SFIREG

STATE FIFRA ISSUES, RESEARCH AND EVALUATION GROUP

June 24, 2019

Moana R. Appleyard
USEPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N. W.
Mail Code: 7508P
Washington, DC 20460

Dear Ms. Appleyard:

On behalf of the State FIFRA Issues Research and Evaluation Group (SFIREG), a permanent committee of the Association of American Pesticide Control Officials (AAPCO), thank you for the opportunity to comment on EPA's Pyrethroid Outdoor Application Statements. Specifically, EPA requested feedback of its current draft label proposal to address the ecological risks to aquatic invertebrates from pyrethroid products. Of particular interest to EPA are the specific label statements related to the proposed reduction of the perimeter treatments from 10ft out to 3ft in outdoor settings. We appreciate your commitment to engage states and SFIREG early in the process to review the draft proposed label language to address ecological risks from the use of pyrethroids.

SFIREG's Environmental Quality Issues Working Committee (EQI) has compiled preliminary feedback from SFIREG EQI members, Region 7's SFIREG Representative and AAPCO. Commenters represent California, Washington, Oregon, Florida, and Nebraska. The comments provided below address various section of the labels including the specific feedback requested for the outdoor perimeter treatments. Again, we appreciate the opportunity to provide initial comments to you. Considering the complexity of this issue and these labels, we would appreciate further time to work with your group on these concepts.

General Outdoor Application Statement

General Outdoor Application Statement	"All outdoor spray applications, if permitted elsewhere on this label, must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses: 1. Applications to soil or vegetation, as listed on this label, around structures; 2. Perimeter band treatments of no more than 3 feet wide or less outward from the base of a building, for pervious surfaces. 3. Applications to lawns, turf, and other vegetation, as listed on this label;

	4. Applications to the side of a building, up to a maximum height of 2 feet above ground level; 5. Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure; 6. Applications to the exterior surfaces of buildings around potential pest entry points into buildings, when limited to a surface band not to exceed one inch in width; 7. Applications made through the use of a coarse, low pressure spray to only those portions of vertical surfaces that are directly above pervious surfaces such as bare soil, lawn, turf, mulch or other vegetation, as listed on this label, and not over an impervious surface, drainage or other condition that could result in runoff into storm drains, drainage ditches, gutters, or surface waters, in order to control occasional invaders or aggregating pests."

COMMENTS - California Department of Pesticide Regulation, Nan Singhasemanon, EQI Member

The 10-ft reduced to 3-ft on the label is something that has existed in California since 2012 as part of the DPR pyrethroid regulations. The reduction was negotiated between DPR and registrants with input from pest control operators (PCOs).

During regulation development, the goal of negotiations was to reduce use on areas that were not critical for pest control in California and on areas that were prone to runoff. I understand that the Pyrethroid Working Group (PWG) had conducted a survey with PCOs and one of the findings was that few companies in the state were applying beyond a 3-ft distance from the structure for perimeter spray use. They were already getting good efficacy on general insect control. So, there was consensus to tighten up that distance. Since EPA is having conversations with PWG, we suggest EPA ask them about the survey and the findings. The survey was very comprehensive and here is the PWG supported perimeter survey link: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4255737/

California DPR continues to monitor pyrethroids in urban runoff & receiving waters. DPR is seeing some reduction in concentrations of bifenthrin in Northern CA, but not much reduction has been observed in Southern CA for bifenthrin or other pyrethroids. There are other factors that could have impacts on the success of the DPR regulations. DPR has increased PCO outreach & coordinating with our enforcement team and our team has gone back to model management practices under the regulations & have explored new ones too. The regulations were developed without modeling at that time and now with our modeling resources we'll be able reevaluate. The idea was to dial down and restrict use while keeping efficacy intact. Note that DPR is currently prepping a manuscript on our monitoring data and it will be published soon.

EPA Question: *Do you have any feedback on how the reduction has worked in terms of efficacy for treating pests and general workability for the applicators?*

DPR Response: As for efficacy & impact on applicators, it's been 7 years & there hasn't been a concern raised by any PCOs since the DPR regulations have been in place. Keep in mind they have access to other materials as well so they may have likely adapted their product use patterns to fit there pest control needs.

We know that fipronil has seen an increase in use for insect control (mainly ants & spiders). Of course, CA has unique climate & pest pressures so what has worked for us may not work for other states or regions.

COMMENTS - Washington State Department of Agriculture
Gary Bahr, EQI Chair

Question: *If the labels already say "spray the foundation of the house to a height of 2 to 3 feet", then if horizontal spray is allowed, should the horizontal distance also be "2 to 3 feet" also or at a minimum of "banding less than 2 feet" at the foundation?*

- Labels should be changed to eliminate the 10 feet spray horizontal spray distance and broadcast spraying on imperious surfaces should be avoided.
- It seems like the horizontal distance away from the structure would vary based on an *impervious or non-impervious horizontal surface* next to the vertical, or also whether it is *under an overhanging roof*, or in *proximity to some drain our runoff collection system*. There could be restrictions in proximity to runoff drains and drain systems to piping systems.

There is also a question regarding the vulnerability of applications to lawns where there is irrigation and a close proximity to impervious surfaces. [Note: Possibly Nan Singhasemanon's team at DPR, UC Davis and the UP3 Partnership (abbreviation for Urban Pesticides Pollution Prevention Partnership) have some data on this].

I've seen some language where states have these recommendations:

- Other than crack-and-crevice or spot treatments, any outdoor surface must be over permeable sites like bare soil or lawns, NOT over other impervious surfaces where runoff may occur after rainfall or irrigation (such as concrete).
- Application to things like sewer lids, drains, or similar sites where the pesticide may enter storm water or surface water is prohibited.
- Applications to sidewalks, driveways, or other impervious surfaces can only be crack-and-crevice or spot treatments.

Currently labels vary considerably and could be revised to be more consistent. Examples of variations depending on the product are provided below. These variations in labeling should be simplified if possible and labels amended to provide consistency.

Example: APPLICATION INSTRUCTIONS
To keep insects/pests from entering the house, use a hose-end or tank sprayer to spray a 2 foot band of soil around the house next to the foundation. Also, spray the foundation of the house to a height of 2 feet. Repeat application every 14 days if necessary.

Example: For Home Perimeter Treatment Application:

- *Spray a 3 to 10 foot band of soil around the house next to the foundation.*
- *Also, spray the foundation of the house to a height of 2 to 3 feet.*
- *House siding may be treated if pests including gypsy moth adults and caterpillars, boxelder bugs, elm leaf beetles, earwigs or silverfish are present.*

Example: DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not water the treated area to the point of run-off. Do not make applications during rain.

- Outdoor Applications including hard surfaces:
    - All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses: 1. Treatment to soil or vegetation around structures; 2. Applications to building foundations, up to a maximum height of 3 feet.
    - Other than applications to building foundations, all outdoor applications to hard surfaces such as sidewalks, driveways, patios, porches and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications, only.
    - Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.
    - Application to Horizontal Hard Surfaces
        - To help prevent product from running off into sewers, storm drains, and curbside gutters, do not treat hard flat surfaces (e.g., driveways, sidewalks) unless the surface is protected from rainfall and spray from sprinklers.
    - Application to Vertical Hard Surfaces
        - Pest control on outside surfaces and around buildings: Applications to hard vertical surfaces outdoors (e.g., foundations) are permitted to a maximum height of 3 feet above the ground. Sections of hard vertical surfaces that join to hard flat surfaces outdoors can only be treated if either 1) these sections are protected from rainfall and spray from sprinklers, or, 2) the hard flat surfaces they touch do not drain into a sewer, storm drain, or curbside gutter.
    - Perimeter treatment: For sections of foundation that join to hard flat surfaces, the treated areas must be protected from rainfall and spray from sprinklers unless those hard flat surfaces do not drain into a sewer, storm drain, or curbside gutter

WSDA's "*PESTICIDE APPLICATORS GUIDANCE DOCUMENT, Label Changes for Pyrethroid Non-agricultural Outdoor Products*" is included below:

STATE OF WASHINGTON

DEPARTMENT OF AGRICULTURE

P.O. Box 42560 • Olympia, Washington 98504-2560 • (360) 902-1800

PESTICIDE APPLICATORS GUIDANCE DOCUMENT

Label Changes for Pyrethroid Non-agricultural Outdoor Products

Why are these labels being changed?

Recently, pesticide products containing insecticides in the chemical class known as pyrethroids have undergone a series of label changes. These changes are in response to water quality monitoring studies that found significant amounts of pyrethroid insecticides (primarily bifenthrin) in sediments of urban

creeks in California. Pyrethroids are highly toxic to aquatic organisms, accumulate in sediments, and thus produce an increased risk of killing invertebrates and other creatures living within sediments.

What is currently happening?

The Environmental Protection Agency (EPA) is requiring revised Environmental Hazard Statements and general Directions for Use for pyrethroid pesticide products used in non-agricultural outdoor settings. These label changes are intended to reduce pyrethroid movement into non-target areas through runoff or spray drift that may occur during applications. Amended labels from pesticide manufacturers were due by June 4, 2010 so these products will be showing up in the marketplace very soon. Both consumer products and those designed for use by pest management professionals (PMPs) are affected by these changes.

Because pyrethroids are widely used in commercial and residential accounts, PMPs are questioning how, when, and if they can still legally be used. These label changes do not mean pyrethroids are being taken off the market; they are an important tool that will remain in your toolbox. What these changes do mean is that PMPs need to use pyrethroids more cautiously. Older products that do not have new restrictions can continue to be used according to the existing label.

What will these changes mean to me and my customers?

Broadcast applications to large surfaces such as exterior walls of buildings, patios, or concrete walkways will no longer be allowed. Treat where the pest is or will enter a structure (around windows, doors, or other openings), not the entire side of a house.

All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- Treatment to soil or vegetation around structures.
- Applications to lawns, turf, and other vegetation.
- Applications to building foundations*, up to a maximum height of 3 feet.

[*Foundations include exterior siding of a building, not just the concrete.]

Pyrethroids used for termite pre-treatments have additional guidelines including:

- The treatment site must be covered prior to a rain event in order to prevent run-off of the pesticide into non-target areas.
- Do not treat soil that is water saturated or frozen.
- Do not apply within 10 feet of storm drains. Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes or ponds, estuaries, and commercial fish farm ponds.
- Do not make on-grade applications when sustained wind speeds are above 10 mph (at application site) at nozzle end height.

Do not treat when raining – this is the most difficult restriction due to the frequent rain we have in the Pacific Northwest, especially west of the Cascade Mountains. WSDA recommends that you do not apply if there is a chance of significant amounts of rainfall (accumulations of greater than ½") within the next 24 hours. Use common sense. If you believe any pesticide will move away from the application site, don't apply it.

Do not apply to the point of runoff – this pertains to both liquids and granular formulations that may be watered into a lawn after an application.

Keep out of gutters or drains to prevent movement into bodies of water.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot*** or crack-and-crevice applications, only.**

[**Even though protected from rainfall, these areas are subject to runoff during certain weather events. EPA is not allowing broadcast applications to these or sheltered areas such as slabs in carports. For spider treatments under eaves, apply the pesticide as a crack-and-crevice application where eave adjoins siding or along gutters. Spot treatments can be used where spiders and their webs are abundant. To minimize the potential for drift, a broadcast application to the entire eave around the perimeter of a building is no longer allowed.]

[***A spot treatment is not to exceed two square feet; making adjacent spot treatments to cover a large area is not allowed.]

If you have questions about these label changes, contact Dr. Dan Suomi at 360.902.2044 or by email at dsuomi@agr.wa.gov.

March 2012

READ AND FOLLOW THE LABEL!

COMMENTS – Oregon Department of Agriculture
Rose Kachadoorian, AAPCO President

Issue One: Original EPA language: *"Only apply products containing (name of pyrethroid) onto fields where a maintained vegetative filter strip of at least 25 feet exists between the field edge and where a down gradient aquatic habitat exists: …"*

- Shouldn't this be re-written to read something like, *"When there is a down gradient aquatic habitat within 25 feet of the treated crop, only apply products containing (name of pyrethroid) onto fields if there is a maintained vegetative filter strip of at least 25 feet between the treated field edge and where the down gradient aquatic habitat exists."*

Issue Two: The issue regarding the definition of rain came out of western WA in 2012, see attachment.

- This needs to be defined on these labels. Perhaps use NOAA's (https://w1.weather.gov/glossary/index.php?letter=r), *"Precipitation that falls to earth in drops more than 0.5 mm in diameter."*

COMMENTS – Florida Department of Agriculture and Consumer Services
James R. Cooper PhD, CPSS, Assistant Bureau Chief, Bureau of Scientific Evaluation and Technical Assistance

Spot Treatment Guidance Statement

1. I like defining a spot treatment application by maximum area for one spot, eg. 2 sq. feet or 2 ft. diameter spot for ant mounds. I think it should be done for spot treatments on herbicide labels also.
2. Additional guidance on label regarding how many spots are allowed per acre before it is considered a broadcast treatment, eg. not to exceed 10% of an acre.
3. I think labels need to be clearer that spot treatments are not to receive the total broadcast acre rate, eg. if broadcast rate is 2 lbs. product/acre then the sum of spot treatments in 1 acre should not get 2 lbs. of product.
4. Do we need to allow some spot treatments in vegetated buffers and no spray zones? Are the no spray zones areas rapidly re-inoculating the treatment areas?
5. Do we need to allow more applications per year for spot treatments? More frequent spot treatments so fewer broadcast treatments overall. I assume spot treatments are easier on the native insects.

Buffer from Water Statements:

"For soil or foliar applications including turf applications, do not apply within 25 feet, or by air within 150 feet by lakes, reservoirs, rivers, permanent streams, marshes, or natural ponds, estuaries and commercial fish farm ponds."

1. I would like to see the word "wetland" used in the "do not spray areas", but I know the Feds have legal problems defining a wetland.
2. Do we need to add koi ponds and non-commercial fishponds, to protect the suburbians and people with their ranchettes from their neighbors and themselves?
3. The term "natural ponds" should be omitted since I think this implies exemption of any man-made lake around a sub-division or golf course, which is likely connected surficially downstream to a natural surface water.

Water Protection Statements:

"Do not spray into fish pools, ponds, streams, or lakes. Do not apply directly to sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain or after application".

1. Fish pools seems like odd terminology. It seems like you are allowing applications in the riffles since phrase "pool and riffle" is common terminology in hydrology.
2. Suggest changing language to; Do not spray into surface waters which includes such areas as wetlands, marshes, streams, lakes, ponds.....etc.".
3. "*And do not spray into areas that frequently flood (lower flood plain which floods every other year, 50% chance flooding every year).*" The problem is spraying in areas that are dry during the treatment but are known to flood at some time later. Once these areas are inundated, any pesticide applied can desorb from the soil into the overlying water or move with the eroding soil down to potentially sensitive aquatic communities.

Rain-Related Statements:

"Do not make applications during rain and avoid making applications when rainfall is expected within 24 hours to allow products sufficient time to dry".

1. If it takes 24 hours to become rainfast, then we need better products.
2. Florida's forecast is a least a 30% rain every day during the 5 to 6 months of summer sea breezes and daily thunderstorms.

Landscaping Ornamentals and Ornamental Turf:

"Do not apply when the average wind speed is greater than 15 mph."

"Average" is a non-enforceable term. Is it the 15 min, 1-hour, 3-hour, 1-day, or 1- week average wind speed? Prefer standard drift language of applying when wind speed is 3 to 10mph. Wind speeds less than 3 mph may be due to an inversion, which will keep it in the air longer and promote drift.

Commercial Nurseries:
"Do not apply when the average wind speed is greater than 15 mph."
See comment above.

Spray Drift - Ground boom applications:
Do not apply when wind speeds are sustained above 15 miles per hour at the application site.

1. "Sustained" is not a defined term and not enforceable. How long is sustained? Recommend utilizing standard drift statements. Apply when wind speed is 3 to 10 mph. Do not apply when wind gusts above 15 mph.

Do not apply during temperature inversions.

1. Once again, the need for the 3-mph minimum wind speed, which is often symptomatic of inversions, but also need statements on other ways to ID an inversion (fog, dew, smoke behavior etc.).

Vegetative Filter Strip
"Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

*Only apply products containing (name of pyrethroid) onto fields where a maintained vegetative filter strip of at **least 25 feet** exists between the field edge and where a down gradient aquatic habitat exists".*

1. Further clarification as to what is classified as an "aquatic habitat" may be helpful. For instance, would lateral ditches that often run around the edge of fields be subject to the required 25-foot vegetative buffers?
2. What of smaller ditches that run into the field?
3. Flat Florida has ditches that often keep water for long periods of time so there is always something aquatic in them.
4. Usually I think of a ditch as something that is continually being maintained with dredging.
5. Does the vegetative filter have to be on my property? eg. Right of Way of a utility line, road, public land, neighbor's property.
6. What does it mean to construct and maintain a vegetative buffer? Can a sucessionary field of dog fennel and blue stem serve as a vegetative filter strip, even if it was intentional?
7. How to handle invasion of vegetative filter strip by pollinator attractive weed species, eg. *Bidens alba* (Spanish Needles)? Would I be on the line for potential spray drift impacts if pollinators are present in the filter strip due to this? *Bidens alba* nearly blooms all year in Florida and is a foundation plant for native pollinators.

With regards for the reduction in the vegetated filter width from 25 to 15 feet if you practice soil conservation:

1. I think this is OK for erosion of soil-adsorbed pyrethroids, but we still need at least a 25ft buffer for spray drift during application. I think that research is showing that we are having more spray drift than we originally thought and pyrethroids impact aquatic invertebrates down in the parts per trillion range.
2. I recommend we go wider on vegetated filter strips for Highly Erodible Land, which are defined by the NRCS in their HELC-Highly Erodible Land Conservation. We do not need to have these lands in annually cultivated row crops and they have one of the largest impacts on

surface water quality. This will also provide more incentive to get with NRCS program to get them into perennial vegetation.

COMMENTS - Nebraska Department of Agriculture
Craig Romary and Tim Creger, Region 7 SFIREG Representative, Animal & Plant Health Protection

EPA is considering mitigation options to reduce the movement of pyrethroids from agricultural fields to water bodies, and would appreciate information from USDA on some options we are considering. Some proposed label language follows the questions.

Background
EPA is considering increasing the required vegetative filter strips (VFS) between fields where pyrethroids are used and water bodies from 10 feet to 25 feet. The proposed VFS could be reduced to 15 feet if:
The area of application is considered prime farmland (as defined in 7 CFR § 657.5).

- Conservation tillage is being implemented on the area of application.
- Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.
- Terrace farming (such as defined here: https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1263187.pdf) is being used on the area of application.
- Water and sediment control basins are present, as defined here: https://www.nrcs.usda.gov/wps/PA_NRCSConsumption/download?cid=nrcs143_026238&ext=pdf

Questions

- *Are these appropriate and effective practices that reduce the movement of soil into waterbodies?*
- *Are these practices well defined so that growers will know what is being required without further definition?*
- *Are there other, similarly effective practices that EPA should consider adding to the list to maintain a 15 foot VFS instead of a 25 foot VFS?*
- *Are field borders, as defined here https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1241318.pdf, equivalent to a VFS?*
    - Although the two practices appear to have some of the same purposes, I have always associated field borders with ag equipment traffic (turning end rows and hauling harvested crops out of the field). Grass species selected for traffic ways, possibly, might not be as efficient at filtering sediment and associated pollutants.
- *Is prime farmland generally considered to be at little risk from soil erosion?*
    - Generally lower risk, yes, but these same areas are also generally in low-lying areas where the streams are found, so having VFS in these areas would be beneficial.
    - Would it be easier to state "on fields that are not highly erodible (NHEL) or those that are highly erodible (HEL) and also treated to an XYZ conservation plan through USDA, the reduced width is acceptable"?

- However, even NHEL ground has erosion….
- EPA is also considering maintaining the current 10 foot wide VFS for Western irrigated agriculture (WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM). *Is irrigated agriculture in these states at little risk for soil erosion?*

Vegetative Filter Strips

The following mitigation applies to all Agricultural pyrethroids (except pyrethrins).

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

- This implies that the VFS be designed to some standard, not just be in any vegetative cover. Prior labels provided a link to a USDA document (that link is no longer good on the two labels I referenced). I recommend a link to some document: either the previous "conservation buffers to prevent pesticide losses" (This one is still good: https://permanent.access.gpo.gov/lps9018/www.wcc.nrcs.usda.gov/water/quality/common/pestmgt/files/newconbuf.pdf) and/or the NRCS filter strip standard (Nebraska's, for example: https://efotg.sc.egov.usda.gov/references/public/NE/NE393.pdf). However, EPA and/or USDA should permanently maintain the URL.
- However, the minimum width for the NRCS filter strip practice is 20'.
- It may need to be clarified better, that the VFS does not equal just any vegetative cover, if that is in fact, what is implied.

Only apply products containing (name of pyrethroid) onto fields where a maintained vegetative filter strip of at ***least 25 feet*** *exists between the field edge and where a down gradient aquatic habitat exists. This minimum required width of 25 feet may be reduced under the following conditions.* Another reason why the label should reference a standard or guidance of some kind so that the maintenance required is available.

- *For Western irrigated agriculture a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM.*
- *In all other areas, a vegetative filter strip with a minimum width of 25 feet is required, unless the following conditions are met. The 25 feet vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:*
  - *The area of application is considered prime farmland (as defined in 7 CFR § 657.5). Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.*
  - *Suggest Functional and maintained Terraces are present ~~farming is being used~~ on the area of application.*
  - *Suggest Functional and maintained Water and sediment control basins are present on the area of application.*

Question: *If a field was not prime farmland, and had no conservation tillage, terraces or WSBs, would the extended-width filter strip along a permanent waterbody really help that much?* Potentially, much of the field's runoff would be coming from the majority of the field that would not flow through a filter strip.

- The waterways/waterbodies where the VFS is required does not include seasonal or intermittent streams, which limits the placement and utility. The Nebraska Department of Agriculture struggled with similar language for required setbacks on atrazine products, and subsequently developed an interpretation of "intermittent" found on those labels (http://www.nda.nebraska.gov/pesticide/pti1.pdf). This interpretation leaned more toward what is considered as "seasonal" than what one might consider "intermittent".
    - For the Nebraska Buffer Strip Program, streams that are marked on USGS topographic maps as "intermittent" are eligible for filter strips, but may not meet the definition of a stream that requires an atrazine setback
    - The "conservation buffers to reduce pesticide losses" document talks about how having buffers higher up - along lower order streams or drainages – increases effectiveness of the buffers…
    - I suggest adding seasonal and/or intermittent streams to the label with a similar definition as our interpretation (linked above), to include streams that support aquatic life and are something less than permanent, but not those that would be considered 'flashy' or ephemeral.
- While I believe that having a VFS as described and implemented above would be beneficial, this language is another example where there may be a disconnect in communication if the applicator is someone other than the landowner/operator of the property being treated – i.e. a compliance issue.

Existing labels also have language that mentioned a "buffer zone".

- Will that still be the case? Does the buffer zone equal a no-spray zone, or is it referencing a VFS? Maybe it could be called a no-spray zone, to prevent confusion with a VFS, which are also called buffer strips by USDA.
- Vegetative filter strip; buffer strip; buffer zone; no-spray zone; setback – all good terms but used in different ways by different agencies and programs….
- Does the buffer zone include the VFS, or is that in addition to the VFS? Some clarification would be good.
- Is the 10, 15, or 25' VFS needed if the field is applied aerially, which might require a no-spray buffer zone of several hundred feet? This should also be clarified.

Thank you again for the opportunity to comment. We look forward to working with EPA and the continued dialogue.

Sincerely,

Liza Fleeson Trossbach
SFIREG Chair

cc: AAPCO Board of Directors
Gary Bahr, EQI Chair