



Right-of-Way Permit Public Comment Response Summary

Date: May 16, 2023

The Agency of Agriculture, Food & Markets (Agency) requires an approved permit for all right-of-way pesticide applications. Permits are required prior to treating all transmission lines, highways, airport approaches, pipelines, railroads, and railroad yards. Permits are not required to treat electric power substations, pole yards, storage yards, pipeline substations, highway garages and storage areas, and airport runways, taxi-strips, and storage areas. Pursuant to the Vermont Rule for Control of Pesticides, all right-of-way permit applications received by the Agency were posted for 30 days for public review on the Agency [right-of-way permit website](#). Comments received during the 30-day posting period were compiled and evaluated by Agency staff.

The public comment response summary provides responses from the Public Health and Agricultural Resource Management (PHARM) Division to the questions and comments that were received during the public comment period on right-of-way draft permits and applications.

Summary of Comments / Questions

This response summary groups the comments/questions received by permit applicant and provides the PHARM Division's responses. Comments and questions have been quantified, summarized and combined into common themes. The summarized comments are in bold below, with the PHARM Division's response in plain text following.

Vermont Electric Power Company (VELCO) (0 comments received)

No public comments were received referencing this specific application.

Vermont Electric Coop (0 comments received)

No public comments were received referencing this specific application.

Green Mountain Power (4 comments received)

1) Deny the use of chemicals and require only mechanical weed removal.

Mechanical control of unwanted, and potentially hazardous, vegetation is an important part of Green Mountain Power's integrated vegetative management plan. However, it is still necessary to use chemical control as part of a systematic approach to encourage the development of the grass, herb, and shrub stages of plant succession that is required in utility right-of-way management. Green Mountain Power implements manual cutting to create sprout growth of optimum size to be identified and controlled by application of herbicides. In areas where herbicide applications occur within the ROW, the tree population and stem densities decrease

and the shrub-herb-grass population increase. The net result is a gradual decrease in the amount of undesirable plant species to manage, thus the reduction of herbicide rates on future management cycles. In addition, mechanical control is not without risk to workers operating tools such as trimmers, chain saws, and brush hogs on uneven terrain.

The Agency takes a serious approach to balancing your concerns with the requirements of maintaining a utility right-of-way and worker safety.

Vermont Agency of Transportation (VTRANS) (6 comments received)

1) Deny the use of chemicals and require only mechanical weed removal in all Agency of Transportation right-of-way areas.

The organizations responsible for the maintenance of Vermont's utilities and roadways use herbicides as part of an integrated vegetation management plan, which also includes alternative treatments like physical and mechanical methods for weed removal, in order to preserve the infrastructure and safety of our public transportation and utility byways. Chemicals are used in the areas where mechanical control is not feasible.

2) Agency of Transportation permit application does not list specific towns where treatment will occur.

It is correct that the Agency of Transportation application does not specify towns receiving treatment in section B of the application, this is because their right-of-way extends statewide along the entirety of the State Highway system. However, their integrated vegetative management plan, permit application and their previous years spray records indicate that pesticide application will only take place where there are guardrails present on the highway. The ROW permit for Agency of Transportation remains unchanged from years past in regards to the absence of specific towns and authorizing the use of herbicides along the State Highway system, specifically guardrail applications and other areas that require chemical vegetation removal for worker and general public safety concerns addressing poisonous plants. The Agency of Transportation Pesticide Program Map can be accessed to see where applications are permitted along their ROW: [VTrans Pesticide No Spray \(arcgis.com\)](https://arcgis.com).

Vermont Rail Systems [includes Vermont Railway, Clarendon & Pittsford Railroad, Green Mountain Railroad, Washington County Railroad – CT River Division, Washington County Railroad – Barre Division] (11 comments received)

1) The Burlington Board of Health requests notification at least 24 hour prior to pesticide application to railway ROW within city of Burlington. Also requests VT Railway provide notice of intent to a newspaper that does not require purchase or to local online news source for more equitable public notification.

The Agency will notify the Burlington Board of Health at least 24 hours prior to pesticide application to the railroad right-of-way within the City of Burlington. This will include treatment to the Vermont Railway (south of College St) and to New England Central Railroad (north of College St). If the treatment schedule is known ahead of time (weather permitting), notification will occur earlier.

To address your concerns of equitable public notification, the VT railway notification plan will comply with the Vermont Rule of Control of Pesticides and include three spot messages per day on each of two radio stations in the area of application on two consecutive days during the two-week period prior to the commencement of application.

2) Opposition to spraying glyphosate on VT Railway and Clarendon & Pittsford Railway because it is harmful to pollinators.

All the products that are being requested for use to control vegetation along rights-of-way on the Clarendon and Pittsford Railroad are registered with the EPA and therefore have gone through an extensive risk assessment evaluating potential harm to humans, wildlife, fish, and plants, including endangered species and non-target organisms. In addition, the EPA evaluates the potential for contamination of surface water or groundwater from leaching, runoff and spray drift. After reviewing available scientific data on the pesticide product, the comprehensive risk assessments are used to make regulatory decisions and ensure the product labeling mitigates identified risks of concern.

The Vermont Rule for Control of Pesticides, the specific permit conditions, and the product labels, provide requirements to mitigate potential risks to protect human health, safety, and welfare and Vermont's environment, pollinators, and waterways. The permit and state regulations include mandatory buffers around surface waters, and public and potable groundwater sources and surface water intakes. We conduct annual inspections of every permit holder to ensure that pesticide applications are being made in compliance with the labels, the permit and the Vermont Rule for Control of Pesticides.

We greatly appreciate your participation in the public comment period for ROW permits and will continue to provide information and remain transparent throughout this process. Our goal is to balance the need for vegetation control along rights-of-way to maintain the infrastructure, operation, and visibility for the safety of operators, workers, and the general public with the protection of the environment and public health, safety and welfare. If you are aware of a specific incident or location where you are concerned products are being applied to a right-of-way in violation of the Vermont Rule for Control of Pesticides, the permit, or the product label, please report to the Agency and we will investigate.

3) Why have railroads increased their spray width from 10ft each side of center line to 12ft each side of center line?

The permit condition reads as follows: "The spray width shall be no greater than 12 feet from either side of the centerline of the tracks or no greater than the width of the ballast". This has been the condition and permit language since 2018 and contains the exception that spray width can be no greater than the width of the ballast. The ballast is the area of crushed stones under the tracks and is responsible for maintaining a level foundation and bearing the weight of the tracks and train. Weeds and their roots can compromise the structural integrity of the ballast and therefore railroad tracks, without chemical control of the weeds the risk of derailment increases.

4) VT Railway must be cautioned against using either Semera or Payload herbicide on Burlington's waterfront. I am alarmed that this herbicide is their choice, and yours by permit, for this location, and urge you to require a different herbicide.

The Vermont Railway, Inc. applied to the Vermont Agency of Agriculture, Food and Markets (the Agency) for a permit to conduct a Right-of-Way pesticide application, in which Vermont Rail requested to use a combination of pre-emergent and post-emergent herbicides to control vegetation on tracks, ballast systems, signaling devices, and right-of-way line of sight on its rails. This control is needed to maintain rail safety. It is particularly important to use herbicides to maintain the integrity of the railroad ballast system. Vegetation growing in the ballast causes several problems – roots loosen the rock ballast, vegetation promotes accumulation of particulates which reduces water flow through the ballast, and growing and decaying vegetation retains moisture in the system. Federal railroad standards require plant-free ballast to maintain rail safety. Failure to maintain ballast can lead to the need to reduce speeds and can lead to derailments. Requirements for ballast and railway maintenance are particularly stringent for passenger rail.

Mechanical removal of plants is not a valid option because the plants will have already established root systems in the ballast and under the ballast by the time the plants were large enough to be manually controlled. This is in addition to safety concerns for the workers and the impracticality of using manual labor to perform this control.

The Agency required several measures to reduce risks to bystanders and the environment from the application of these herbicides, which are detailed in the Vermont Rail permit. For the area in Burlington that borders Lake Champlain the following conditions are required:

- Limiting the use of a pre-emergent herbicide to a single application of flumioxazin-containing product.
- Spot treatments of glyphosate-containing products are allowed as needed in this area following pre-emergent application.
- Applications cannot occur on a weekend or holiday.
- Applications must be made prior to 6:00 a.m.
- The Agency must be notified 24 hours prior to application being made to allow notification of the Burlington Board of Health and to allow for an inspection by the Agency.

Prior to issuing the VT Railway 2023 permit, we reviewed the USEPA document Flumioxazin: Proposed Interim Registration Review Decision, Case Number 7244, June 2020, (attached) which includes the most recent EPA human and ecological risk assessment of flumioxazin, and the environmental fate and exposure summary from the National Library of Medicine, National Center for Biotechnology Information ([Flumioxazin | C19H15FN2O4 - PubChem \(nih.gov\)](#)).

Flumioxazin was selected from the requested materials due to relatively favorable chemical and toxicity characteristics. Of the products that were proposed by Vermont Rail, this active ingredient had the lowest potential to leach through rainfall to Lake Champlain, while still having low risks to humans and wildlife. Below is a comparison of the partition coefficients for the requested products:

Pesticide	CAS #	
		Koc
Flumioxazin	103361-09-7	13,000
glyphosate	1071-83-6	2,600-4,900
metsulfuron methyl	74223-64-6	4-345
sulfometuron methyl	74222-97-2	107
diquat dibromide	85-00-7	2,000
aminopyralid	150114-71-9	1.04-24.3
imazapyr	81334-34-1	8.81

Because flumioxazin has the highest partition coefficient, it is the least likely to leach from the site of application. As you know, risk from pesticide application is a function of hazard and exposure. In this case, risk for water contamination and effects on aquatic life is substantially reduced due to the reduction in the chance of exposure to the material due to its binding to the ballast material and soil. In addition, the EPA assessment concluded low risks of human and wildlife effects at the labeled use rate.

The permit condition that limits the use in this area to a single application further reduces possible risks from this material, while maintaining the beneficial use of vegetation control in the railroad ballast.

The Agency will monitor the use of this product and adherence to the permit conditions.

- 5) Request to extend permit condition to make applications before 6am to include Lakeside to Harrison Ave and from College St to one block south of City Market. In addition, restrict applications to ballast only.**

The restricted area was extended last year from College St. to Flynn Ave, where previously the southern boundary was Maple St. The Agency maintained the restricted area defined in the Vermont Railway 2022 permit. The permit condition, "The spray width shall be no greater than 12 feet from either side of the centerline of the tracks or no greater than the width of the ballast" will remain in the 2023 permits and restrict applications to the width of the ballast.

- 6) The VT Railway ROW lies adjacent to highly public areas and residential homes, if they insist on using toxic chemicals it must be done when most people will not be exposed. Please require early treatment to residential area south of Lakeside Avenue. In addition, what specific treatments and buffers will be used on the bridge at Barge Canal? Where will tank mix be used and what drift retardant and surfactants will be used?**

Because of the specific questions posed, this public comment was forwarded to the Vermont Rail System (VRS) for response:

Railroads in Vermont and elsewhere have a responsibility to operate safely and to maintain tracks and rail surfaces consistent with federal regulatory requirements and the interests of our employees and train crew. Accordingly, it is VRS's position that the responsible application of

EPA approved herbicides on the railroad right of way by qualified licensed applicators as part of an integrated vegetation management plan is safe and appropriate and a necessary element of essential track maintenance as mechanical controls have proven ineffective. When narrowly applied consistent with label directions, VRS believes that the product mix detailed in its herbicide program is sufficiently protective of human health such that time of day restrictions are not warranted, especially as members of the public are already explicitly prohibited under state law from entering into and upon the railroad right-of-way at any time. Nevertheless, VRS has acknowledged and abides by the current permit conditions imposed in certain areas south of College Street.

All permits as issued already include buffer zones around waterways, water sources, and surface waters. The buffer zones are not unique to Burlington. Since all approved permits include buffers, railroad bridges and areas in close proximity to water crossings, including the bridge over the Barge Canal, are already subject to protective restrictions. VRS believes that additional restrictions on application of EPA approved herbicides along the right-of-way would be inconsistent with its obligation to protect rail infrastructure and enhance rail safety throughout Vermont. In particular, Surf-Ac 820 will be used as a wetting agent/surfactant and MORE will be used as a drift retardant per label requirements and as detailed in the permit application.

Finally, VRS provides direct communication to the Department regarding scheduled applications and provides the public with advance notice that herbicides are regularly applied to the right of way through newspaper and radio advertising. VRS believes that notice consistent with current state regulatory requirements is effective and appropriate and preferable to a patchwork of potentially inconsistent municipal notice requirements.

New England Central Railroad (NECR) (4 comments received)

- 1) The Burlington Board of Health requests notification at least 24 hour prior to pesticide application to railway ROW within city of Burlington. Also requests VT Railway provide notice of intent to a newspaper that does not require purchase or to local online news source for more equitable public notification.**

The Agency will notify the Burlington Board of Health at least 24 hours prior to pesticide application to the railroad right-of-way within the City of Burlington. This will include treatment to the Vermont Railway (south of College St) and to New England Central Railroad (north of College St). If the treatment schedule is known ahead of time (weather permitting), notification will occur earlier.

To address your concerns of equitable public notification, the VT railway notification plan will comply with the Vermont Rule of Control of Pesticides and include three spot messages per day on each of two radio stations in the area of application on two consecutive days during the two-week period prior to the commencement of application.

- 2) Increased spray width from 10ft to 12ft from center line, thus endangering non-target species, water quality and human health. Please return to 10ft spray width.**

The permit condition reads as follows: "The spray width shall be no greater than 12 feet from either side of the centerline of the tracks or no greater than the width of the ballast". This has

been the condition and permit language since 2018 and contains the exception that spray width can be no greater than the width of the ballast. The ballast is the area of crushed stones under the tracks and is responsible for maintaining a level foundation and bearing the weight of the tracks and train. Weeds and their roots can compromise the structural integrity of the ballast and therefore railroad tracks, without chemical control of the weeds the risk of derailment increases.

- 3) Specific conditions proposed for New England Central Railroad permit for treatment along Burlington waterfront: 1. Between College Street and Depot Street adjust spray pattern to 6 ft or tie end to tie end in the area due to proximity of 7 drains to the tracks that are connected to stormwater drainage to Lake Champlain; 2. Require disclosure of whether herbicides will be used separately or combined and disclose the drift retardants or surfactants to be combined with herbicides.**

The Agency maintained the current conditions for the area between College Street and North Avenue, and the Agency took water samples from the storm drain outlet at the Burlington waterfront after a rain event following application. The current conditions for the area between College Street and North Avenue, requiring applications before 6am and not on weekends or holidays and glyphosate only products, encompass the area between College Street and Depot Street. We have previously received public comment concerning the location of the storm drains in this area. Last year we conducted an inspection of the application and the Agency collected samples from the storm drain outlet pipes verified to be connected to the drains of concern. Two water samples were collected on June 22, 2022, which was after the first significant rain event following the one application of glyphosate to this stretch of track on June 20, 2022. No detectable levels of glyphosate, AMPA (breakdown product of glyphosate), or other pesticides potentially applied in the past including aminopyralid, clothianidin indaziflam, metsulfuron-methyl, were found.

The permitted companies and any contracted commercial pesticide applicators are required to maintain, and provide to the agency, routine operational records that must contain the following:

- name and address of the person for whom the pesticide was applied;
- pest treated for;
- location of the pesticide application;
- size of the area treated;
- crop, commodity, stored product, or site that the pesticide was applied;
- time and date of the pesticide application;
- brand name or product name of the pesticide applied;
- EPA registration number of the pesticide applied;
- total amount of the pesticide applied per location per application and
- name and certification number of the certified applicator that made or supervised the application, and, if applicable, the name of any noncertified applicator(s) that made the application under the direct supervision of the certified applicator.

St. Lawrence & Atlantic Railroad (0 comments received)

No public comments were received referencing this specific application.

Canadian Pacific Railroad (0 comments received)

No public comments were received referencing this specific application.

Town of Addison (0 comments received)

No public comments were received referencing this specific application.

Village of Old Bennington (0 comments received)

No public comments were received referencing this specific application.

National Grid (0 comments received)

No public comments were received referencing this specific application.

Pan Am Railway (0 comments received)

No public comments were received referencing this specific application.

General Comments / Questions (70 comments received)

Comments and questions received that did not pertain to a specific application received response addressing their specific questions and including the following topics:

Thank you very much for your comments and concerns regarding the right-of-way (ROW) permits issued by the Public Health and Agricultural Resource Management (PHARM) Division of the Agency of Agriculture, Food and Markets. All the products that are being requested for use to control vegetation along rights-of-way are registered with the EPA and therefore have gone through an extensive risk assessment evaluating potential harm to humans, wildlife, fish, and plants, including endangered species and non-target organisms. In addition, the EPA evaluates the potential for contamination of surface water or groundwater from leaching, runoff and spray drift. After reviewing available scientific data on the pesticide product, the comprehensive risk assessments are used to make regulatory decisions and ensure the product labeling mitigates identified risks of concern.

The [Vermont Rule for Control of Pesticides](#), the specific permit conditions, and the product labels, provide requirements to mitigate potential risks to protect human health, safety, and welfare and Vermont's environment and waterways. The permit and state regulations include mandatory buffers around surface waters, and public and potable groundwater sources and surface water intakes. We conduct annual inspections of every permit holder to ensure that pesticide applications are being made in compliance with the labels, the permit and the Vermont Rule for Control of Pesticides.

While mechanical control of unwanted vegetation is considered and often included in the permit holders' integrated vegetative management plans, it is not always a feasible option within rights-of-way. The Agency of Transportation uses chemical means around guardrails only to maintain visibility, infrastructure and safety where mowing is not possible because of the guardrail. In addition, Weeds within the ballast of railroad tracks have to be completely eliminated, including the root systems, in

order to maintain the structural integrity of the tracks. This full weed control, only accomplished through chemical means without disturbing the ballast and soil, is necessary to meet rail safety requirements to reduce the risk of derailment.

We recognize that PFAS is an emerging issue and understand your concern. The PFAS contributions from the use of the materials included in the permits are orders of magnitude lower than contributions from other sources (waste disposal, use of PFAS materials such as fire fighting foam, land application of biosolids, etc.). For more information about the EPA's commitments to action concerning PFAS please refer to their PFAS Strategic Roadmap: [PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024 | US EPA](#)

Again, we greatly appreciate your participation in the public comment period for ROW permits and will continue to provide information and remain transparent throughout this process. Our goal is to balance the need for vegetation control along rights-of-way to maintain the infrastructure, operation, and visibility for the safety of operators, workers, and the general public with the protection of the environment and public health, safety and welfare. If you are aware of a specific incident or location where you are concerned products are being applied to a right-of-way in violation of the Vermont Rule for Control of Pesticides, the permit, or the product label, please [report to the Agency](#) and we will investigate.

Final issued 2023 permits are available on the Public Health and Agricultural Resource Management Division webpage: [Right-of-Way Permit Applications | Agency of Agriculture Food and Markets \(vermont.gov\)](#)