily herbicide application logs, Appendix E, that include:

- Date
- Name and address of company
- Name of Category 40 Certificate Holder
- Name of applicator
- Location
- Herbicide used
- Application method

10. INDIVIDUALS SUPERVISING YOP

Mark Piccarini
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 (978)777-2668
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11. MUNICIPAL DEPARTMENT AND CONTRACTORS PERFORMING THE HERBICIDE TREATMENT

As required by regulations, application to ROWs 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 Electric Division. 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 operational guidelines outlined in this YOP and in the VMP.

Mayer Tree Services, 9 Scots Way, Essex, MA 01929, (978)768-6999

Town of Danvers, DPW - Forestry Division, 1 Burroughs Street, Danvers, MA 01923

12. HERBICIDE FACT SHEETS

Herbicide fact sheets explain technical information relative to the herbicide concentrates proposed for use during the 2016 treatment cycle. These are included in Appendix F.

13. PROCEDURES FOR HANDLING, MIXING AND LOADING HERBICIDE CONCENTRATES

All herbicides will be handled, mixed and applied according to the directions in 333 CMR 11.00, which includes following Label Instructions and in compliance with all applicable federal and state laws and regulations. If possible, herbicide mixing should be done at the contractor's facilities and extreme care shall be exercised during all mixing, handling and loading in order to prevent careless spills or splashes. No herbicide concentrates will be mixed, handled or loaded on a ROW within one hundred (100) feet of a Sensitive Area.

14. EMERGENCY RESOURCES

Danvers Electric Division contracts with independent, professional, certified herbicide applicators that are responsible for the containment, clean up and reporting of chemical spills or accidents. The following is a guide to the information sources that, according to various regulations, must be available to the treatment crew in the event of a chemical spill or emergency situation:

Technical Reference Materials:

- Product Label
- Product Safety Data Sheet (SDS)
- Product Fact Sheet, if available

A. HERBICIDE MANUFACTURER

MANUFACTURER	PHONE NUMBER
Albaugh Inc.	800-247-8013
BASF Corporation	800-832-4357
Bayer Environmental Science	800-334-7577
Dow Agro Sciences	800-992-5994
E.I. du Pont de Nemours and Company	800-441-3637
Monsanto	314-694-4000
Nufarm	877-325-1840

B. STATE AGENCIES

STATE AGENCY	TELEPHONE NUMBER	SPECIAL INSTRUCTIONS
Massachusetts Pesticide Bureau	(617) 626-1700	A.S.A.P. (within 48 hours)
Massachusetts Department of Environmental Protection, Emergency Response Section	Main Office: (888) 304-1133 Northeast Region: (978) 694-3200	For emergencies involving reportable quantities of hazardous materials; required info: City/town, street address, site name (if applicable), material
Massachusetts Dept. of Public Health, Bureau of Env. Health Assessment Toxicology Program	(617) 624-5757	
Massachusetts Poison Information Centers	(800) 682-9211	For medical emergencies involving suspected or known pesticide poisoning symptoms

C. EMERGENCY CONTACTS

EMERGENCY SERVICE	PHONE NUMBER
Massachusetts State Police	(508)820-2300
Local Fire / Police Dept	(978) 774-1212 911
ChemTrec	800-424-9300
Clean Harbors	800-OIL-TANK
Pesticide Hotline	800-858-7378

Danvers Electric Division contact in the case of a spill or accident is:
Danvers Electric Division
1 Burroughs Street
(978) 774-0005