

**VERMONT AGENCY OF AGRICULTURE, FOOD AND MARKETS (AAFM)
VERMONT PESTICIDE ADVISORY COUNCIL (VPAC)
May 11, 2016 MEETING MINUES**

MEMBERS IN ATTENDANCE

Bosworth, Sid
Gary, Lené (via phone)
Giguere, Cary
Halman, Josh
Hazelrigg, Ann
Hoffman-Contois, Razelle (Chair)
LaValley, Jenn (Admin)
Levey, Rick
Palmer, Eric
Shively, Andy

MEMBERS ABSENT

Darrow, Casey

GUESTS

Jason Magoon
Jennifer Callahan
Bert Stewart
David O'Brien
Jarod Wilcox
Jeff Disorda
Nat Shambaugh
Michael Bald
Sara Packer
David Huber
Tyler Hanson
Brian Chateauvert
Benjamin Delorme
Eric Trucott
Marcy Young
Michal Duffy
Michael Friedman
Barbara Burnett
Peter Young
Sylvia Knight
Bob Wright
Dana Banks
Mary Hooper
Elaine Martin
Anne Watson
Michael Mainer

Meeting Called to Order

9:33 am EDT

Meeting Adjourned

3:55 pm EDT

Announcements

- Minutes from the March 23, 2016 meeting were reviewed and approved by all members present (J. Halman moved, A. Hazelrigg seconded). Final minutes will be posted on the VPAC SharePoint.
- Razelle reported that VT-ALERT can now be used to receive electronic notification of planned herbicide application to utility, railroad and Vermont Agency of Transportation Rights-of-Way (ROWs). She encouraged the use of this additional option for notification and offered to assist with sign up if desired. Paper copies of sign up instructions, general information on VT-ALERT and the Special Accommodation Request Form from Vermont Rail System's and New England Central Railroad's Integrated Vegetation Management Plans were available for pick up at the meeting. Information regarding VT-ALERT has been posted on the VPAC homepage and Sharepoint. Razelle thanked AAFM, in particular Matt Wood, for pursuing this joint effort with the Department of Emergency Management and Homeland Security and turning the Council's desire for there to be a contemporary method for timely, personal notification of pending treatment into a reality.
- Razelle reported that a memo to Secretary Ross dated May 9, 2016 that summarizes VPAC's extensive review of integrated vegetation management practices and options within Railroad ROWs was finalized. This document has been posted on the VPAC SharePoint.

Public Comment – None

Business

Review of Permit Application to Conduct Herbicide Treatment within Rights-of-Way

Several permit requests were reviewed and subsequently recommended to the Secretary of AAFM (Secretary) for approval. Since the May 2014 meeting, the Council has requested that a summary of pesticide usage (for at least the last two treatment cycles if there have been at least two) be included with each permit application or that such information be provided at the annual VPAC ROW permit application review meeting. Some applicants provided this information in the permit application package while others distributed during the meeting. Those who came prepared to discuss usage and did so using paper copies not included in the permit application agreed to

provide electronic copies for distribution to the Council and posting to the VPAC SharePoint. Permits issued in 2015 and the 2016 permit applications discussed below have been uploaded to the VPAC SharePoint.

Morning Session

Vermont Agency of Transportation (VTRANS)

Jennifer Callahan, Stormwater Technician with the VTRANS Operations and Maintenance Bureau, presented the 2016 permit application. Paper copies of VTRANS pesticide use 2005-2015 were provided for review (also previously provided electronically). Ms. Callahan explained that guardrail treatment did not occur in 2015 due to budget constraints and in order to reorient treatment timing. She noted a bit of public feedback had been received with concerns regarding the amount of vegetation present. She described the new VTRANS contracting process and that four contractors, instead of one, will be used in 2016. Vegetation Control Services, Inc. is anticipated to be used primarily in the southern part of the state and DeAngelo Brothers, L.L.C. to the north. Cary would like to hear about VTRANS experience with the two new contractors that will be employed this year. Rick asked how sensitive areas are mapped. Ms. Callahan explained that VTRANS personnel actually identify and flag sensitive areas and that different Districts use different methods including, but not limited to, use of pavement marks, physical flags and maps. Cary stated that provision of weekly spray reports is acceptable and preferable as use of the M.A.T.S. (Monitoring and Asset Tracking System) is no longer efficacious. The Council voted that the application be forwarded to the Secretary for approval (C. Giguere moved, E. Palmer seconded; 8 yes, A. Shively abstained).

Utilities

The Council discussed each proposed treatment plan in detail. Pesticide usage and highlights of the 2015 treatment cycle were provided. Lené requested that moving forward, all applicants take into consideration areas where ROWs may cross authorized recreational paths (e.g., hiking trails, bike paths) and that means of making the public aware that such areas may be treated with herbicides be included in management efforts, e.g., posting of signage (with contact information) at appropriate locations. The Council supported this suggestion.

1. **Green Mountain Power (GMP)** – Jarod Wilcox presented both the 2016 Distribution and 2016 Transmission line permit requests.

A. Green Mountain Power Distribution (third year post merger with CVPS)

Mr. Wilcox first provided a presentation on the LaPlatte River Marsh Natural Area Restoration Project on Nature Conservancy Lands in Shelburne, Vermont. He described how The Nature Conservancy and GMP have partnered to work to control invasives in a ROW corridor where herbicides had not historically been used. The Charlotte Selectboard was noted to support this effort. In 2013, work began with mechanical mowing with a “Brontosaurus” (explained to be essentially an excavator with a brush hog head attachment) followed by cut stump treatment with Garlon 4. In 2014, targeted foliar application of a mix of Krenite and Arsenal was conducted on 2.4 acres to tackle select, targeted invasive plants and “incompatible utility tree species.” The 2016 permit application for treatment of the Distribution line was then discussed. Mr. Wilcox noted there has been a small decrease in usage as they have reached the lower limit of usage and control and have plateaued. It is three years post-merger and initial treatment of legacy northern areas will soon begin. Over 3000 notification requests are on file. Extensive, individual notification and outreach is underway and expected to continue. Cary asked about proposed foliar, cut stump and basal treatment. Mr. Wilcox explained that the proposed program, using a mix of Krenite and Polaris, provides control but avoids browned-out vegetation which can be visually unappealing (less of a concern on the Transmission side as the line is less visible to the public). He noted they tried using Krenite at 7% with Thinvert but found high leaf out the following year which they do not find when using the mix. Lené asked about the methods of manual control that are used. Mr. Wilcox reported that on the Distribution side it is all hand cutting with a two to seven man crew. All specimens identified to be removed in the ROW are cut and chipped. For lines that run off-road, a three to five man crew is used. He explained that while mechanical control is an expensive and labor intensive effort, it benefits the entire program and helps prevent outages. The Council unanimously voted that the application be forwarded to the Secretary for approval (J. Halman moved, R. Levey seconded).

B. Green Mountain Power Transmission (third year post merger with CVPS)

Mr. Wilcox described why the 2016 permit application proposes to include invasive species monitoring and treatment at the Kingdom Community Wind Farm (access and corridor). Detailed maps of the area were provided for discussion. He noted there are currently 21 towers in place. The Council unanimously agreed that there is an apparent conflict between the Integrated Vegetation Management Plan and requirements of the existing Certificate of Public Good (CPG) and Act 250. Compliance with the CPG would result in violation of the ROW permit. Rick pointed out that, as described in the Council’s recent memo to Secretary Ross, treatment for control of invasive plant species, if not necessary to meet safety needs, is not justified under Integrated Vegetation Management Plans for herbicide use within ROWs. Eric asked what products were being considered for control of invasives. Mr. Wilcox mentioned Milestone®, VM+® and Rodeo®. Sid noted that one of the species listed on the hand-out was not an invasive. Extensive discussion of the conundrum ensued. Mr. Wilcox noted manual control efforts are ineffective. Razelle asked if lack of control of invasives presents any health or safety issues, especially for workers. Mr. Wilcox replied it does not. Razelle recommended that this request be tabled and that AAFCM coordinate an internal meeting between pertinent parties to determine resolution. The Council unanimously agreed. Mike Bald suggested it would be helpful to include those with expertise in timber management in this discussion. Review of the other aspects of the 2016 permit application ensued. Herbicide usage data was discussed. The 2015 effort was reviewed. Mr. Wilcox noted that a few northern legacy lines first treated in 2015 may be treated again in 2016 in order to establish control. In 2015, extensive mechanical control followed by some herbicide use where efficacious was employed. There is the potential for an increase in the use of Krenite this year due to the amount of work planned and the way the product comes in; if work on the Distribution line is completed early efforts will segue to the Transmission line. Extensive notification and outreach efforts were described including newspaper ads, mailings, in person notifications and personal notification letters. Mr. Wilcox reported that treatment is planned in the southern end of the state. He noted GMP is very sensitive of public concerns in this area, especially in Bennington County, given events of late. In addition to mass mailings, every abutter was sent a personal letter. Mr. Wilcox described that all Towns served are

notified even if no treatment is planned for a particular area. Work in the Mad River Valley is anticipated in 2017. The Council unanimously voted that the application be forwarded to the Secretary for approval minus the tabled Kingdom Community Wind Farm component (A. Shively moved, S. Bosworth seconded).

- **National Grid** – David O'Brien presented the 2016 permit request. Integrated Vegetation Management (IVM) is being used. Herbicide usage graphs were provided and discussed. It was reported that increased use of glyphosate and triclopyr in 2015 was related to the increase in re-sprouts encountered. Lené asked about their approach to manual control. An approach similar to that described by Mr. Wilcox (GMP) was said to be employed. Manual control is done with chain saws or brush saws. Almost all conifers are hand cut. Eric noted that Rodeo®, not Accord®, should be listed in subsection C.1. of the permit application and added to subsection C.3. Rick asked if there is a more environmentally friendly glyphosate product than Accord available for use. It was noted that variation in the eco-profile section of the Safety Data Sheet is due to the fact that various individuals prepare these documents. Notification was noted to include newspaper ads, a letter to all abutters and door to door notification. A personal letter with contact information is sent to properties where no treatment was requested the year prior. This approach has been used in Massachusetts due to a 30 day notification requirement and has received positive feedback. The Council unanimously voted that this application be forwarded to the Secretary for approval with the product corrections noted by Eric (E. Palmer moved, A. Hazelrigg seconded).
- 2. **Vermont Electric Cooperative (VEC)** – Sara Packer presented the 2016 permit request. VEC involves both transmission and distribution lines. Treatment will be mainly via selective low volume foliar. While VEC has not used any cut stump treatment to date, permission to do so is requested in the event it becomes necessary. Ms. Packer noted the goal is to implement herbicide treatment one year post mechanical control. Usage graphs were discussed. A decrease in usage along the transmission line reflects completion of the five year maintenance cycle. VEC is still working on the distribution line. She described the evolution of the current forestry program which began in 2009 and had an initial treatment in 2010. Mechanical control only was employed from the mid-1980s until this time. Eric asked if abutters who opt out are required to maintain that area of the ROW. Ms. Packer replied no, as it would be too dangerous and that in such instances VEC employs only mechanical control. Eric asked if this can be done efficiently and she replied that such "skips" impact the overall efficacy of the program. VEC does extensive research to identify properties that may abut. Methods of notification include door to door, radio and newspaper. Written notification of treatment is provided to anyone who has ever expressed concern. She reported they have had a good response from the public. VEC does outreach but if someone still requests no treatment, VEC does not treat. It was described how recently, a non-abutter in Westford has been advocating that no herbicide treatment occur. This has resulted in a large number of no spray requests being received from abutters in this community. In addition, there is an ongoing issue with the Town of Essex regarding the right to treat within the ROW. At present, the Town claims to own the land where the ROW crosses the road thus is entitled to request no treatment. Ms. Packer noted that if a quit claim deed is provided that shows the Town owns the road, the Town will be treated like any other abutting property owner. The matter is currently under discussion with the Town and Selectboard. The Council unanimously voted that the application be forwarded to the Secretary for approval (J. Halman moved, S. Bosworth seconded).
- 3. **Vermont Electric Power Company (VELCO)** – Jeff Disorda presented the 2016 permit request. VELCO is on a 4 year treatment cycle. Usage graphs of gallons of product used per acre in 2014 and 2015 were provided and discussed. Rick asked if there was any intent to use Streamline®. Mr. Disorda replied no, as the current mix is working well, especially with Thinvert®. He described how Thinvert® is primary foliar and they are seeing good results even in areas with high stem density. In 2015, the southern part of the line was treated the second time through so they still had to use some herbicide to control. Lots of mechanical/manual work will be employed in 2016. VELCO would like to start as soon as possible with cut stump treatment to decrease the amount of vegetation brown-out on the road side. Work with the Audubon Society of Vermont has gone well and an increase in songbirds has been reported. Geo-locators will be put on some birds to learn where they travel. Notification methods include newspaper and radio ads as well as door to door personal notification and door hangers. Mr. Disorda noted that as VELCO is on a 4 year treatment cycle they are getting to know a lot of the land owners and work on establishing solid relationships. Although big capital growth was noted to be slowing down, VELCO continues to replace structures from the 60s. The Council unanimously voted that the application be forwarded to the Secretary for approval with the caveat that the correct name of the glyphosate product be used (A. Hazelrigg moved, R. Levey seconded).

Afternoon Session

Public Comment

- Barbara Burnett identified herself as a resident of Montpelier and provided the Council with hard copies of written comments she also had provided via e-mail. Ms. Burnett read these into the minutes and they may be found in their entirety in Attachment A.
- Michal Duffy identified herself as a member of the Hunger Mountain Coop and stated she opposes use of herbicides in the railroad ROW corridor that runs through the densely populated area in Montpelier. She shared concerns regarding use of herbicides in the ROW near the Coop and the potential for public exposure. As an alternative, Ms. Duffy suggested hand pulling of weeds and noted there are members of the Coop who are willing to volunteer to do so and will sign any waiver required.
- Michael Friedman, identified himself as a physician from Connecticut who specializes in endocrinology and is affiliated with the Association for Advancement of Restorative Medicine. Dr. Friedman shared a handout citing various journal articles on health effects that may be associated with prenatal and childhood exposure to organophosphate pesticides. He noted that exposure to Persistent Organic Pollutants (POPs) is of particular concern for the fetus and young children and that such chemicals accumulate in fat tissue. He expressed concern regarding the potential toxicity of adjuvants as these are not included on product labels or regulated in the

same way as active ingredients. He referred to a 2016 study conducted with highly diluted concentrations of glyphosate. Cary clarified that Vermont would not classify glyphosate as a POP and that no organophosphates are currently registered for use as herbicides in ROWs. He believes the information presented refers to chemicals which have been identified as POPs, not glyphosate which has not. Razelle reported that there was a recent Collaborative for Health and the Environment Partnership call devoted to glyphosate. On the call three international speakers discussed the current state of research on glyphosate, potential health impacts and other factors. Dr. Fiorella Belpoggi, of the Ramazzini Institute, announced they are embarking on a pilot study that will lead to a larger, comprehensive study that will examine multiple potential endpoints at doses consistent with environmental exposure. Slides are available on the CHE website.

- Mary Hooper identified herself as the state representative for the Washington-4 district and asked that the Council defer issuing a permit until the rail company and the City of Montpelier can work out an agreement regarding use of an alternative means of control. Representative Hooper expressed concerns regarding the proximity of gardens, daycares and other businesses to the ROW and the need of the community to feel safe. She noted this topic was to be discussed at the City Council meeting tonight. Razelle reminded all present that the Council serves as a technical advisory group and does not have the authority to permit or prohibit any activity.
- Sylvia Knight identified herself as a resident of Charlotte and asked that written comments she had previously provided via e-mail be included in the minutes. These may be found in their entirety in Attachment A.
- Elaine Martin identified herself as an employee of the Community Center on Stone Cutters Way. She described how the Center provides food, including produce from gardens along the railroad ROW, and shared her concerns about the potential impact of herbicide use in the ROW on the food and gardens as well as the potential for exposure for those working in the gardens. Upwards of 30 meals were noted to be served on Friday nights with about 15 meals served on Wednesday mornings. She noted that there are folks who have volunteered to help hand weed in the ROW.
- Anne Watson identified herself as a member of the Montpelier City Council and stated that she and Mayor Hollar would like the chance to discuss alternative means of vegetation control with the City and the rail company. Cary asked what has transpired since her last status report to the Council. Ms. Watson reported the City is willing to pay for manual control in 2016 as they did in 2015. Cary described the Council's initial thoughts of potentially a three treatment cycle. Additional discussion is described in the notes below.

Railways

Each permit application was reviewed and discussed in detail. As with the utilities, applicants were requested to take into consideration areas where ROWs may cross authorized recreational paths (e.g., hiking trails, bike paths) and that means of making the public aware that such areas may be treated with herbicides be included in management efforts, e.g., posting of signage (with contact information) at appropriate locations.

1. Vermont Rail Systems (VRS)

The 2016 proposed treatment program and individual permit applications in the VRS were discussed in detail with Ben Delorme representing VRS and Brian Chateauvert representing RWC, Inc.

After extensive deliberation, the Council unanimously agreed to recommend the proposed treatment plan to the Secretary for approval stressing the caveat that use of Esplanade 200 SC® (active ingredient indaziflam) at 5 ounces per acre and/or Streamline® (active ingredient aminocyclopyrachlor and metsulfuron methyl) at 6 ounces per acre must be accompanied by a surface water monitoring effort, for both active ingredients, along a portion of the treated rail corridor. The 2016 treatment plan also includes use of Aquaneat® (active ingredient glyphosate) alone in the second run and also as part of the first run tank mix where it enhances efficacy. The 2015 treatment plan included use of Opensight® (active ingredients aminopyralid and metsulfuron methyl). When asked by Razelle, Mr. Chateauvert explained that the request for Streamline® in 2016 is because use of different active ingredients helps prevent creation of resistant species and is not reflective of any problem with use of Opensight®.

For the benefit of new Council members, Razelle and Cary recapped that a few years ago there were concerns regarding use of Opensight® given a major issue that had been identified regarding phytotoxicity of low levels of aminopyralid found in compost. Given the uncertainties, ongoing research and regulatory revisions that were underway, in 2014 the Council agreed it best to wait a year for additional information to become available before a product with aminopyralid (e.g., Opensight®) was considered for use. At the April 28, 2015 VPAC meeting and again at this meeting, Cary and Sid explained that potential use of aminopyralid, and other chemicals in this family such as aminocyclopyrachlor, in railroad ROWs was not a use pattern of potential concern in Vermont as there is no direct connection unless ballast areas were grazed by animals which they are not. The concern is that aminopyralid, in particular, may pass through an animal's system and be present at a concentration in the animal's waste which if used in the production of compost could be problematic for plant growth. There is now more experience dealing with this family of herbicides and a better understanding of potential use patterns of concern and necessary precautions. These are now classified as Restricted Use Pesticides and uses that could potentially lead to low levels getting into compost have been removed from the label in the northeast. Razelle noted that concerns regarding compost were associated with phytotoxicity not human health. Based on the updated information, in 2015 the Council recommended for approval a treatment plan that included use of Opensight®.

The U.S. Environmental Protection Agency has noted that compounds in this family, including aminocyclopyrachlor, may be mobile in water. This is reflected on product labels. Thus, the Council has consistently recommended AAFM include a concurrent surface water monitoring effort. Eric, Josh and Rick asked if it would be possible for AAFM to collect samples prior to treatment in order to get an idea of existing environmental levels of indaziflam and aminocyclopyrachlor. Cary noted this may not be possible given the timing. He also stated that aminocyclopyrachlor previously had many uses but is now restricted to use within ROWs; agricultural use is not allowed in Vermont. Rick offered to assist AAFM with monitoring. Razelle requested that any monitoring results be shared with the Council as soon as possible.

The VRS 2015 treatment effort was discussed.

The Council stated that all applications forwarded to the Secretary for approval are with the recommendation that all existing caveats and cautionary provisions be carried forward. For example, language regarding timing of treatment to reduce the potential for human exposure (e.g., in rail yards, at crossings, at the Burlington Waterfront) and details of tie end to tie end treatment are to be included. Any additional line-specific caveats are noted in the individual permit application review notes below.

- A.** Washington County Railroad (Barre) – Public concern continues to be expressed regarding potential chemical treatment of the stretch of track that runs through the center of Montpelier as evidenced by e-mails and public comments.

It was recapped that in 2014, after extensive deliberation, the Council agreed to recommend to the Secretary that a no spray zone be established for one year in the corridor that runs from Pioneer Street to the Route 89 overpass with the condition that the Council be briefed on the results of this effort at the 2015 ROW permit review meeting. The Council was willing to make this recommendation based on several factors including, but not limited to, the indication from Mr. Delorme and Mr. Chateauvert that as this 2.5 mile stretch had been treated in 2013, a one year hiatus to allow those concerned to work cooperatively to determine if a functional, nonchemical means of vegetation control could be established that would not result in degradation of track reliability or safety.

At the April 28, 2015 meeting, Mr. Delorme reported that a cooperative effort did not occur. The Council queried him extensively regarding why this effort failed. Based on the information provided, it was the Council's understanding that for safety reasons, VRS could not support volunteers conducting mechanical control on the tracks. In addition, Mr. Delorme explained that funding from the rail company would be necessary to support even a volunteer effort as equipment and materials would need to be paid for.

In accordance with an amended permit issued by the Secretary on July 15, 2015, in 2015 the City of Montpelier, in cooperation with VRS, funded mechanical control of vegetation in the ROW corridor between Main Street and Granite Street. Some members of the public have shared concerns regarding the aesthetics of this effort with the Council.

Anne Watson of the Montpelier City Council (and liaison for Mayor Hollar) spoke regarding the City's desire to pursue a nonchemical control effort in 2016 and that this would be discussed at the City Council meeting that evening. Razelle asked if the railroad company had been invited to participate or informed of the meeting. Ms. Watson replied no. Mr. Delorme and Peter Young, deputy general counsel for VRS, replied that they are willing to meet with the City but neither was aware of this meeting or that the City was considering funding an alternative method of vegetation control. The Council was disappointed to learn of this disconnect and encouraged open lines of communication between the City and VRS. Ann Hazelrigg suggested that those involved set a date for a conversation between the City and VRS. The Council agreed that advance notice of this evening's meeting would have facilitated the ability of VRS to participate. Razelle asked if a second year of vegetation management via mechanical control alone would offer effective control and not result in degradation of track reliability or safety. Mr. Delorme and Mr. Young described that while such an effort may offer short-term control of above ground vegetation, there is growing concern that degradation of the railbed will continue if below surface vegetation (e.g., root structures) is not addressed. The Council and all present discussed various types of non-chemical means of control and associated challenges and lack of efficacy. Cary, Lené and Eric described many of the challenges of establishing a cycle of chemical and nonchemical means of control. It was noted that the idea of cycling could only be entertained if the railbed itself was in good condition and that in the end, such an approach could result in periodic use of a soil sterilant in the area under discussion. The Council agreed that the rail bed must be properly maintained for any type of control effort to be effective. Mr. Delorme was asked if resources would be allocated to conduct railbed repair work in areas of this stretch where issues have been identified. He stated management will determine where resources will be concentrated.

Extensive discussion ensued covering a variety of aspects of maintenance within railroad ROWs including, but not limited to, the need for effective control of vegetation in order to ensure safe and reliable operation, details of railbed maintenance, federal requirements for visual inspection of track, the potential use of chemicals other than glyphosate in areas where there is high potential for public exposure, potential public concerns regarding use of any chemical (when asked directly, Ms. Burnett offered that she believes the community does not want any type of chemical control employed) and differences between railroad and utility ROW permits.

Sid requested that a track inspection be conducted with the results provided to the Council. The last several federal inspection reports were also requested for review.

The Council stressed that maintenance of railway ROWs is essential for safe, reliable operation of this allowed mode of transportation while at the same time control methods employed must be protective of public health and the environment. To this end, the Council unanimously voted that the application be forwarded to the Secretary for approval with the following recommendations: a concurrent surface water monitoring effort for indaziflam and aminocyclopyrachlor be conducted; all traditional caveats are carried forward; an additional caveat regarding timing of treatment in the area of the bike path and high traffic/urban areas (prior to 6 a.m.) be included; glyphosate only is to be used on the stretch of track that runs from Main St. the Granite St. with treatment to occur only during times of low pedestrian traffic and that there be ample public notice of any potential treatment in the City of Montpelier. (R. Levey moved, J. Halman seconded).

In addition, with regard to the desire expressed by Ms. Watson on behalf of the City, the Council refers the Secretary to the May 9, 2016 memo:

"VPAC recommends that the Agency of Agriculture, Food and Markets amend railroad ROW permits to include a provision whereby a governing body of a municipality may request a railroad to use alternative vegetation management methods in areas identified as frequently used by the public or with high potential for public exposure. Alternative methods of vegetative management in such areas may include options not specifically evaluated and recommended in permits issued by the Agency of Agriculture, Food & Markets under your authority, but agreed to by the railroad operators and the municipality. The municipality will be responsible for the offset in costs associated for alternate management methods, if chemical approaches have been permitted in the area. Any alternate chemical must be included in the permit application."

- B. The proposed treatment program for other lines in the VRS is identical to that for the Washington County Railroad (Barre). The Council unanimously voted that the following applications be forwarded to the Secretary for approval with the surface water monitoring recommendation noted above and any additional caveats as noted below (E. Palmer moved, S. Bosworth seconded).
- Clarendon and Pittsford – with standard caveats
 - Green Mountain Railroad – with standard caveats
 - Pan Am Southern – with standard caveats
 - Vermont Railway – with standard caveats and that the Burlington waterfront be treated prior to 6 a.m. but not on a weekend or holiday and then only with glyphosate. In response to a request from Mr. Chateauvert to treat this area with the tank mix, Razelle explained that additional information, including the requested surface water monitoring data, would be required in order for Health to appropriately evaluate this request. If such treatment is desired in 2017, she requested that a proposal including product names and active ingredients be provided to her early in the year to allow for adequate time for review. Mr. Chateauvert and Mr. Delorme agreed.
 - Washington County Railroad Connecticut River Division – with standard caveats

2. Central Maine and Quebec Railway (formerly Montreal, Maine and Atlantic)

Brian Chateauvert presented the 2016 permit application. At the 2015 permit review meeting, Randy White noted that while no chemical treatment occurred in 2014 as the line was in between owners, a lot of tie and ballast work was conducted. The 2016 treatment program is the same as proposed for VRS. The Council voted unanimously to recommend this application to the Secretary for approval with the same caveats as above regarding use of Esplanade SC 200® and Streamline® (E. Palmer moved, S. Bosworth seconded).

3. New England Central Railroad (NEC)

Michael Mainer presented the 2016 permit application. In 2013 this line was purchased by the Genesee and Wyoming. A 15 foot no spray buffer to water's edge is proposed. The proposed treatment program includes use of Esplanade 200 SC® (active ingredient indaziflam), Method240SL® (active ingredient aminocyclopyrachlor) and Razor Pro® (active ingredient glyphosate). Surface water monitoring as described for VRS above was recommended. The Council agreed that monitoring could be in a portion of the rail corridor where either product that contains aminocyclopyrachlor is used (i.e., sampling from where either Method240SL® or Streamline® is used will suffice). An Integrated Vegetation Management Plan was previously submitted and has been posted to the SharePoint. Razelle asked how vegetation is controlled within the 15 foot buffer to surface water. Mr. Mainer explained mechanical control is used. The Council recommended that the standard caveats be carried forward along with those related to treatment of the Burlington waterfront e.g., treatment will occur prior to 6 a.m. but not on a weekend or holiday etc. Razelle requested an e-mail confirming that only glyphosate was used in the area of the Burlington Waterfront in 2015 and that the contractor is aware of this constraint in 2016. The Council voted unanimously that, upon receipt of the requested e-mail, this permit application could be forwarded to the Secretary for approval with the recommendations and caveats noted above (J. Halman moved, A. Shively seconded). [N.B. the requested e-mail was received on May 12, 2016]

4. St. Lawrence and Atlantic

Michael Mainer presented the 2016 permit application. The same treatment program as described for New England Central is requested. A 15 foot no spray buffer to water's edge is proposed. VPAC had previously suggested that a representative of the rail line may want to investigate the status of the track in the area of Norton that has historically not been treated and reach out to current occupants to initiate a discussion. Mr. Mainer reported that the occupants remain the same. He described that years of no treatment has caused issues with the rail company. He is not familiar with the current condition of the track. The Council agreed that Andy and Razelle would visit the area in question and report back. Razelle asked about the status of an Integrated Vegetation Management Plan as none is in her files or on the SharePoint. Cary reported that a paper copy had been submitted to AAFM two years ago. He asked Jenn to work on locating and to share with the Council. Mr. Mainer did not seem optimistic that he could obtain an electronic version from the rail company. The Council voted unanimously that the permit application be forwarded to the Secretary for approval with the caveat that a 500 foot no spray buffer be established both north and south of the property in question and that both ends of the buffer be clearly flagged (E. Palmer moved, A. Shively seconded).

Next Meeting: To Be Determined

Attachment A

From Ms. Barbara Burnett



Barbara Burnett <nw4estcats@yahoo.com> Hoffman, Razelle; Sid Bosworth; Giguere, Cary; Levey, Rick; Palmer, Eric; Shively, Andy; Lené Gary; Ann Hazelrigg

Washington County Railroad's Application to Apply Herbicides on Its ROW in the City of Montpelier

Wed 5/11

Dear Ms. Hoffman and the members of VPAC:

First, I want to acknowledge what we all agree on: that the RR's ROW (the ballasts and the tracks) must be kept well maintained and weed-free so that the trains can operate safely.

We differ, however, in the starting point for reaching that goal. Standing Together for Healthy Solutions believes that the protection of the health of the public and the environment should determine the ways in which the ROW is maintained. Any method used to maintain the ROW must not put the health of the public or the planet at risk.

We have submitted copies of scientific studies (e.g., from the IARC) plus additional documentation which clearly sets out the risks posed to human health by herbicides, especially glyphosate. We note as well that VPAC is mandated to decrease pesticide use in VT and to reduce the risks associated with the use of pesticides.

We support the expansion of the definition of "sensitive areas" to include any area which is highly populated as well as those with a high potential for public exposure, not merely environmentally sensitive areas such as rivers and streams. We believe that to protect public health, the entire 2.5 ROW within the city of Montpelier should be so designated, and we urge that VPAC recommend that it be so designated,

We also urge that VPAC recommend that the RR's permit be conditioned based on that designation and, as a result, that no herbicides be allowed to be used within the city limits. Only alternative methods of weed control would be allowed. (Note: we have suggested numerous alternatives to toxic herbicides in the past 2 years—not just weed-whacking. We are open to a wide variety of non-toxic weed management approaches (e.g., flash-freezing); we only object to the use of toxic chemical herbicides.)

In addition, we have continually stressed the condition of the ROW in question. We have repeatedly alerted VPAC to the poor condition of the tracks and the ballasts, and have provided photographic evidence as well.

Construction and maintenance have a huge influence on the presence or absence of weeds in the rail bed. We believe that order to bring its ROW up to code, the RR may need to perform a major structural upgrade of the entire 2.5 mi. ROW in the Montpelier city limits. This should be done before a discussion on the use of herbicides can even begin. As the Swiss RR study from 2000 states, vegetation cannot be managed if the infrastructure is in poor condition. "There is no cost-effective and environmentally-friendly method of ensuring that an area remains free of vegetation in the long term, *if conditions are favourable to plant growth.*"

Therefore, we urge that VPAC recommend placing the following restrictions on the RR's permit:

1. Prior to having its request to apply herbicides on its ROW in Montpelier considered, the Washington County RR must first provide to VPAC a copy of all inspection records from the VT Rail Division for the past 10 years regarding the condition of the ballasts of its ROW within the city limits, along with an evaluation showing all instances of non-compliance with any FRA requirement.
2. In the interim, the use of herbicides must be prohibited on the RR's ROW in the city limits until the issue of the condition of the ballasts has been fully assessed and addressed. In the interim, weeds must be managed using only alternative means.
3. Should the evaluation confirm that the ballasts and tracks in question are indeed in poor condition, and that a significant structural upgrade is warranted, the RR must bring its ballasts and tracks up to code in a way that will also reduce the chance of weeds returning. (E.g., by installing concrete ballasts, not simply by dumping fresh gravel on existing ballasts.) Constructing a sturdy ballast will greatly enhance rail safety as well as reduce or eliminate the need for herbicide use both now or in the future.

In addition, if an upgrade is warranted, no request to apply herbicides to this ROW should be considered until and unless the project is satisfactorily completed. Until then, weeds must be managed only by alternative means. Should the RR chose not to upgrade this section of its ROW to be in compliance with the code, the RR should not be allowed to spray herbicides on its ROW in Montpelier.

In short we want a truly safe rail way. But in order to have that, the poor condition of the ballast must first be addressed—before any application to apply herbicides can even be considered.

Sincerely,

Barbara Burnett
Member, Standing Together for Healthy Solutions
191 Barre St. #106
Montpelier, VT 05602


From Ms. Sylvia Knight:



Sylvia Knight <sknight@gmavt.net> Hoffman, Razelle; Sid Bosworth; Levey, Rick; Palmer, Eric; Ann Hazelrigg; Shively, Andy; Lené Gary

VT RR/ Washington County Barre permit

1 Tue 5/10



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Action Items

Get more add-ins

Dear Razelle et al,

2 major issues for the permit discussion tomorrow:

1. I am troubled by VT RR's request to treat the railroad through the highly populated area of Montpelier, after all the discussion and effort that has transpired to seek alternatives. The State owns the ROW. Standing Together for Healthy Solutions has been seeking nontoxic management of the ROW through the highly populated and publicly used ROW in Montpelier for over 2 years. VT RR should not need to use soil sterilants if they *removed the soil from the ballast and used stone*. Herbicides will simply add dead plant matter to the ballast. This does not lead to structural stability or safety for the railroad or the public. There are sections of this ROW that appear not to meet FRA standards. Granted, you don't have authority to tell the RR how to manage the tracks; you do have the mandate (6 VSA 1102ff) to condition permits to reduce the use of herbicides.

So, please condition the VTRR Washington County Barre permit thus: to deny use of herbicides within Montpelier to protect human health.

2. I am troubled by VT RR's request to spray up to 2 feet of water. Have you noticed that New England Central maintains a 15 ft buffer from water, according to their permit? Please hold *all* VT RR permits to the same 15 ft buffer maintained by NEC RR. It's the least you can do in respect for VT's waters, a public trust resource.

Please see attached article by USGS scientists indicating that glyphosate is more persistent and mobile than previously believed.

Respectfully,

Sylvia Knight
www.earthcommunityadvocate.info

2009 Portland GSA Annual Meeting (18-21 October 2009)
Paper No. 218-8
Presentation Time: 10:15 AM-10:30 AM

GLYPHOSATE AND AMPA IN U.S. STREAMS, GROUNDWATER, PRECIPITATION AND SOILS

[BATTAGLIN, William A.](#), U.S. Geological Survey, Colorado Water Science Center, Box 25046, MS 415, Denver Federal Center, Lakewood, CO 80225, wbattagl@usgs.gov, MEYER, Michael T., U.S. Geological Survey, Kansas Water Science Center, Lawrence, KS 66049, KUIVILA, Kathryn M., U.S. Geological Survey, Sacramento Water Science Center, Placer Hall 6000 J Street, Sacramento, CA 95819-6129, and DIETZE, Julie E., U.S. Geological

Herbicides containing glyphosate are used in more than 130 countries on more than 100 crops. In the United States (U.S.), agricultural use of glyphosate [N-(phosphonomethyl)glycine] has increased from less than 10,000 metric tons per year (active ingredient) in 1993 to more than 70,000 metric tons per year in 2006. In 2006, glyphosate accounted for about 20 percent of all herbicide use (by weight of active ingredient). Glyphosate formulations such as Roundup® are used in homes and in agriculture. Part of the reason for the popularity of glyphosate is the perception that it is an “environmentally benign” herbicide that has low toxicity and little mobility or persistence in the environment. The U.S. Geological Survey developed an analytical method using liquid chromatography/tandem mass spectrometry that can detect small amounts of glyphosate and its primary degradation product aminomethylphosphonic acid (AMPA) in water and sediment. Results from more than 2,000 samples collected from locations distributed across the U.S. indicate that glyphosate is more mobile and occurs more widely in the environment than was previously thought. Glyphosate and AMPA were detected (reporting limits between 0.1 and 0.02 micrograms per liter) in samples collected from surface water, groundwater, rainfall, soil water, and soil, at concentrations from less than 0.1 to more than 100 micrograms per liter. Glyphosate was detected more frequently in rain (86%), ditches and drains (71%), and soil (63%); and less frequently in groundwater (3%) and large rivers (18%). AMPA was detected more frequently in rain (86%), soil (82%), and large rivers (78%); and less frequently in groundwater (8%) and wetlands or vernal pools (37%). Most observed concentrations of glyphosate were well below levels of concern for humans or wildlife, and none exceeded the U.S. Environmental Protection Agency’s Maximum Contaminant Level of 700 micrograms per liter. However, the ecosystem effects of chronic low-level exposures to mixtures of pesticides are uncertain, and some studies have attributed toxic effects on biota to the surfactants or other adjuvants that are included in common glyphosate formulations.

[2009 Portland GSA Annual Meeting \(18-21 Oct 2009\) General Information for this Meeting](#)

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