



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY
BOARD OF PESTICIDES CONTROL
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

WALTER E. WHITCOMB
COMMISSIONER

HENRY S. JENNINGS
DIRECTOR

MEMORANDUM

Date: April 15, 2015
To: Board Members
From: Henry Jennings
Subject: Criteria for Issuing Variances from Chapter 29, Section 6 for Railroad Spraying

Companies spraying railroads need to obtain variances from Chapter 29, Section 6 if they wish to make broadcast applications of herbicides within 25 feet of surface water. Railroad companies have traditionally requested to apply herbicides up to 10 feet of water crossings.

Historically, the Board has granted variances for railroad spraying provided that the applicant adheres to the "MDOT model." At the May 16, 2014, meeting the Board granted a one-year variance from Chapter 29 to Asplundh Tree Expert Company—Railroad Division. However, concern was voiced at the meeting about the runoff potential for one of the herbicides listed on the application. Those present came to the realization that no one was completely sure what the "MDOT model" entailed. Consequently, the Board directed the staff to work with MDOT and other experts to develop guidelines/criteria for the issuance of railroad variances prior to next season. Robert Moosmann of MDOT has developed some draft guidelines (attached) and the staff has been researching the available railroad spraying guidelines and the products commonly used.

After considering the purpose of the requirement for which Chapter 29 variances are issued, contemplating the Board's directive, and reviewing related material, the staff came to the conclusion that the principal question relates to the inherent runoff risks related to the product choices. Based on this premise, it led the staff to two possible paths: 1) conduct comprehensive comparative aquatic risk assessments on each of the potential products, or 2) rely on EPA's assessment by way of the surface water advisory statements on the product labels. Given that the staff is currently engaged in a rather ambitious assessment of pesticide risks to marine invertebrates, the latter option appears to be the more prudent choice.

The staff has excerpted the surface water advisories (attached) from the products containing the active ingredients used on last year's projects. A rather wide diversity in the level of concern in the advisories is quickly apparent. The water quality advisories reveal there is relatively little concern for glyphosate and imazapyr products. The Dupont Oust Extra (sulfometuron methyl and metsulfuron methyl) label contains a 25 foot buffer to surface water for railroad applications thereby precluding the Board from issuing a variance for that product. Labels for products containing aminopyralid (e.g. Chaparral), aminocyclopyrachlor (e.g. Streamline) and indaziflam (e.g. Esplande) all include surface water advisories that raise concerns. The staff would like guidance from the Board on whether products with these advisories should qualify for a variance.

In addition to screening for appropriate products for variance consideration, Bob Moosmann has identified a series of criteria the Board may want to consider as requirements for issuing variances for spraying within 25 feet of surface water, such as:

- Requiring the use of products that do not contain surfactants
- Requiring inclusion of a sticker/extender (like pineolene) for which there is scientific data supporting the ability of the adjuvant to adhere the herbicides to the substrate.
- Prohibiting—consistent with some of the ground water advisories—applications when significant precipitation is forecast for the application area within 24 hours
- Considering the time of year when spraying will be conducted. MDOT discourages railroad applications in May or June as these have been very wet months in recent years.

Action Needed: Final Adoption of the Rule, Basis Statement, Rulemaking Statement of Impact on Small Business, and Response to Comments for Chapters 22 and 28

- Jennings noted that these two rules were major substantive and so required legislative review. There wasn't a lot of discussion about the rules at the hearing or work session; the governor allowed them to become law without signing them. The Board can't change anything at this point: it can only vote on whether to finally adopt the amendments or not.

Chapter 22

- **Jemison/Morrill: Moved and seconded to adopt the rule as amended, the basis statement, the impact on small business and the response to comments and for Chapter 22 as written.**
- **In Favor: Unanimous**

Chapter 28

- **Jemison/Stevenson: Moved and seconded to adopt the rule as amended, the basis statement, the impact on small business and the response to comments and for Chapter 28 as written.**
- **In Favor: Unanimous**
- **Consensus was reached to support using enforcement discretion during the transition period and encourage applicators to begin posting immediately. Staff was directed to post information on the website and to send an email to applicators clarifying what the requirements are.**

5. Development of Guidelines for the Board Related to the Issuance of Variance Permits for Spraying Railroads Adjacent to Surface Waters

At the May 16, 2014, meeting, the Board granted a one-year variance from Section 6 of Chapter 29 to Asplundh Tree Expert Company—Railroad Division to make broadcast herbicide applications less than 25 feet from surface water. At that time, the Board also directed the staff to develop guidelines/criteria for issuance of railroad variances prior to next season. Robert Moosmann of MDOT has developed some draft guidelines and the staff has been researching the Board concerns. The staff will present its findings and seek feedback from the Board.

Presentation By: Henry Jennings
Director

Action Needed: Establish Criteria for Granting Railroad Variances

- Jennings explained that—for the last 28 years—the Board has been issuing variances to railroads from the Chapter 22 requirement to identify sensitive areas within 500 feet of the application site. Based on the current rulemaking, on May 25, companies conducting applications under category 6A will no longer be required to identify sensitive areas, so variances will no longer be necessary. For the last six or seven years the Board has been issuing two variances to railroads: one for Chapter 22 and one for Chapter 29 relating to broadcast spraying within 25 feet of water. Now we are focused on the latter. Companies are willing to maintain a 10 foot buffer, so we're only talking about a 15 foot strip. The staff had discussions around root uptake and ground water concerns, but this variance to Chapter 29 is only about surface water. The staff spent a lot of time looking for best management practices (BMP); there are a fair number for roadsides and transmission lines but not much for railroads. The management goals are very different: roadsides need to keep woody plants in control; railroads need to eliminate all vegetation in ballast. Bob Moosmann's document did an excellent job

of explaining what they're trying to do and why. This is rock ballast, usually with a steep embankment. It has the characteristics of a high risk area, but the variance only relates to a 15 foot wide strip. It looks like rock on the surface, but there is organic matter underneath. The staff began thinking we needed BMPs but ended up thinking it's really just about the products and the timing. The entire discussion started around a particular product that was listed in a variance request and whether that product was appropriate for this use. The Board could do a risk assessment covering all products, but that would take a lot of resources, so the staff decided to focus on the surface water advisories. Then the staff received a comparative risk assessment of products, submitted by Bayer, which was not in agreement with the label advisories. In talking with Brian Chateauvert from Railroad Weed Control, who has done the bulk of this work in Maine in the last 30 years, it became apparent that we need to consider weed resistance. One key component of resistance management is being able to change modes of action and chemistries. If resistance develops the application rates will go up, which will conflict with the water quality protection goals. Maybe the Board should focus on encouraging applicators to use other practices such as staying away from soap-like surfactants, using a sticker/extender instead; avoid spraying when rain is forecast; avoid spraying early in the year when the water table is high; using the lowest effective rates; using multiple chemistries. The staff discussed various options quite a bit, but there isn't sufficient information available that lets us tell them which products to use and which products to not use. Their programs already include their risk assessment balanced against the need for efficacious control. Remember that this variance is all about a 15 foot strip; there is no current evidence that this is causing issues. Bayer's assessment indicates a concern for sensitive vascular plants. When EPA does a risk assessment for aquatic risks they assume a worst case scenario as far as application rates, the volume of water being impacted. Dilution may be the solution, because the scenarios we're anticipating in Maine involve a higher volume of water than what's used in the EPA model.

- Hicks said there was nothing inherently wrong with Bayer's assessment. There were three products used in Maine that weren't included; she tried to find toxicity data for them. EPA hasn't done anything on glyphosate in recent years; in an earlier review that she did of glyphosate she found that much of its toxicity is from the surfactant, not from the glyphosate itself. Hicks handed out a chart comparing the products; the ones in gray were not included in Bayer's assessment.
- Bohlen noted that this discussion is on a 15 foot strip, sometimes along lake shores. Are there implications for this policy on operations elsewhere? If the Board makes recommendations for areas adjacent to water, how will that affect what is done away from the water. Chateauvert replied that they treat 12 feet in both directions from the center of the track. At a road crossing, where visibility is needed, they go out further. Where there's water they narrow the pattern and shut off some nozzles. Applicators essentially use the same chemistry throughout the project. There's no way to change chemistry on the fly. There are two tanks but they have to get out of the vehicle and manually change over. The separate tanks are used to extend the length of track that can be treated before stopping and loading on additional water. Along Sebago they apply glyphosate for five miles and once they're away from the water they change the mix, but they can't do that everywhere. When the booms are shut off, a gutter comes up to collect drips.
- Morrill asked what the protocol is within 10 feet of the water. Chateauvert said that if there is a weed issue, the railroad company goes in and turns up stones. This is very expensive. Usually the abutment is way back from the water and you can spray right up to the bridge. He noted that they are making just one application a year, at maintenance rates. For Streamline the maximum rate is 11.5 (ounces per acre) and they are using 6 (ounces per acre); The maximum rate for Esplanade is 10 (fluid ounces per acre) and they're using 4.75 to 5 (fluid ounces per acre).
- Morrill remarked that Bob Moosmann's report is great; really explains the treatments, the why and how. The Board is looking at the same variance permits year after year; if it's the same variance then it is a good rule. The product label directions also provide protection. Morrill isn't sure the Board should handcuff applicators by limiting product choices. He doesn't want to have to issue permits every year; why create a rule and then provide variances so no one has to follow it. Jennings

suggested there may be a public benefit to the variance since it generates this kind of discussion. The Board could grant multi-year permits. There may be circumstances where you would want the 25 foot buffer.

- Stevenson asked whether variances come before the Board; Jennings said that the first one does, but the Board has said the staff can re-issue variances if there are no changes. Or the Board can choose to see them every year. Last year when a specific variance (which included Streamline) came before the Board you granted a one-year variance but asked the staff to study the subject. Morrill noted that the Board has always said “follow the MDOT model” but couldn’t really define what that was, so it wanted to look at BMPs. Hicks noted that the biggest BMP is to follow the label. Morrill agreed, and the second is to follow the Board’s drift rule. Chateauvert noted that there is a large disincentive to mess up. Jennings remarked that there is not a high risk of drift because they are using large droplets and low boom height.
- Bohlen commented that the aquatic risk is more about rain events. The suggestions on the memo address those risks.
- Morrill agreed that that the ideas in the memo are good. He prefers to leave off specific product names; a better product might come along. He asked what “significant rain event” means. Fish suggested half an inch. Jennings said that in a drought half an inch isn’t very much, but if the soil is saturated then it’s a lot. Morrill suggested changing the language from significant rain event to rain forecast within 12 hours.
- Bohlen noted that the intent is to say that if it’s going to rain, don’t spray. The concern is about an elevated water table. It’s not just about precipitation. Can the language be rephrased to specifically address the water table, location specific?
- Granger said that a lot of herbicides are more effective at lower rates early in the season. He suggested leaving it to the judgment of the applicators.
- Bohlen suggested saying consider the condition of the water table when spraying early in the season. Chateauvert noted that if the ground is saturated, they shouldn’t be spraying anyway.
 - **Morrill/Stevenson: Moved and seconded: if variance permit request meets the criteria (from memo, as amended above) the staff can approve the variance for two years, otherwise bring requests to the Board; review the policy in two years.**
 - **In Favor: Unanimous**

6. Review of Interim Guidelines for Forest Pesticide Applications Intended to Prevent Discharges of Pesticides to Waters of the State

On June 27, 2012, the Board approved *Interim Guidelines for Forest Pesticide Applications* with the statement: “These guidelines were not developed for and are not intended to serve as standards for permitting purposes.” At that time there was not a general pesticide permit to cover pesticide applications made over or near water and these guidelines were intended to help prevent discharges of pesticides. In April, 2015, the Maine Department of Environmental Protection finalized a general permit for aerial application of forest pesticides and referenced BPC Best Management Practices. Additionally, at the Joint Standing Committee on Agriculture, Conservation and Forestry work session for LD 817, An Act Regarding Aerial Pesticide Spray Projects, there was discussion about adding references to technological advances for aerial spraying. Should anything be added to improve this document? Should the condition be removed given that the document has been referenced in a state permit?

Presentation By: Henry Jennings
Director

Action Needed: Provide Guidance to the Staff

**BOARD OF PESTICIDES CONTROL
APPLICATION FOR VARIANCE PERMIT
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)**

I. Gerald L. Blase (215) 603-1841
 Name Telephone Number
Asplundh Tree Expert Co. - Railroad Division
 Company Name
740 County Rd 400 Ironton OH 45638
 Address City State Zip

II. Gerald L. Blase CMA 1303
 Master Applicator (if applicable) License Number
919 Phillips Rd Warminster PA 18974
 Address City State Zip

III. **As part of your application, please send digital photos showing the target site and/or plants and the surrounding area, particularly showing proximity to wetlands and water bodies, to pesticides@maine.gov**

IV. Area(s) where pesticide will be applied:

St Lawrence & Atlantic Railroad Right of Way- 24' pattern (12' each side of Center of track)
leaving a minimum of 10' buffer zone from Lakes, Streams, Rivers, and flowing Surface
water.

V. Pesticide(s) to be applied:
Accord XRTII (EPA# 62719-517) 1-2 pts/ac ; Esplanada 200SC(EPA#432-1516) 3-4oz/ac;
Opensight (EPA# 62719-597)3oz/ac ; Oust Extra(EPA#352-622) 3-4oz/ac
all products mixed and applied in 25-30 gal of water/ acre

VI. Purpose of pesticide application:
The purpose of the application is to maintain the rail ballast and shoulder adjacent to the
ballast vegetation free for the following reasons including: 1) To allow for proper safety
inspection of the ties, switches, and rails 2) to maintain proper drainage. 3) To allow for
the inspection of trains. 4) to remove health and safety hazzards for the employees and
public. 5) to improve working conditions. 6) To reduce fire hazzards. 7) To improve
visibility at road crossings.

VII. Approximate dates of spray application:
between Mid-May 2015 through September

VIII. Application Equipment:
Hy-Rail Truck Equipment with fixed mounted booms approximately 18" above the rail

IX. Standard(s) to be varied from:
Chapter 29 Section 6 A , I to V-- Buffer Requirements (prohibiting pesticide applications within 25 feet of the mean high water mark).

Asplundh has chosen to use products that are proven to maintain the ballast weed free by using the lowest use rates possible to achieve the results. By following the State of Maine regulations with regard to buffer zones in which no spraying will occur and lowest use rates, and incorporating a good IPM program including track maintenance, that the risk to the Public and the Environment will be minimized.

X. Method to ensure equivalent protection:
Asplundh will monitor weather conditions in advance of applications cancel applications when rainfall is predicted.

The railroad will supply an advance hy-rail truck in which the patrolman will have the track charts that show river and stream crossings, ponds, and grade crossings. Radio Communication between the patrolman and the spray truck operator will allow advance notice to the operator of bridges , culverts, and water courses. Asplundh will leave a minimum 10' buffer from lakes, streams, rivers, and flowing surface water. The railroad will employ alternative methods to control vegetation in those skipped areas if required. Asplundh uses a drift control product (41-A) in every mix. A sticker product (like New Film IR) will also be used to help the mixture "stay in place" on the rail bed, and NO surfactants will be added to any mixture. None of the proposed herbicides are volatile.

Signed:  Date: 5/6/15

Return completed form to: **Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028**
OR E-mail to: pesticides@maine.gov

**BOARD OF PESTICIDES CONTROL
APPLICATION FOR VARIANCE PERMIT
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)**

I. Don Weimann (215) 806-8951
Name Telephone Number

Asplundh Tree Expert Co.- Railroad Division
Company Name

720 County Rd 400 Ironton OH 45638
Address City State Zip

II. Don Weimann CMA 43017
Master Applicator (if applicable) License Number

720 County Rd 400 Ironton OH 45638
Address City State Zip

III. **As part of your application, please send digital photos showing the target site and/or plants and the surrounding area, particularly showing proximity to wetlands and water bodies, to pesticides@maine.gov**

IV. Area(s) where pesticide will be applied:
St Lawrence & Atlantic Railroad Right of Way- 24' pattern (12' each side of Center of track)
leaving a minimum of 10' buffer zone from Lakes, Streams, Rivers, and flowing Surface
water.

V. Pesticide(s) to be applied:
Razor Pro(EPA# 228-366) 1-2 pts/ac ; Esplanada 200SC(EPA#432-1516) 3-4oz/ac;
Opensight (EPA# 62719-597)3oz/ac ; Spyder Extra(EPA#228-690) 3-4oz/ac
all products mixed and applied in 25-30 gal of water/ acre

VI. Purpose of pesticide application:
The purpose of the application is to maintain the rail ballast and shoulder adjacent to the
ballast vegetation free for the following reasons including: 1) To allow for proper safety
inspection of the ties,switches,and rails 2) to maintain proper drainage. 3) To allow for
the inspection of trains. 4) to remove health and safety hazzards for the employees and
public. 5) to improve working conditions. 6) To reduce fire hazzards. 7) To improve
visibility at road crossings.

VII. Approximate dates of spray application:
between Mid-May 2017 through September

VIII. Application Equipment:
Hy-Rail Truck Equipment with fixed mounted booms approximately 18" above the rail

IX. Standard(s) to be varied from:
Chapter 29 Section 6 A , I to V-- Buffer Requirements (prohibiting pesticide applications within 25 feet of the mean high water mark).

Asplundh has chosen to use products that are proven to maintain the ballast weed free by using the lowest use rates possible to achieve the results. By following the State of Maine regulations with regard to buffer zones in which no spraying will occur and lowest use rates, and incorporating a good IPM program including track maintenance, that the risk to the Public and the Environment will be minimized.

X. Method to ensure equivalent protection:
Asplundh will monitor weather conditions in advance of applications cancel applications when rainfall is predicted.

The railroad will supply an advance hy-rail truck in which the patrolman will have the track charts that show river and stream crossings, ponds, and grade crossings. Radio Communication between the patrolman and the spray truck operator will allow advance notice to the operator of bridges , culverts, and water courses. Asplundh will leave a minimum 10' buffer from lakes, streams, rivers, and flowing surface water. The railroad will employ alternative methods to control vegetation in those skipped ares if required. Asplundh uses a drift control product (CONTROL) in every mix. A sticker product (like New Film IR) will also be used to help the mixture "stay in place" on the rail bed, and NO surfactants will be added to any mixture. None of the proposed herbicides are volatile.

Signed: Donald Weimann Date: 3/24/17

Return completed form to: **Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028**
OR E-mail to: pesticides@maine.gov

**BOARD OF PESTICIDES CONTROL
APPLICATION FOR VARIANCE PERMIT
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)**

I. Robert W. Moosmann (207) 592-0774
Name Telephone Number

Maine Department of Transportation, Bureau of Maintenance & Operations
Company Name

16 State House Station Augusta Maine 04333-0016
Address City State Zip

II. Area(s) where pesticide will be applied:

- Selected State maintained roads and other transportation facilities such as buildings, maintenance lots, bridges, and railroads, and adjacent areas within the right of way thereof.
- Selected target plants include: evergreen trees up to 3 feet high and deciduous trees up to 6 feet high; grasses and weeds in guardrail areas, in pavement cracks, invasive plants; plants that present a health risk; or other plants necessary to control for transportation purposes.

III. Pesticide(s) to be applied:

The following products or equivalents may be used as the only product in the mix or in various combinations and concentrations.

Garlon 4 Ultra (triclopyr), Escort or MSM_60 (metsulfuron methyl), Arsenal Powerline Herbicide (imazapyr), Krenite S (fosamine ammonium), Streamline (aminocyclopyrachlor and metsulfuron methyl), Rodeo or Glyphosate 5.4 (glyphosate), Endurance (prodiamine), Oust or SFM_75 (sulfometuron methyl)

IV. Purpose of pesticide application:

- 1) Control of woody brush on roadsides to maintain safety clear zones, sight distances, enhance winter solar access to pavement, and provide snow storage.
- 2) Control of grasses and weeds in cracks in pavement in preparation for asphalt surface treatments.
- 3) Control of grasses and weeds in guardrail areas to enhance sight distances, visibility of and access to structures, signs, and other devices.
- 4) Control of invasive plants
- 5) Control of plants that present a health risk to department or contract workers.
- 6) Control of other plants necessary to control for transportation purposes.

V. Approximate dates of spray application: April 27, 2015 to December 1, 2015

VI. Application Equipment:

- Hypro 10 gpm diaphragm piston pump hydraulic sprayer with handgun or equivalent, 100 to 700 gallon tanks.
- Low pressure, low application rate, side mounted off center nozzles for roadside weed control spraying
- Low pressure, low application rate, no drift raindrop nozzle, handgun with extension wand
- Backpack and hand pump sprayers

VII. Standard(s) to be varied from:
Chapter 29 - Section 6. Buffer Requirement Part (A)

VIII. Reason for variance:

To provide control of brush, annual, or perennial plants growing within a distance from 25 feet to 10 feet from waters as defined in the regulation. Brush and other plants targeted for control will be those which impede visibility of the road, signs, guardrail, entrances, and other structures; cause shading of the road surface; are considered an invasive plant; are a health risk: or other plants necessary to control for transportation purposes.

IX. Method to assure equivalent protection:

- 1) Roadside brush control: use large nozzle disc size for enlarged droplet size, use a tank mix particulating agent for enlarged droplet size, use sticker-spreader-extender to adhere spray materials to ground or leaf surface and make rain fast, use pump pressure of 25-125 psi to maintain spray stream trajectory of less than 40 feet, use low volatile chemicals at lowest effective rates, maintain notification signage on spray trucks, offer no-spray agreements. Spray when ground is dry and not saturated with water. Avoid spraying when forecasts show a threat of heavy rains. Do not spray on rainy days and cease spray operations if rain is in the immediate forecast.
- 2) Roadside broadleaf weeds: use low pressure of 30 to 100 psi, low volume per acre techniques with side mounted off center nozzles that produce large droplets over a controlled spray pattern of 6 to 20 feet, use a slow ground speed of 15 mph or less, use a sticker extender to adhere spray materials to the ground or leaf surfaces and make rain fast, use low volatile chemicals at lowest effective rates, maintain notification signage on spray trucks, offer no-spray agreements. Spray when ground is dry and not saturated with water. Avoid spraying when forecasts show a threat of heavy rains. Do not spray on rainy days and cease spray operations if rain is in the immediate forecast.
- 3) Cracks in pavement, guardrail, invasive plants, plants that are a health risk, or other plants: use a low pump pressure of 25 to 50 PSI; use a tank mix particulating agent for enlarged droplet size, use a spray gun and spray nozzles that will produce raindrop size particles with no fine particle sizes that can drift away from target, use non-volatile chemicals at lowest effective rates, use a sticker-spreader-extender to adhere spray materials to ground or leaf surface and make rain fast, maintain notification signage on spray trucks. Spray when ground is dry and not saturated with water. Avoid spraying when forecasts show a threat of heavy rains. Do not spray on rainy days and cease spray operations if rain is in the immediate forecast.



Signed: _____ Date: 4/12/2015

Return completed form to: **Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028**

OR E-mail to: pesticides@maine.gov

BOARD OF PESTICIDES CONTROL
APPLICATION FOR VARIANCE PERMIT
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)

I. Robert W. Moosmann Office: (207) 624-3600 Cell: (207) 592-0774
Name Telephone Number

Maine Department of Transportation, Bureau of Maintenance & Operations
Company Name

16 State House Station Augusta Maine 04333-0016
Address City State Zip

II. Area(s) where pesticide will be applied:

- Selected State maintained roads and other transportation facilities such as buildings, maintenance lots, bridges, and railroads, and adjacent areas within the right of way thereof.
- Selected target plants include: evergreen trees up to 3 feet high and deciduous trees up to 6 feet high; grasses and weeds in guardrail areas, in pavement cracks, invasive plants; plants that present a health risk; or other plants necessary to control for transportation purposes.

III. Pesticide(s) to be applied:

The following products or equivalents may be used as the only product in the mix or in various combinations and concentrations.

Garlon 4 Ultra (triclopyr), Escort or MSM_60 (metsulfuron methyl), Arsenal Powerline Herbicide (imazapyr), Krenite S (fosamine ammonium), Rodeo (glyphosate), Endurance (proflaminate), Oust or SFM_75 (sulfometuron methyl)

IV. Purpose of pesticide application:

- 1) Control of woody brush on roadsides to maintain safety clear zones, sight distances, enhance winter solar access to pavement, and provide snow storage.
- 2) Control of grasses and weeds in cracks in pavement in preparation for asphalt surface treatments.
- 3) Control of grasses and weeds in guardrail areas to enhance sight distances, visibility of and access to structures, signs, and other devices.
- 4) Control of invasive plants
- 5) Control of plants that present a health risk to department or contract workers.
- 6) Control of other plants necessary to control for transportation purposes.

V. Approximate dates of spray application: May 15, 2017 to December 31, 2017

VI. Application Equipment:

- Hypro 10 gpm diaphragm piston pump hydraulic sprayer with handgun or equivalent, 100 to 700 gallon tanks.
- Low pressure, low application rate, side mounted off center nozzles for roadside weed control spraying
- Low pressure, low application rate, no drift raindrop nozzle, handgun with extension wand
- Backpack and hand pump sprayers

VII. Standard(s) to be varied from:
Chapter 29 - Section 6. Buffer Requirement Part (A)

VIII. Reason for variance:

To provide control of brush, annual, or perennial plants growing within a distance from 25 feet to 10 feet from waters as defined in the regulation. Brush and other plants targeted for control will be those which impede visibility of the road, signs, guardrail, entrances, and other structures; cause shading of the road surface; are considered an invasive plant; are a health risk: or other plants necessary to control for transportation purposes.

IX. Method to assure equivalent protection:

- 1) Roadside brush control: use large nozzle disc size for enlarged droplet size, use a tank mix particulating agent for enlarged droplet size, use sticker-spreader-extender to adhere spray materials to ground or leaf surface and make rain fast, use pump pressure of 25-125 psi to maintain spray stream trajectory of less than 40 feet, use low volatile chemicals at lowest effective rates, maintain notification signage on spray trucks, offer no-spray agreements. Spray when ground is dry and not saturated with water. Avoid spraying when forecasts show a threat of heavy rains. Do not spray on rainy days and cease spray operations if rain is in the immediate forecast.
- 2) Roadside broadleaf weeds: use low pressure of 30 to 100 psi, low volume per acre techniques with side mounted off center nozzles that produce large droplets over a controlled spray pattern of 6 to 20 feet, use a slow ground speed of 15 mph or less, use a sticker extender to adhere spray materials to the ground or leaf surfaces and make rain fast, use low volatile chemicals at lowest effective rates, maintain notification signage on spray trucks, offer no-spray agreements. Spray when ground is dry and not saturated with water. Avoid spraying when forecasts show a threat of heavy rains. Do not spray on rainy days and cease spray operations if rain is in the immediate forecast.
- 3) Cracks in pavement, guardrail, invasive plants, plants that are a health risk, or other plants: use a low pump pressure of 25 to 50 PSI; use a tank mix particulating agent for enlarged droplet size, use a spray gun and spray nozzles that will produce raindrop size particles with no fine particle sizes that can drift away from target, use non-volatile chemicals at lowest effective rates, use a sticker-spreader-extender to adhere spray materials to ground or leaf surface and make rain fast, maintain notification signage on spray trucks. Spray when ground is dry and not saturated with water. Avoid spraying when forecasts show a threat of heavy rains. Do not spray on rainy days and cease spray operations if rain is in the immediate forecast.



Signed: _____ Date: 4/27/2017

Return completed form to: **Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028**

OR E-mail to: pesticides@maine.gov

**BOARD OF PESTICIDES CONTROL
APPLICATION FOR VARIANCE PERMIT
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)**

I. BRIAN CHATEAUVERT (413) 562-5681
Name Telephone Number

RWC, INC.

Company Name

P.O. BOX 876, 248 LOCKHOUSE ROAD WESTFIELD, MA 01086-0876
Address City State Zip

II. BRIAN CHATEAUVERT CMA3046/6A 6B
Master Applicator (if applicable) License Number

11 STONEGATE CIRCLE WILBRAHAM, MA 01095
Address City State Zip

III. **As part of your application, please send digital photos showing the target site and/or plants and the surrounding area, particularly showing proximity to wetlands and water bodies, to pesticides@maine.gov**

IV. Area(s) where pesticide will be applied:

Orrington Rail Project - Orrington, ME

Pan Am Railways-48' pattern (24' each side center of track)

Belfast Moosehead Lake Railroad-24' pattern (12' each side center of track)

Presque Isle Industrial Council formerly Aroostook Valley Railroad-24' pattern (12' each side center of track)

Maine-State owned Railroad Tracks-48' pattern (24' each side center of track)

Sappi Fine Paper Mill, Hinkley, Maine-24' pattern (12' each side center of track)

Eastern Maine Railroad-48' pattern (24' each side center of track)

Maine Eastern Railroad-48' pattern (24' each side center of track)

Turner Island LLC Railroad, S. Portland, Maine-24' pattern (12' each side center of track)

Maine Northern Railway-48' pattern (24' each side center of track)

Central Maine & Quebec Railway-24' pattern (12' each side center of track)

V. Pesticide(s) to be applied: Various combinations of Aquaneat (Glyphosate), Polaris AC Complete (Imazapyr), Escort XP (Metsulfuron Methyl), Opensight (Potassium Salt of Pyridine), Esplanade 200SC (Indaziflam), Streamline (Aminocyclopyrachlor Metsulfuron methyl), in 30-60 gallons of water per acre.

VI. Purpose of pesticide application: the ballast, shoulder and areas adjacent to shoulder sections of the right-of-way (diagrams of typical spray patterns enclosed) must remain weed, grass and brush free for just some of the following reasons:

a. To allow for proper inspection of tie fastenings, switches & rails

b. To maintain proper drainage

c. To allow for inspection of trains

d. To remove health and safety hazards

e. To improve working conditions

f. To reduce fire hazards

g. To improve visibility at road crossings

VII. Approximate dates of spray application: June 1 through September 30, 2015

VIII. Application Equipment:
Hy-rail Truck Equipment with fixed mounted booms approximately 18 inches
above the rail.

IX. Standard(s) to be varied from:
Chapter 29 Section 6A, I to V - Buffer requirements (prohibiting pesticide
applications within 25 feet of the high water mark).

X. Method to ensure equivalent protection:
The railroad patrolmen have track charts which show rivers, streams, ponds,
road crossings, etc. He normally is in a track vehicle running ahead of the
spray unit and through the use of radio communication, gives a warning signal
where there are culverts, bridges with running water underneath and other
sensitive areas adjacent to the track. RWC, Inc. has mounted in cab controlled
gutters on the rear of our equipment to assure that no pesticides drip or enter
the waterways of the State of Maine when going over the bridges. RWC, Inc.
will leave a buffer of ten feet (10') from lakes, rivers, streams and surface
waters and in the case of a public water supply will only apply Glyphosate,
for a distance of one half mile before the site and one half mile beyond. Within
the ten-foot (10') buffer, alternative methods will have to be employed to control
vegetation. RWC Inc. will use drift control agents to reduce the chance of drift
and enlarged droplet size continue using nozzles that enlarge droplet size,
continue to use sticker-spreader-extender to adhere spray materials to ground
or leaf surface, continue to use low volatile chemical, continue to monitor
weather conditions and cancel applications when rainfall is predicted. RWC
will conduct the applications in a manner which protects surface water as
defined in Chapter 29, Section 6A.

Signed: Brian Chateauvert Date: 5/7/2015

Return completed form to: Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028
OR E-mail to: pesticides@maine.gov

FIGURE 1
RAILROAD AREAS REQUIRING VEGETATION CONTROL

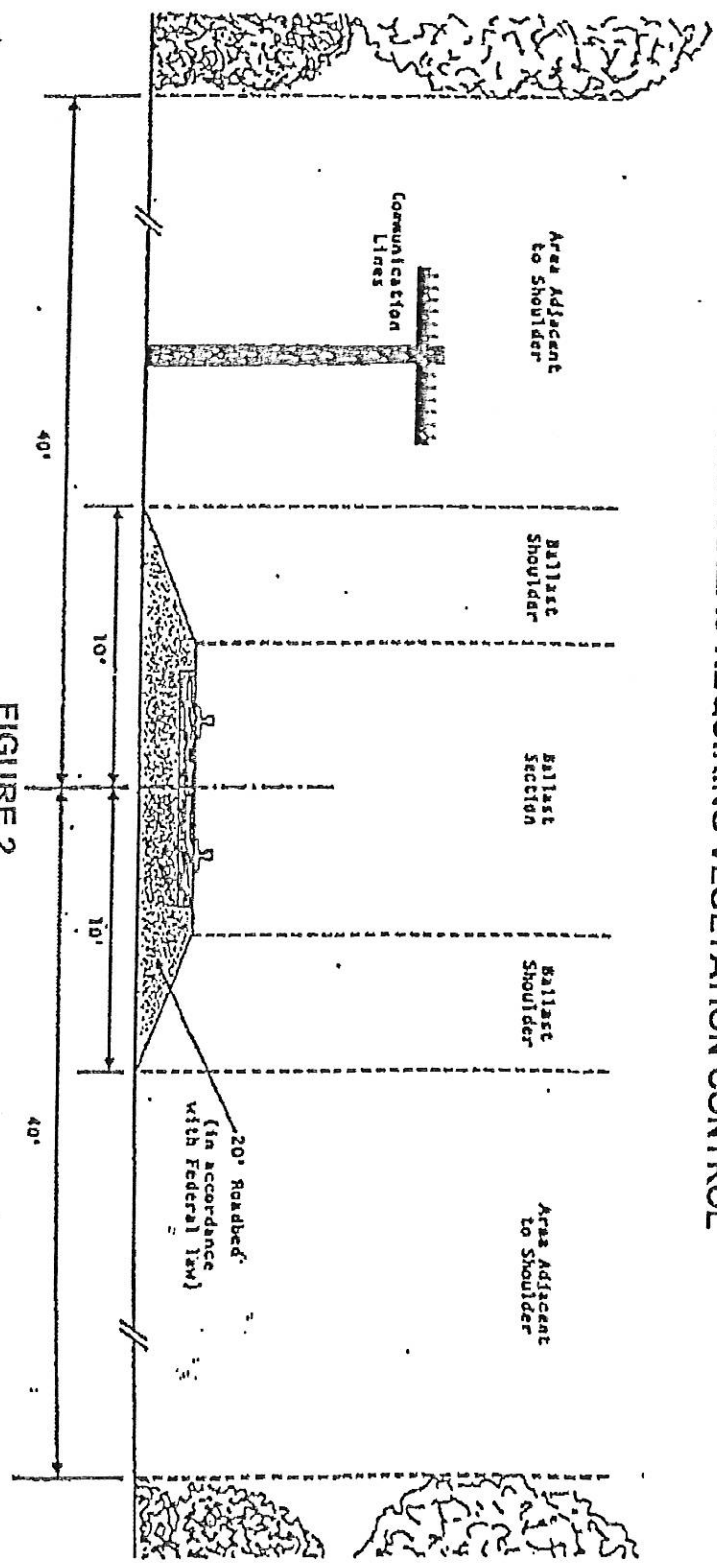
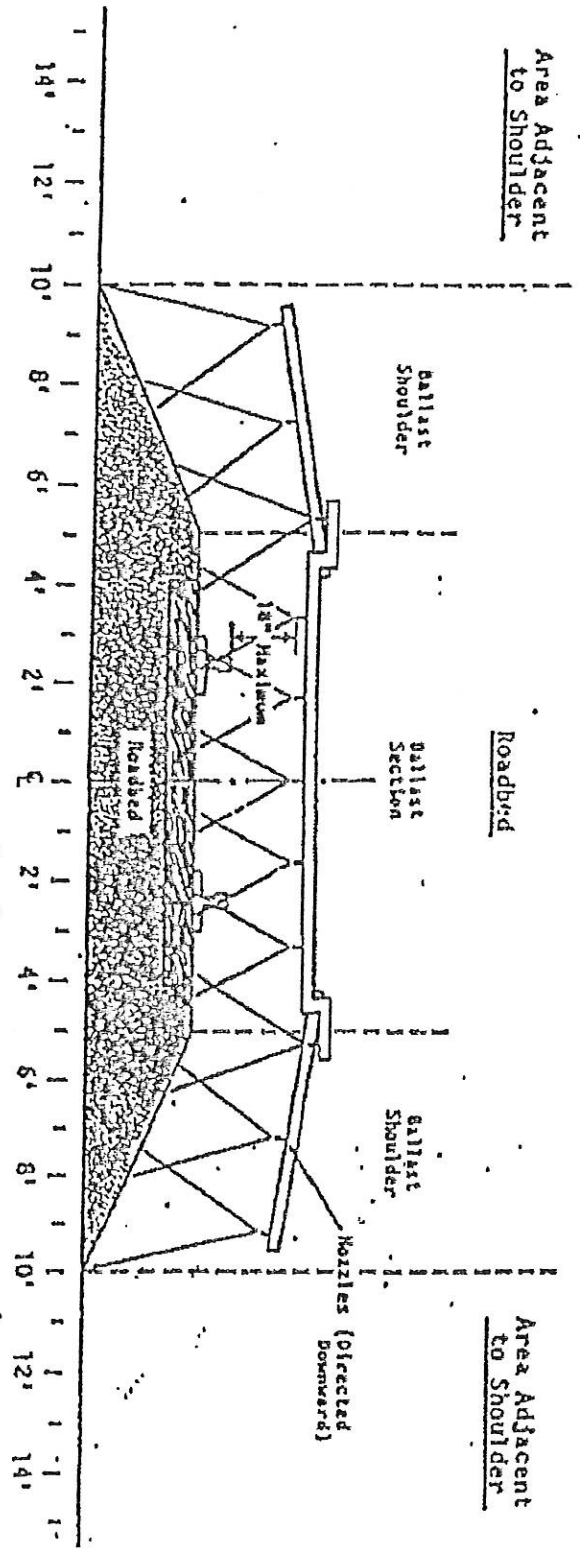


FIGURE 2

Notes: Spray can be controlled to selectively treat all portions (Ballast, Shoulder, and Adjacent Area) or any of the individual portions alone.



**BOARD OF PESTICIDES CONTROL
APPLICATION FOR VARIANCE PERMIT
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)**

I. BRIAN CHATEAUVERT (413) 562-5681
Name Telephone Number

RWC, INC.
Company Name

PO BOX 876, 248 LOCKHOUSE RD WESTFIELD, MA 01086-0876
Address City State Zip

II. BRIAN CHATEAUVERT CMA3046/6A 6B
Master Applicator (if applicable) License Number

11 STONEGATE CIRCLE WILBRAHAM, MA 01095
Address City State Zip

III. **As part of your application, please send digital photos showing the target site and/or plants and the surrounding area, particularly showing proximity to wetlands and water bodies, to pesticides@maine.gov**

IV. **Area(s) where pesticide will be applied:**

Pan Am Railways-48' pattern (24' each side center of track)

Belfast Moosehead Lake Railroad – 24' pattern (12' each side center of track)

Presque Isle Industrial Council – 24' pattern (12' each side center of track)

Maine – State owned Railroad Tracks – 48' pattern (24' each side center of track)

Sappi Fine Paper Mill, Hinkly, Maine – 24' pattern (12' each side center of track)

Eastern Maine Railroad – 48' pattern (24' each side center of track)

Turner Island LLC Railroad, S. Portland, Maine – 24' pattern (12' each side center of track)

Maine Northern Railway – 48' pattern (24' each side center of track)

Central Maine & Quebec Railway 48' pattern (24' each side center of track)

V. **Pesticide(s) to be applied:** Various combinations of Aquaneat (Glyphosate), Polaris AC Complete (Imazapyr), Escort XP (Metsulfuron Methyl). Opensight (Potasium Salt of Pyridine), Esplanade 200SC (Indaziflam), Viewpoint (Aminocyclopyrachlor Imazapyr Metsulfuron methyl) Method 50SG (Aminocyclopyrachlor), in 30-60 gallons of water per acre.

VI. **Purpose of pesticide application:** the ballast, shoulder and areas adjacent to shoulder sections of the right-of-way (diagrams of typical spray patterns enclosed) must remain weed, grass and brush free for just some of the following reasons:

- a. To allow for proper inspection of tie fastenings, switches & rails
- b. To maintain proper drainage
- c. To allow for inspection of trains
- d. To remove health and safety hazards
- e. To improve working conditions
- f. To reduce fire hazards
- g. To improve visibility at road crossings

- VII. **Approximate dates of spray application:** May 15th through September 30, 2017
- VIII. **Application Equipment:** Hy-rail Truck Equipment with fixed mounted booms approximately 18 inches above the rail for weed and grass control and brush booms with fixed directa spray and mini wobbler tips.
- IX. **Standard(s) to be varied from:**
Chapter 29 Section 6A, I to V – Buffer requirements (prohibiting pesticide applications within 25 feet of the high water mark).
- X. **Method to ensure equivalent protection:**
The railroads patrolmen have track charts which show rivers, streams, ponds, road crossings, etc. He normally is in a track vehicle running ahead of the spray unit and through the use of radio communication, gives a warning signal where there are culverts, bridges with running water underneath and other sensitive areas adjacent to the track. RWC, Inc. has mounted in cab controlled gutters on the rear of our equipment to assure that no pesticides drip or enter the waterways of the State of Maine when going over the bridges. RWC, Inc. will leave a buffer of ten feet (10') from lakes, rivers, streams and surface waters and in the case of a public water supply will only apply Glyphosate, for a distance of one half mile before the site and one half mile beyond. Within the ten foot (10') buffer, alternative methods will have to be employed to control vegetation. RWC, Inc. will use drift control agents to reduce the chance of drift and enlarged droplet size continue using nozzles that enlarge droplet size, continue to use sticker-spreader-extender to adhere spray materials to ground or leaf surface, continue to use low volatile chemical, continue to monitor weather conditions and cancel applications when rainfall is predicted. RWC will conduct the applications in a manner which protects surface water as defined in Chapter 29, Section 6A.

Signed: __Brian Chateauvert____ Date: __January 24, 2017_____

Return completed form to: **Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028**
OR E-mail to: pesticides@maine.gov

FIGURE 1
RAILROAD AREAS REQUIRING VEGETATION CONTROL

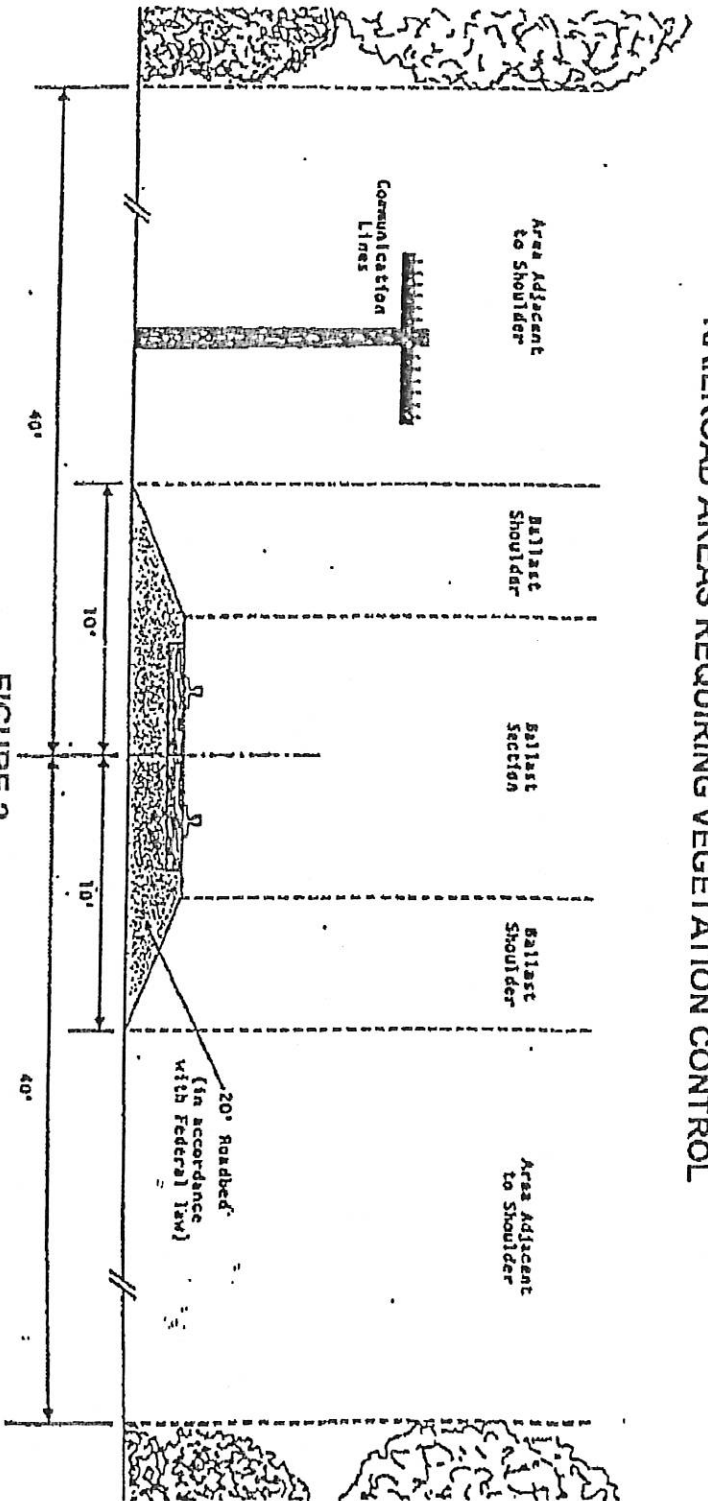
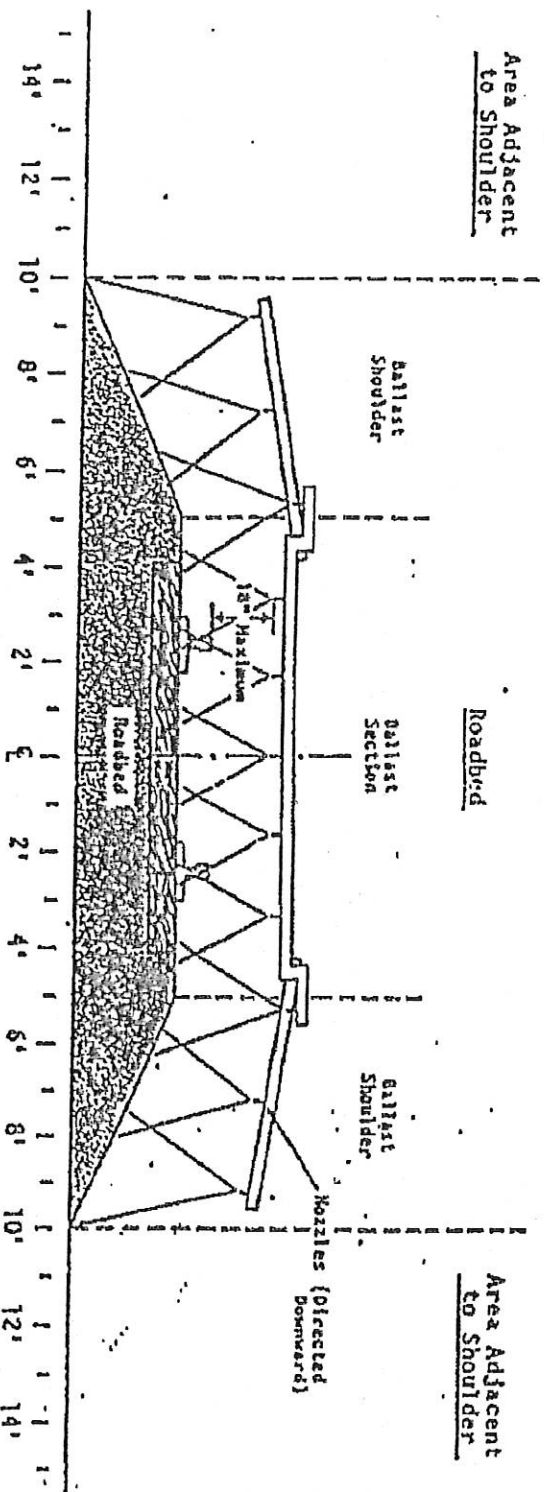


FIGURE 2

Note: Spray can be controlled to selectively treat all portions (Ballast, Shoulder, and Adjacent Area) or any of the individual portions alone.



**BOARD OF PESTICIDES CONTROL
APPLICATION FOR VARIANCE PERMIT
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)**

I. Donald Dubois (207) 316-8016
Name Telephone Number

Dubois Contracting
Company Name

295 St. John Road Font Kent Maine 04743
Address City State Zip

II. Donald Dubois CMA 44820/3A3B 6A6B
Master Applicator (if applicable) License Number

295 St. John Road Font Kent Maine 04743
Address City State Zip

III. **As part of your application, please send digital photos showing the target site and/or plants and the surrounding area, particularly showing proximity to wetlands and water bodies, to pesticides@maine.gov**

IV. Area(s) where pesticide will be applied:
Font Kent Dike along the St. John
and Fish Rivers

V. Pesticide(s) to be applied:
Rodeo, Liberate, Blue Dye

VI. Purpose of pesticide application:
Total elimination of all vegetation
on the rocky portion of the dike on
the river side. Per requirements of
Army Corp of Engineers, Federal Gov.

VII. Approximate dates of spray application:

June 1 to August 30 2015 while vegetation is active and river is at its lowest

VIII. Application Equipment:

Manual Back Packing

IX. Standard(s) to be varied from:

Allowable use of this product on a dry Flood Plain (Rodeo) use within 25' of high water mark

X. Method to ensure equivalent protection:

Will incorporate use of low pressure back pack application with Rodeo instead of Round up to minimize leaching, Use Liberate is a non-ionic surfactant containing drift control agent & deframer all in one. Will use blue dye to reduce over application. We are also planning application date of June 1 to August 30 to assure river level is at its lowest with no wind where temperature will allow for fastest drying time & no suspension of spray.

Signed:

Paul [Signature]

Date:

4/18/16

Return completed form to: Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028
OR E-mail to: pesticides@maine.gov

BOARD OF PESTICIDES CONTROL
APPLICATION FOR VARIANCE PERMIT
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)

I. Donald Dubois (207) 316-8016
Name Telephone Number

Dubois Contracting
Company Name

295 St John Rd Fort Kent Me 04743
Address City State Zip

II. Donald Dubois CMA 44820/3A3B6A6B
Master Applicator (if applicable) License Number

295 St John Rd Fort Kent Me 04743
Address City State Zip

III. As part of your application, please send digital photos showing the target site and/or plants and the surrounding area, particularly showing proximity to wetlands and water bodies, to pesticides@maine.gov

IV. Area(s) where pesticide will be applied:

Fort Kent Dike along the St John
and Fish Rivers

V. Pesticide(s) to be applied:
Rodeo, Milestone, A1700, Blue Dye

VI. Purpose of pesticide application:
Total elimination of all vegetation on
the rocky portion of the dike on the
river side Per requirements of the
Army Core of Engineers, Federal Gov.

VII. Approximate dates of spray application:

June 1 to August 30, 2017 while
vegetation is active & river is at its lowest

VIII. Application Equipment:

Manual Back Packing

IX. Standard(s) to be varied from:

Allowable use of these products on a
dry Flood Plain use within 25' of
high water mark

X. Method to ensure equivalent protection:

Will incorporate use of Low Pressure backpack
application to minimize leaching of spray
solution. Herbicide application of Rodeo and
Milestone will be made for complete control
of any tall vegetation growing in said area. Will
also use LI 700, a non ionic surfactant containing
drift control & defoamer all in one. Will also use
Blue dye to reduce any over application.
Application date of June 1 to August 30 to assure
river level is at its lowest, with no wind where
temperature will allow for fastest drying time & no
suspension of spray.

Signed:

Daniel O'Brien

Date:

5/26/17

Return completed form to: Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028
OR E-mail to: pesticides@maine.gov

APR 06 2015



Vegetation Control Service, Inc.

2342 MAIN STREET
ATHOL, MA 01331
OFF: 978-249-5348
FAX: 978-249-4784
800-323-7706

56 HILL ROAD
FRANKLIN, NH 03235
OFF: 603-934-4665
FAX: 603-934-6260

134 LEVERETT ROAD
SHUTESBURY, MA 01072
413-250-1414

April 2, 2015

Henry Jennings
Board of Pesticide Control
28 State House Station
Augusta, ME 04333-0028

Dear Mr. Jennings:

Included is another *Application for Variance Permit (pursuant to Chapter 29, Section 6 of the Board's Regulations)* for the southern half of TransCanada's 115 kV Transmission line at the Kibby Wind Power Project. This is the same request accepted by the Board in 2012 (see enclosed).

We are applying for this in order to use Mistblowers (motorized back pack sprayers) in wetlands where there is no surface water present and 25 feet from any surface water. Our program is described in detail in the previously submitted Operational Vegetation Management Plan approved by LURC and Maine DEP.

If you have any questions, please do not hesitate to contact myself, or Wendy Priestley at (978) 249-5348 or wendy@vegetationcontrol.com.

Thank you for your time.

Sincerely,

A handwritten signature in cursive script that reads 'Jeffrey M. Taylor'.

Jeffrey M. Taylor,
VCS Senior Consultant

Enc.

**BOARD OF PESTICIDES CONTROL
APPLICATION FOR VARIANCE PERMIT
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)**

I. Jeffrey Taylor of Vegetation Control Service, Inc. on behalf of David Murray, Environmental Specialist (603) 445-6803 (VCS: 978-249-5348)

TransCanada Energy Ltd, Kibby Wind Power Project
Company Name

Walpole Office, 2 Killeen Street North Walpole NH 03609
Address City State Zip

II. Area(s) where pesticide will be applied:

The southern half of the 115 kV Transmission line at the Kibby Wind Power Project (see Approved Vegetation Management Plan). No herbicides will be sprayed within 25 feet of any surface water (in wetlands, streams, rivers, ponds, etc...). However, according to specification in the attached VMP, Section 5.8, starting on page 43, treatments will take place in wetlands when there is no surface water present.

III. Pesticide(s) to be applied:

Rodeo (EPA reg. #62719-324, Arsenal Powerline (EPA Reg. #241-431) and Escort XP (EPA Reg. #352-439)

IV. Purpose of pesticide application:

Selective Treatment of woody plant species capable of interfering with the conductor zones on the 115 kV Transmission line at the Kibby Wind Power Project, with treatment to invasive plant species as identified in the field.

V. Approximate dates of spray application:

July 27th to August 17th, ~~2012~~ 2015

VI. Application Equipment:

Motorized Back Pack Sprayers (Mistblowers)

VII. Standard(s) to be varied from:

Use of Motorized Back Pack Sprayer in Wetlands along a 14 mile stretch of 115 kV right-of-way

VIII. Reason for variance:

This highly selective method allows for the treatment of the extensive amount of resprouts currently present on the right-of-way in this first treatment to the southern half of the right-of-way since construction. Selective mistblower applications will typically use less herbicide and water mixture per acre as compared to other non-motorized foliar techniques, particularly in dense target situations. There also is little to no excess "herbicide drip" from treated vegetation, resulting in less impact to understory, non-target organisms. Anti-drift additives are always included with all of our tank mixtures which help reduce potential drift and enhance target vegetation selectivity.

IX. Method to assure equivalent protection:

1). The treatment crews will strictly follow the specifications detailed in the attached VMP and all applicable state and federal laws and regulations. 2). The herbicide applications will strictly be selective to capable species (as described above in VIII) under an IVM program using herbicides labeled for use in wetlands. 3). The week of July 9th in advance of the treatment crew, a three man survey crew will walk the entire right-of-way and mark in the field and in TransCanada's GIS database system, the location of all sensitive areas including waterbodies and wetlands. 4). No herbicides will be used within 25 feet of any surface water; mechanical treatment methods will be used instead, primarily hand cutting with chainsaws. 5). All Herbicides applications will be directed away from the surface water buffer. 6). The company performing the 2015 herbicide application is Vegetation Control Service, Inc. a pioneer in IVM and selective motorized herbicide applications with 49 years' experience in the field, in vegetation management consulting and 17 years' experience in GIS database development.

Signed: Jeffrey M. Ingle Date: 4/8/15

Return completed form to: **Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028**

OR E-mail to: pesticides@maine.gov

**Statement submitted to the Maine Pesticide Board regarding the Application
for Variance Permit pursuant to Chapter 29, Section 6
by Vegetation Control Service, Inc. (VCS)
on behalf of TransCanada Energy Ltd, Kibby Wind Power Project**

TransCanada has submitted this application to treat within wetlands on the southern half of the Kibby 115 kV transmission line right-of-way with hand held motorized back pack sprayers.

All vegetation maintenance activities at Kibby are guided by a New England utility industry standard *selective* Integrated Vegetation Management (IVM) program. Under this program, the primary ecological communities or “natural areas” that TransCanada intends to establish, encourage and support are natural areas of early successional primarily lower growing herbaceous and scrub-shrub vegetation, in order to comply with Federal clearance standards:

1. Primary targets: woody plants capable of maturing over twelve feet in height.
2. “Noxious Weeds” including poisonous and invasive species.
3. Grasses, herbaceous growth and shrubs or woody vegetation that matures less than twelve feet in height (except where they are capable of interfering with the electric structures) will be reasonably avoided and encouraged to flourish.

GENERAL WETLANDS SPECIFICATIONS

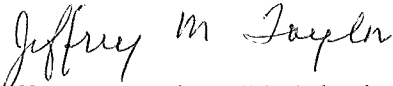
1. TransCanada will maintain mechanical only areas twenty-five feet by horizontal measurement from the banks on either side of surface waterbodies/open surface waters in wetlands.
2. Herbicide applications in wetlands are limited spray areas in which only appropriately labeled herbicides with low toxicity ratings are applied using low-volume, selective hand-held application methods when there is no surface water present.

From initial field survey’s including the mapping of all “sensitive areas” by TRC Engineering Services during the permit process, and two field survey’s by VCS senior consulting staff, there are only a few wetlands that meet the criteria of Chapter 26 (no great ponds, only a few characterized by visible surface water or dominated by emergent or aquatic plants). All crew personnel are also trained to the specifics of the Kibby project before being allowed to apply herbicides to the right-of-way.

The plan for 2015 is to use hand cutting and back pack hand pumps in the designated wetlands under Chapter 26. These are areas in which there are few target species, which tend to grow at a slower rate due to the wetland conditions.

We request that the board review this Variance Application as an initial review of the *Vegetation Management Plan* approved by LURC and Maine DEP in 2011. Future application in wetlands would benefit from a selective, directed spray by motorized pack back applications that allow the applicator to minimize the impact to non-target organisms in the understory.

Thank You for the opportunity to submit this request,


Jeffrey M. Taylor, ISA Arborist