



**OPERATOR OF
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
COMMUTER RAIL SYSTEM**

**470 ATLANTIC AVENUE
BOSTON, MA 02116**

2021

YEARLY OPERATIONAL PLAN

PREPARED BY:

**FAIR DERMODY CONSULTING ENGINEERS
19 OCEAN AVENUE, UNIT 5
PORTLAND, MAINE 04103**

ABSTRACT:

This Yearly Operational Plan (YOP) describes the vegetation management operations for the Railroad rights-of-way (ROW) scheduled for vegetation maintenance during 2021 year in compliance with the Commonwealth of Massachusetts Rights-of-Way Management Regulations 333 CMR 11.00.

This YOP is a companion document to the Vegetation Management Plan (VMP) which has been approved by the Department of Agricultural Resources. It includes the Integrated Vegetation Management (IVM) approach being followed for the year reference as approved by the Massachusetts Department of Agriculture (MDAR).



INTRODUCTION TO THE PROGRAM

The Commuter Rail transports over a million passengers every year. In recent years, an increase in natural hazards, fallen vegetation, and slippery rail has become a significant concern. Extreme weather events such as high winds, blizzards, ice, and heavy rain exacerbate the problem of falling vegetation that has encroached on the rights-of-way (ROW). With this ever-increasing threat to safety and infrastructure, Massachusetts Bay Transportation Authority (MBTA) and Keolis have determined that the control of large canopies over the ROW and adjacent shoulder area must be addressed and maintained as described within the five-year Vegetation Management Plan (VMP). Large canopies and encroaching tall woody vegetation pose a high risk to regular operations by obstructing required locomotive and personnel line-of-sight along the ROW, in curves, at grade crossings, and signals. Visibility is critical to safe operations, and to the public navigating the many grade crossings throughout the Commonwealth every day.

Federal and State laws require railroads to manage vegetation on their ROW:

The Code of Federal Regulation - CFR 213.37 Vegetation.

Vegetation on railroad property which is on or immediately adjacent to roadbed shall be controlled so that it does not -

- 1. Become a fire hazard to track-carrying structures;*
- 2. Obstruct visibility of railroad signs and signals:*
 - a. Along the right-of-way, and*
 - b. At highway-rail crossings; (This paragraph (b)(2) is applicable September 21, 1999.)*
- 3. Interfere with railroad employees performing normal trackside duties;*
- 4. Prevent proper functioning of signal and communication lines; or*
- 5. Prevent railroad employees from visually inspecting moving equipment from their normal duty stations.*

Massachusetts Department of Environmental Protection and Department of Agricultural Resources (MDAR) developed 333 CMR 11.00: Rights of Way Management “to establish a state-wide and uniform regulatory process which will minimize the uses of, and potential impacts from herbicides in rights-of-way on human health and the environment while allowing for benefits to public safety provided by the selective use of herbicides.”

The purpose of 333 CMR 11.00, Rights of Way Management, is to promote the implementation of Integrated Vegetation Management (IVM) 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 rights-of-way. These regulations establish procedures which guarantee opportunity for public and municipal agency review and input.

On July 21, 2020, Keolis’s VMP was submitted to MDAR. The VMP was reviewed through a series of advertised public comment periods and meetings. The Conservation Commission, Board of Health, and Board of Selectmen or Mayor in each community was notified. No comments were received from the public, or individual communities. The VMP was approved February 3, 2021 for the period 2021-2025. The VMP is the long-term management plan for the railroad which describes the intended program for



vegetation control over a five-year period and includes both the chemical application and the manual and mechanical controls implemented through an IVM approach.

A Yearly Operational Plan (YOP) is required to be submitted to the MDAR every year herbicides are intended for use to maintain ROWs. The YOP provides the IVM program for the calendar year which incorporates chemical application and mechanical controls and drainage ditch clearing as required to ensure safe operations. The YOP is a companion document to the MDAR approved VMP. The communities that this YOP will be executed in have all received a Request for Determination for the zones of chemical applications outlined in maps per community. Currently the schedule of application will be defined depending on track time allowed following the application processes outlined in the approved VMP. Keolis will follow Best Management Practices outlined in the attached document throughout the year.

Upon receipt of this YOP, MDAR publishes a notice in the Environmental Monitor. The applicant will provide a copy of the YOP and Environmental Monitor notice to the Board of Health, Conservation Commission, and the chief elected municipal official for the city or town in which the herbicide treatment is proposed.

MDAR allows a 45-day comment period on the proposed YOP beginning with publication of the notice in the Environmental Monitor and receipt of the YOP and Environmental Monitor notice by each municipality.

Public notification of herbicide applications to the right-of-way is made by registered mail under separate cover at least 21 days in advance of the treatment. Notice is made to MDAR; the Mayor, City Manager or chairman of the Board of Selectman; the Board of Health; and the Conservation Commission of the municipality where the right-of-way lies.

The activities this YOP details are critical to the safety of employees, the passengers, and the communities the commuter rail passes through each day. To maintain and improve safety for all involved, the YOP is intended to:

- Clear the hazards of vegetation encroachment on the ROW for the safe passage of trains and their passengers.
- Reduce the incidence and effects of "slippery rail", caused by falling vegetation and vegetation growing adjacent to and/or in the roadbed.
- Remove and/or trim at-risk trees and other vegetation before snow, ice, and/or high winds bring them down onto the ROW.
- Maintain the pole lines, fiber optic cable, and the positive train control system along the ROW free of vegetation hazards to ensure reliability of operations.
- Improve the line-of-sight at crossings along the ROW by removing and or trimming hazardous vegetation that has encroached on the ROW.



The YOP permitted maintenance activities under the approve VMP:

- Chemical(s) to be applied pre-emergent Time of Year application- Spring
- Post-emergent/brush Time of Year application - late summer and early fall
- Chemical(s) for off-track brush control Time of Year application - late summer and fall
- Chemical (s) for stem treatment will be applied selectively throughout the year
- Mechanical controls will be managed throughout the year as needed
- Drainage ditch clearing will be managed throughout the year as needed

The Yearly Operating Plan for chemical application in 2021 will be implemented with the approval letter issued by MDAR and will follow the requirements of 333 CMR 11.



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ANY COMMENTS ON THIS YOP SHOULD BE DIRECTED TO:

Tim Dermody
Fair Dermody Consulting Engineers
19 Ocean Avenue, Suite 5
Portland, ME 04103
(207) 747-4651 ex. 4
Tim@FDCEngineers.com

AND

Clary Coutu
Director of Environmental Services,
Compliance and Sustainability
Keolis Commuter Services
(617) 222-8009
Clary.Coutu@keoliscs.com



I. THE COMPANY PERFORMING THE HERBICIDE TREATMENT

This company or contractor will perform the herbicide treatment. Applicators are certified by MDAR in the applicator category Right-of-Way Pest Control.

Company Name RWC, Inc.
Address Lockhouse Road
P.O. Box 876
Westfield, MA 01086
Telephone # (413) 562-5681
Contact Person(s) Brian Chateauvert

Company Name Northern Tree Service
Address 1290 Park Street
Palmer, MA 01069
Telephone # (800) 232-6132
Contact Person(s) Tim Lamotte

II. INDIVIDUAL REPRESENTING APPLICANT & SUPERVISING THE YOP

Individual supervising execution of the YOP and representing the railroad.

Name & Title Clary Coutu, Director Environmental Services,
Compliance and Sustainability
Address Keolis Commuter Services, LLC.
470 Atlantic Avenue
Boston, MA 02116
Telephone # (617) 222-8009



III. MUNICIPALITIES THE TREATMENT DESCRIBED WILL BE MADE

Maps of the individual municipalities affected by this Yearly Operational Plan can be found at:

FDCerailroadvegetation.com

➡ KEOLIS Commuter Services

➡ "YOUR MUNICIPALITY"

➡ Right-of-Way Maps

| | | |
|-------------------|-----------------|-------------------|
| Abington | Hamilton | Plymouth |
| Acton | Hanson* | Plympton |
| Andover | Haverhill* | Quincy |
| Ashland | Hingham | Randolph |
| Avon* | Holbrook | Raynham** |
| Ayer | Hopedale | Reading |
| Bellingham | Ipswich | Revere |
| Belmont | Kingston | Rockport |
| Berkley** | Lakeville** | Rowley |
| Beverly | Lawrence | Salem |
| Billerica | Leominster | Saugus |
| Boston | Lincoln | Scituate |
| Boxborough | Littleton | Shirley |
| Braintree | Lowell | Somerville |
| Bridgewater* | Lunenburg | Southborough |
| Brockton* | Lynn* | Stoughton |
| Brookline* | Malden | Swampscott |
| Cambridge | Manchester* | Taunton** |
| Canton | Mansfield** | Tewksbury |
| Chelsea | Medford | Wakefield |
| Cohasset | Melrose* | Walpole** |
| Concord* | Middleborough** | Waltham |
| Dedham | Milford | Wellesley* |
| East Bridgewater* | Millbury | Wenham |
| Everett | Milton* | West Bridgewater* |
| Fall River*/** | Natick | Westborough* |
| Fitchburg* | Needham | Weston |
| Foxborough*/** | New Bedford*/** | Westwood |
| Framingham* | Newbury | Weymouth |
| Franklin | Newburyport | Whitman |
| Freetown** | Newton | Wilmington |
| Gloucester | Norfolk | Winchester |
| Grafton* | North Andover* | Woburn |
| Halifax | Norwood* | Worcester |

*Application of herbicides will be limited to the non-sensitive areas until further notice

** Currently under maintenance by other rail operators until further notice

IV. HERBICIDES, APPLICATION RATES, CARRIERS, & ADJUVANTS

PROGRAM FOR THE ROADBED

The post-emergent herbicide program is designed to keep the ballast section and shoulder, yards, switches, signals, and grade crossings weed free. Areas scheduled for weed control treatments have been inspected for density of target vegetation to determine appropriate control methods.

| Location | Herbicide(s) | Carriers or Adjuvants | Application Technique | Application Rate |
|----------------------------|---|-----------------------|-----------------------|--------------------------|
| Sensitive area buffer zone | Aquaneat Milestone or Opensight Oust XP or Polaris AC Complete | Spreader Sticker | Foliar | 2 qts/acre |
| | | | Foliar | 7 oz/acre or 3.3 oz/acre |
| | | | Foliar | 4 oz/acre |
| | | | Foliar | 2 pts/acre |
| | | | Foliar | 8-16 oz/acre |
| Non-sensitive areas | Aquaneat Milestone or Opensight Oust XP or Polaris AC Complete | Spreader Sticker | Foliar | 2 qts/acre |
| | | | Foliar | 7 oz/acre or 3.3 oz/acre |
| | | | Foliar | 4 oz/acre |
| | | | Foliar | 2 pts/acre |
| | | | Foliar | 8-16 oz/acre |
| Touch-up applications | Aquaneat Milestone or Opensight Oust XP or Polaris AC Complete | Spreader Sticker | Foliar | 2 qts/acre |
| | | | Foliar | 7 oz/acre or 3.3 oz/acre |
| | | | Foliar | 4 oz/acre |
| | | | Foliar | 2 pts/acre |
| | | | Foliar | 8-16 oz/acre |

PROGRAM FOR AREAS ADJACENT TO THE ROADBED (BRUSH PROGRAM)

The brush control herbicide program is designed to prevent the re-growth of trees and other woody vegetation in areas adjacent to the roadbed. Areas scheduled for brush control treatments are limited to target vegetation which obscures visibility or interferes with railroad signs, signals, communication wires and other areas where vegetation represents a hazard to assets and safe operations.

| Location | Herbicide(s) | Carriers or Adjuvants | Application Technique | Application Rate |
|-----------------------|--|-----------------------|-----------------------|---------------------------|
| Non-sensitive areas | Polaris AC Complete Milestone or Opensight Escort XP | Methylated Seed Oil | Foliar | 20 oz/acre |
| | | | Foliar | 10 oz/acre or 5.5 oz/acre |
| | | | Foliar | 2 oz/acre |
| | | | Foliar | 8-16 oz/acre |
| | | | Foliar | 8-16 oz/acre |
| Non-sensitive areas | Polaris AC Complete Milestone or Opensight Escort XP | Methylated Seed Oil | Foliar | 20 oz/acre |
| | | | Foliar | 10 oz/acre or 5.5 oz/acre |
| | | | Foliar | 2 oz/acre |
| | | | Foliar | 8-16 oz/acre |
| | | | Foliar | 8-16 oz/acre |
| Touch-up applications | Polaris AC Complete Milestone or Opensight Escort XP | Methylated Seed Oil | Foliar | 20 oz/acre |
| | | | Foliar | 10 oz/acre or 5.5 oz/acre |
| | | | Foliar | 2 oz/acre |
| | | | Foliar | 8-16 oz/acre |
| | | | Foliar | 8-16 oz/acre |

V. HERBICIDE APPLICATION TECHNIQUES

Herbicide applications within the railroad ROW will be performed using low pressure application from a specialized hy-rail truck equipped with a spray boom. This method is suitable for application within the buffer zone, or restricted application zone of sensitive areas, as defined in 333 CMR 11.04. The spray vehicle is equipped with spray nozzles and controls to allow for treatment of the entire roadbed, or to selectively treat individual sections of the ballast and ballast shoulders. Within sensitive areas, a container will be used to catch any accidental dripping of herbicide. It is a trough-shaped apparatus mounted just behind and above the boom and will be hydraulically lowered to sit underneath the spray nozzles while the vehicle is traveling through areas where herbicide spraying is prohibited.

In order to assist in rapid identification of “sensitive areas” in the field, a pilot vehicle will proceed approximately 1/4 mile ahead of the applicator vehicle in order to signal ahead the location of “sensitive areas”.

Touch-up techniques control any target vegetation within the ballast and ROW that may have been missed or not treated during the initial phase. Control of vines and other vegetation that might creep onto the ballast from roots growing outside the original treatment boundaries can be managed as a selective, foliage, or spot spray. No more than 10% of the initially identified target vegetation on the right-of-way in any municipality may be treated during a touch-up application and the total amount of herbicide applied in any one year shall not exceed the limits specified by the label or YOP [per 11.03(8)(c)].

The brush control program is designed to control vegetation in areas adjacent to the shoulder using post-emergent herbicides. The herbicides selected will depend on the species of target vegetation present. The application method will depend on the density of target vegetation and previous mechanical control methods. Shrubs and herbaceous vegetation in these areas will be maintained where possible.

There are several methods for the application of post-emergent herbicides to the target vegetation. The variety of methods allows the applicator to selectively apply the herbicide directly onto the target vegetation. These applications are described below:

FOLIAR: Selective application of the herbicide to the foliage and or stem by low-pressure mechanical spray devices. This type of application is useful on busy, high speed rail lines where the work intervals between trains are too short for slower mechanical methods. Selective foliar application will not be used on vegetation over 12 feet in height, except for side trimming (333 CMR 11.03 (5)). Side trimming, when done with herbicides, is the selective application of the herbicide to target portions of a tree and avoids removal of the entire tree. During side trimming operations in residential areas, the railroads utilize low pressure application techniques and appropriate adjuvants to minimize drift. Experience indicates minimal drift occurs, usually within 5 feet of side trimming operations.

STEM OR BASAL SPRAYING: Selective application of the herbicide in a petroleum or crop oil base carrier to the lower portion of the main stem (trunk of a tree). The equipment for basal spraying is often a manual-pump apparatus.



CUT SURFACE: Application of herbicide to the stump immediately after a cutting procedure which may include mowing. Traditionally, the herbicide is manually applied directly to the cut stump surface.

VI. ALTERNATIVE CONTROL PROCEDURES

No alternative vegetation control methods are feasible within the track areas of the right-of-way. The IVM approach incorporates manual and mechanical trimming, cutting and removal of target vegetation within the entire ROW where the application of herbicide is prohibited and where vegetation may represent a hazard to assets and safe operations.

Mechanical control techniques include methods involving the use of hand tools, power equipment, and mowing. Mechanical control techniques are limited to woody and brush vegetation and include target vegetation that interferes with the ROW. Mechanical control removes unwanted vegetation in areas restricted for herbicide application and the areas adjacent to the roadbed and outside of the limit of herbicide application. Trees and brush interfere with pole lines, signal structures, low voltage power lines, communication and signal lines, reduce visibility, and intrude into the track zone.

An arborist works closely with the contractor and Keolis personnel to identify at risk and hazardous trees, vegetation for removal, and invasive species. Dead or dying, extensively decayed, or unstable trees are hazardous and shall be cut and removed. Cutting is used for trees having a diameter greater than six inches or in restrictive locations where other mechanical methods are not viable. All trees and brush identified as interfering with safe operations, personnel performing their duties, and public safety shall be trimmed within the ROW.

Mowing is the mechanical process of cutting a woody target species with cutting heads. Mowing is commonly used for trees having a diameter of less than six inches. These machines can be mounted on off-track, on-track, or hy-rail equipment. The railroad strives to limit the amount of mowing and/or cutting by maintaining as much of the right-of-way with herbicide applications.

VII. IDENTIFICATION OF TARGET VEGETATION

Prior to herbicide application, a review will be made noting location, density, and type of vegetation present along ROW. This information will be used to develop a herbicide application program that will be effective against target vegetation and minimize the amount of herbicide used.

In accordance with the Code of Federal Regulations, 49 CFR 213- Track Safety Standards, all vegetation growing in the ballast and ballast shoulder; in yards; and around switches, signals, signs, and highway grade crossings is considered target vegetation and must be controlled so that it does not:

- a) become a fire hazard to track-carrying structures;
- b) obstruct visibility of railroad signs and signals;
- c) interfere with railroad employees performing normal trackside duties;



- d) prevent proper functioning of signal and communication lines; and
- e) prevent railroad employees from visually inspecting moving equipment from their normal duty stations.

Woody vegetation growing in the ROW and adjacent to the shoulder will be trimmed, cut, or removed to promote the growth of low growing shrubs. Targeted woody vegetation will be that which has the potential to block visibility, increase slippery rail conditions, or invade the roadbed and overhead communication lines, and generally increases risk to safe operations.

VIII. METHODS TO DESIGNATE SENSITIVE AREAS ON THE ROW

Sensitive areas are defined in the Rights-Of-Way Management Regulations (333 CMR 11.02) are as defined in 333 CMR 11.04, any areas within the Right-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 limited to the following:

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

- (a) any Zone I;
- (b) 100 feet of any Class A Surface Water Source;
- (c) 100 feet of any tributary or associated surface water body where the tributary or associated surface water body runs within 400 feet of a Class A surface water source;
- (d) 10 feet of any tributary or associated surface water body where the tributary or associated surface water body is at a distance greater than 400 feet from a Class A surface water source;
- (e) a lateral distance of 100 feet for 400 feet upstream, on both sides of the river, of a Class B Drinking Water Intake;
- (f) 50 feet of any identified Private Well;
- (g) 10 feet of any Wetlands or Water Over Wetlands;
- (h) 10 feet of the mean annual high-water line of any river; and
- (i) 10 feet of any Certified Vernal Pool.

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

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



- (h) a distance of between 10 feet from any Certified Vernal Pool and the outer boundary of any Certified Vernal Pool Habitat; and
- (i) a distance of 100 feet of any Agricultural or Inhabited Area.

* Limited Spray Area(s) are those in which spraying is restricted to one annual application of a herbicide through low pressure foliar techniques.

Non-Sensitive Areas are upland areas and/or track not in proximity to sensitive areas and do not require specific precautions or herbicide restrictions.

Sensitive areas, no-spray areas, limited-spray areas, and non-sensitive areas will be marked at their boundaries with permanent color-coded markers. Sensitive areas considered to be readily identifiable in the field (i.e. agricultural and inhabited areas) will not be marked. The markers will be one or any combination of the following:

- color-coded signs attached to posts
- color-coded signs attached to the railroad ties
- color-coded painted rail sections

Sensitive and non-sensitive areas will be designated by the following color-codes:

| | |
|-------------|--|
| white | non-sensitive areas |
| blue | sensitive area in which a minimum of 12 months shall elapse between herbicide applications |
| double blue | sensitive areas in which a minimum of 24 months shall elapse between herbicide applications. |
| yellow | no spray zone |

IX. PROCEDURES FOR HANDLING, MIXING, & LOADING OF HERBICIDES

The herbicide application crew will wear protective clothing and personal safety equipment when mixing, handling, loading, or applying herbicide, including standard work clothing or coveralls, work gloves, and work boots. Latex or nitrile rubber gloves, as well as eye goggles are recommended to be worn during mixing of herbicide concentrate as some herbicides may cause mild eye and skin irritations.

Mixing and use of herbicide shall be consistent with the labeling instructions included on the packaging. The herbicide mix will be prepared from herbicide concentrate and water. In compliance with the regulations, the handling, mixing and/or loading of this material will not occur within 100 feet of any sensitive area. Wherever and whenever possible, the herbicide applicator will prepare the herbicide mix on non-porous surfaces, such as pavement or concrete.

Sources of Water and Safeguards to Prevent Contamination

Water used for herbicide mix will be obtained from hydrants and freshwater sources. During the herbicide mix preparations and during herbicide application, strict adherence to the following safeguards will be maintained:



- 1) Water will be obtained using trucks equipped with anti-siphon devices to eliminate herbicide backflow.
 - a) Trucks used to extract water from water bodies will be equipped with two such devices: one will be found directly behind the mouth of the hose and another will be at the coupling that joins the hose to the mix tank.
 - b) Hoses used to extract water from the hydrant will utilize the same setup as described above, except that a third anti-siphon device will be found within the coupling joining the hose to the hydrant.
- 2) The herbicide concentrate will not be added to the tank until the water has been obtained and the application apparatus is at least 100 feet outside a sensitive area.

Disposal of Herbicidal Wastes

Disposal of all herbicidal wastes will be the responsibility of the licensed applicator. It is the applicator's responsibility to ensure that such disposal will be carried out in an environmentally sensitive manner, in compliance with all Federal and State regulations and guidelines.

X. HERBICIDE FACT SHEETS, HERBICIDE LABELS, AND S.D.S. SHEETS

Below is a list of herbicides potentially in use by this Yearly Operational Plan. For the exact products used in this year's program please refer to page 3 of this document.

| MANUF. | PRODUCT NAME | ACTIVE INGREDIENT(S) | EPA REGISTRATION # |
|-----------------------|------------------------|--|--------------------|
| ALBAUGH, INC. | KRENITE S | AMMONIUM SALT OF FOSAMINE | 42750-247 |
| BASF | ARSENAL | ISOPROPYLAMINE SALT OF IMAZAPYR | 241-346 |
| BASF | ARSENAL POWERLINE | ISOPROPYLAMINE SALT OF IMAZAPYR | 241-431 |
| BASF | ARSENAL R.R. HERBICIDE | ISOPROPYLAMINE SALT OF IMAZAPYR | 241-273 |
| BAYER CROP SCIENCE | ESCORT XP | METSULFURON METHYL | 432-1549 |
| BAYER CROP SCIENCE | OUST EXTRA | SULFOMETURON METHYL & METSULFURON METHYL | 432-1557 |
| BAYER CROP SCIENCE | OUST XP | SULFOMETURON METHYL | 432-1552 |
| CORTEVA AGRI-SCIENCES | MILESTONE | AMINOPYRALID | 62719-519 |
| CORTEVA AGRI-SCIENCES | OPENSIGHT | AMINOPYRALID & METSULFURON METHYL | 62719-597 |
| CORTEVA AGRI-SCIENCES | GARLON 4 | TRICLOPYR, BUTOXY ETHYL ESTER | 62719-40 |

| | | | |
|-----------------------|-----------------------------|-------------------------------|-----------|
| CORTEVA AGRI-SCIENCES | GARLON 4 ULTRA | TRICLOPYR, BUTOXY ETHYL ESTER | 62719-527 |
| CORTEVA AGRI-SCIENCES | GLYPRO-PLUS | GLYPHOSATE | 62719-322 |
| CORTEVA AGRI-SCIENCES | ACCORD CONCENTRATE OR RODEO | GLYPHOSATE | 62719-324 |
| MONSANTO | ROUND UP PRO | GLYPHOSATE | 524-475 |
| NU FARM AMERICAS | AQUANEAT AQUATIC | GLYPHOSATE | 228-365 |
| NU FARM AMERICAS | PATRIOT SELECTIVE | METSULFURON METHYL | 228-391 |
| NU FARM AMERICAS | POLARIS AC COMPLETE | IMAZAPYR | 228-570 |
| NU FARM AMERICAS | POLARIS HERBICIDE | IMAZAPYR | 228-534 |
| NU FARM AMERICAS | SPYDER SELECTIVE | SULFOMETURON METHYL | 228-408 |
| NU FARM AMERICAS | RAZOR | GLYPHOSATE | 228-366 |
| NU FARM AMERICAS | RAZOR PRO | GLYPHOSATE | 228-366 |
| RAINBOW TREE CARE | CAMBISTAT | PACLOBUTRAZOL | 74779-3 |

LABELS & SAFETY DATA SHEETS (SDS):

The labels and SDS sheets for the above products can be found by:

1. Open your internet browser and enter the following address in the **Address bar**:
<http://www.cdms.net/Label-Database>
2. Select the **Manufacture** (as found above) you wish to be informed about from the side bar on the left side of the page.
3. A list of products will appear. Please be sure to reference the **Product Name** to locate the correct information.

HERBICIDE FACT SHEET:

Herbicide fact sheets for the above products can be found by:

1. Open your internet browser and enter the following address in the **Address bar**:
<http://www.mass.gov/eea/agencies/agr/pesticides/rights-of-way-sensitive-area-materials-list.html>
2. Choose the link that corresponds to the **Active Ingredient** present in the product.

Hard copies of any of these documents may also be obtained by calling Fair Dermody Consulting Engineers at (207) 747-4651



XI. EMERGENCY CONTACTS

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

Herbicide Label

Herbicide Fact Sheet

Herbicide Safety Data Sheet

Herbicide Manufacturer

BASF Ag Products (800) 545-9525

Bayer Environmental Sciences (866) 992-2937

Corteva Agri-Sciences (800) 992-5994

Nufarm Turf & Specialty (800) 345-3330

Rainbow Tree Care (952) 922-3810

Massachusetts Pesticide Bureau (617) 626-1784

Massachusetts DEP Emergency Response (888) 304-1133

Chemtrec (800) 262-8200

EPA National Pesticide Information Center (800) 858-7378

Massachusetts Poison Control Center (800) 222-1222

Local Community Chief of Police and/or Fire Chief:

| | | | | | |
|----------------|----------------|---------------|----------------|----------------|----------------|
| Abington | (781) 878-3232 | Hamilton | (978) 468-1212 | Plymouth | (508) 830-4218 |
| Acton | (978) 264-9638 | Hanson | (781) 293-4625 | Plympton | (781) 585-3339 |
| Andover | (978) 475-0411 | Haverhill | (978) 373-1212 | Quincy | (617) 479-1212 |
| Ashland | (508) 881-1212 | Hingham | (781) 749-1212 | Randolph | (781) 963-1212 |
| Avon | (508) 583-6677 | Holbrook | (781) 767-1212 | Raynham | (508) 824-2716 |
| Ayer | (978) 772-8200 | Hopedale | (508) 473-8444 | Reading | (781) 944-1212 |
| Bellingham | (508) 966-1515 | Ipswich | (978) 356-4343 | Revere | (781) 284-1212 |
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