

INDIANA PESTICIDE REVIEW BOARD

164th Meeting Minutes March 2, 2021; 9:00 am – 11:40 pm Office of Indiana State Chemist 175 S University St. West Lafayette, IN 47907

Members Present: Members Present Virtually: Ex officio

Bruce Bordelon Bob Andrews David Scott

Lee Green Bill Johnson Mark LeBlanc, State Chemist

Ron Hellenthal (Chair) Christian Krupke Fred Whitford

Jamey Thomas

Jim Hawbaker

John Bacone

Julia Tipton-Hogan

Members Absent: Kevin Underwood

Martha Clark-Mettler

Megan Abraham

Mike Titus

Scott Robbins

Stuart Orr

1. Approval of the meeting agenda...MOTION... to approve by Ron Hellenthal, seconded by Lee Green; **VOTE**... was unanimous

2. Approval of the previous meeting minutes...

Ron Hellenthal: Everyone should have access to these—are there any questions or comments? Dave Scott: The only comment I have to make is that you will notice a format change from time to time, that's a function of who is taking the minutes for the day. It is not an intentional change of format, just a matter of style.

MOTION... to approve by Martha Clark-Mettler, seconded Lee Green; **VOTE**... was unanimous

3. Review of cases involving civil penalties since the last meeting...

Ron Hellenthal: As with the previous meeting minutes, everyone should have access to these—

are there any questions or comments? If not, no vote is required, we'll move on.

4. Civil penalty legislation under consideration during 2021

Ron Hellenthal: I believe there was a link posted, but it didn't work. However, there have been no changes since the last review, so Dave, take it from here?

Dave Scott: Yes, and it's no longer draft legislation; it's in process. What should have been available with the meeting announcement is Senate Bill number 227, we will get that fixed, make the link active.

Senate Bill 227 tracks identically to the draft that we reviewed at the last meeting. The Senate took it up first, it went through committee, had support from a variety of folks that participated the workgroup, passed senate 49-0, the next step, we hope for the House to take up Senate Bill 227 and take action in the House. I spoke to John Baugh this morning, as of right now, the bill is not yet on the House agenda to be heard, but that may change at any time. This year's legislative session is a little different than has traditionally been conducted, taking the pandemic into consideration, but we anticipate that the House will take up the bill any day. With that, I'd be happy to answer any questions

Martha Clark-Mettler: Do you know what committee is taking up the bill?

Dave: It's been assigned to the House Ag committee

Bruce Bordelon: Are there any questions coming in about this?

Dave: Questions post work group have been almost nonexistent, we've had a couple of conversations with legislative services, with those taking the draft and turning it into a bill, but those were just clarification questions. We've had little in the way —or none— of public inquiry, without a doubt, the workgroup did a fantastic job, but the support of all of the user groups or those that would be impacted by the changes in the regulations has been very helpful.

Bruce: Hopefully we'll hear about it in the near future.

Dave: Just as soon as action is taken on it, we'll get it posted to the Review Board website.

Ron: Any questions or comments? Hearing none, we'll move on.

5. Determination of RUP dicamba products as Highly Volatile Herbicides (HVH)

Dave Scott: By way of background, at the last meeting, there was an ask to consider a June 20th cutoff date for the application Dicamba herbicides in 2021. We know Illinois is pursuing an emergency rule to implement a June 20th application cutoff date in their state, I'm not sure about other states, since there is a June 30th application cutoff date built into the label now. EPA no longer allows state label or 24c label, the mechanic utilized before to implement the cutoff date, to be used to further restrict a pesticide use in a state.

So we looked into the statutes for other options, we found one that indicates that the Board has the authority to determine that any particular herbicide qualifies as a highly volatile herbicide (HVH) if it meets the definition as stated in the statute.

At the last meeting, we elected to pursue that option so that we can implement the June 20th cutoff date. There was support from the board for that in the last meeting, Martha was kind enough to share with us a process used by IDEM (Indiana Department of Environmental Management) to make a non-rule determination policy. We followed that in format, and that's what you have in front of you.

We presented that draft document to a review board workgroup. The Workgroup met on January 27th, participants included members of industry, representatives of the 4 major Dicamba manufacturers, user groups Indiana Farm Bureau, Indiana Agribusiness Council, weed scientists from Purdue University, several of the workgroup members also serve on this Board. If there's

anything I forget that participants from the workgroup would like to add, I certainly invite you to do that.

Meeting was held on the 27th, there were a number of good questions, good input, but at the conclusion of that, they did support the concept and the identified process for implementing the highly volatile herbicide determination. Once the determination, assuming it's made by the board, then what does the law require? Then the law requires that anyone that sells or uses an HVH must do so on written permission or permit from the State Chemist Office. As we discussed, we decided not to issue individual permits to every potential Dicamba user in the state of Indiana, but to do this process by general permit. This general permit would be for both sale and distribution and a general permit for use. To qualify for the general permit for sale and distribution, the only requirement would be that the seller or distributor would be a registered restricted use pesticide dealer, and since all Dicamba products are restricted use in Indiana, and have been since 2018, those folks that are handling and distributing these products are already in compliance with that. A requirement for the permit, the second part of the permit would be that you keep records of those restricted use distributions of those restricted use pesticides—that's already a regulatory requirement, so there would be no additional requirements to the seller of the product, other than to comply with what the law already requires.

There was a good question and we tried to clarify it in this document, about the allowable period for sale of restricted and there is no restriction on the sale or distribution date of the product, just a restriction on the use date of the product. Again, it can be sold any time of the year, there are just some restrictions on when it can be used.

That would be the first part of the permit, for sale and distribution, the second part would be the use, the general use permit and the requirements for qualifications for that permit would be that you would have to be a certified and licensed applicator to use it, either category 1 which is the commercial agricultural category or certified as a private applicator or a licensed farmer. That's already a requirement, so again, nothing new there with respect to qualifying. Second part of it, you'd have to keep application records, which is already a requirement in state rule, and again, you would not need to apply to the state chemist by special permit. The third condition of the permit would be that the application must take place before, up to, and including June 20th, and there would be a no application period June 21st to August 31st, during that period you would not be able to apply it, but then if you wanted to use again after most of the risk has already past, after August 31st for a fall burn down or something like that, you would be able to do that. Again, we had some questions about, what about the turf people, with this affect them, and it wouldn't, because all of the restricted use Dicamba products have over 6.5% active ingredient, all the turf and right of way products that have been restricted since 2018 have less than 6.5%, so we would assume that none of those user groups would be impacted by this determination and the resulting written permissions requirement.

Ron Hellenthal: If I remember correctly, by eliminating this period, that would remove about 50% of Dicamba drift concerns, is that correct?

Dave: Yes, our prediction based on previous data and based on last year, when we did have a June 20th cutoff, we anticipate the number of Dicamba related off-target movement complaints should be cut roughly in half. And again, anything can be impacted one way or the other, by weather, things such as that, early summer, late summer, early spring, late spring, all those things are going to factor into it somehow. But we're looking at trend data over a five-year period and we still come out, pretty consistently, almost every year, with June 20th as a cutoff date, about half of the complaints, perhaps, would have been eliminated. That date is a compromise date. Ron: Are there any general questions from the board or public?

Lee Green: If we declare it Highly Volatile, and go this route, if you have a weird year, where planting is set back extremely far, is that June 20th date set in stone?

Dave: Because this process relies on written permission from the State Chemist, and right now

the written permission is application within that window, we could change the written permission, if we're needed to. If something goes weird, if we don't get anything planted until June, and we're having discussions with the weed scientists from Purdue, and the industry, and everybody else...Now, we're still not going to be able to push back the June 30th date, that's on the label, that can't be negotiated, that we cannot change. If you're asking about that 10 day period, if we say "you can save agriculture" or "you can ruin agriculture" by making an adjustment, then we're still going to be concerned about things like temperature, the growth stages of other susceptible plants, all the other stuff we should be taking into consideration to come up with this date—but if everything gets pushed back and things aren't out there and they're not vulnerable, that changes the equation.

So, yes, this gives us the ability to make those changes, but we want to limit making changes for points here and there, the need should truly be present.

Ron: Any other clarifications? ... So, basically, this is what, the procedure that we need to follow. In order for this to be implemented, we need approval from the board for this non-rule determination document, which will issue a highly volatile herbicide determination. If the board so approves, then three signatures are required...the first is mine, the state chemist, Mark LeBlanc, and Dave Scott—with those three signatures, this basically goes into effect, and it would be in effect this coming field season? And my signature is dependent on approval from the board.

Dave: Ron is correct, when all three parties sign and date it, if we can get it signed today, it would go into effect March 2nd— our plan, our proposal after that point would be start the outreach and communication with the public, answer all those questions, a lot of them we covered today—we've already been contacted by people in the media, they'll be touching base with me again after this meeting. So we have, cooperative extension and other educators have made it known that this is what the board is pursuing, the registrants are providing the training for registered Dicamba users, they've informally been including that date in their training – so this has been out in the open, it just hasn't been formalized yet.

Megan Abraham: Item 1- 4 on that document, are those 3 things are already being done? Will it create a large workload for your staff or has that already been part of the process?

Dave: Under purpose? Those are all things that have not been done yet, those are all things that would go into effect if the board adopts this determination today. IF you're curious as to which specific products we're talking about, we have included a reference in this document, a list of products impacted by this—but at this point, it would not require us to do much else than do some outreach on it, post some question and answers, let everybody know that June 20th is the cutoff date again. Because we're doing this by general permit, it would require us to write a general permit that mimics the language in this document and tells people, "if you're a certified category 1 applicator, or a certified private applicator, you are covered by this general permit, assuming you don't apply it after July 20th. It wouldn't require a lot of extra work on our part, just formalizing it and doing the outreach and communication—

Megan: So the section that says "on written permission from the Indiana State Chemist," that doesn't require your office to write separate permission for each user?

Dave: The general permit allows us to write one for all users, rather than individual permit. Ron: Any other questions? If not, the next step is for us to vote to approve—we need a motion to approve this non-rule determination

Move to Approve Lee Green, Seconded by Mike Titus, vote by role call...was unanimous.

6. Community-wide mosquito vector management projects directed by ISDH

Dr. Jen Brown, State Public Health Veterinarian (See EEE PowerPoint)

Rare but serious cause of illness, most serious mosquito-borne illness native to our area

Mosquitoes acquire disease from birds, pass to horses and humans (mosquitoes do NOT acquire /relay the disease from humans and horses) This is important because vaccinating the horses will not prevent the virus from being transmitted (from mosquitos) to humans.

Most people infected with EEE won't know it, they'll have asymptomatic infections or a flu like illness, 5% will get neuroinvasive disease, causes a multitude of symptoms including death. Highest risk groups are kids younger than 15 and adults older than 50. One in three people that get neuroinvasive disease will die as a result—the other two are highly likely to have life-altering permanent conditions. Michigan 2019 cases, survivors of the neuroinvasive disease were "neurologically devastated."

There is an area of increased risk for EEE, this is due to the confluence of the preferred habitats of the species of mosquito that are vectors of this disease. (Sphagnum bogs – cattail marshes) During an outbreak, 3 different tools to control mosquitos:

- 1. Adulticiding immediate risk reduction
- 2. Larviciding future risk reduction
- 3. Source reduction future risk reduction

Adulticiding addresses immediate need, the others do not. Three available methods of adulticide:

- 1. Barrier treatment
- 2. Truck mounted ULV
- 3. Aerial ULV
 - a. The only effective/recommended for EEE
 - b. Truck mounted cannot easily access area
 - c. Aerial is only way to effectively cover such large space, 3 6 counties

Two different products were considered, Dibrom, Merus 3.0, compared active ingredient, class, effectiveness, etc.

May not need to spray in 2021—it's not something we want to do unless it's absolutely necessary.

Looking to determine best modes of outreach to communicate with organic farms and apiarists.

Fred Whitford: Lee Green asked me to look through their program, give them any ideas, see if I had any input in terms of their action and their work.

The question is should EEE be dealt with? There are a few people that would say "no, it's just a few people, or a few horses, we shouldn't do it." But I think most people would agree that something should be done. In any large-scale program, you'll have some disagreement, but that's where you reach out to see if education can change it, or exactly what the problem is.

The Indiana Department of Health is obligated to deal with these issues-- human health is their priority, as is COVID right now. The problem is that it's a wide-scale application, so we're going to have to use planes, we don't have enough people to do ground applications. To some people, the use of planes is disagreeable, but again, I have no choice, I have to take action. The pilot, who they selected, Agri-fly, is a company I've worked with for 30 years, they're family owned, I can vouch for them, they are a very important component of the aerial application community. So as I was doing all of my homework, it looks like those applications were made over a 2 day period, is that correct?

Jen Brown: In 2020, we were hoping to do the application in one night. In 2019, the applicator had issues with the nozzles getting clogged, which I understand is an expected nuisance when

working with this product—when they returned home, looked at their data, they weren't happy with the application rates they'd gotten in one area, so the next night that one area received a repeat application. Without that technical difficulty, the treatment would have been accomplished in one night.

Fred: To me, looking at the data that way, making the decision to reapply, to me that says we've got a top-notch applicator there. So, I looked at the two choices of product for treatment and reviewed their labels, Dibrom and Merus. In ways they're very similar and ways they're very dissimilar. When we see the efficacy rates between them, up to 95% and up to 86%, that's "up to," and that's concerning to me, that's the top end of their efficacy. So I looked up the efficacy data for both across the country. The efficacy for the product you chose (Dibrom) was 75-95% and the efficacy for Merus 60-85%, based on some of the published research. When it comes to human health, then the product you chose has the much higher efficacy, which is obviously the goal. We are, relatively speaking, putting on, a tablespoon of product to an area the size of a football field, to understand the quantities going out. It is not very much. Other advantages to the Dibrom concentrate is that I haven't seen and resistances to that product built up yet, again, I'm not an expert in that, I'd let Lee, but I couldn't find any cases of resistance to it, as compared to the pyrethroid resistance. What that means, if they're resistant, we don't kill them.

What I appreciated with the products, was the low use rates, both of them.

The one thing that stuck out about both products, and both products on their labels say "this product is highly toxic to bees." They both have it, if I look at the comparison of both products, their safety to people, the environment, their efficacy, their characteristics, Dibrom is the one to go to, if I'm concerned with human health and making sure we get these mosquitos knocked down.

Now, some of these things, and I'll defer to you and Lee, some things don't kill, just knock down, they knock the population down but they come right back—long and short, I think this product is the right choice of product given these two options.

Then there is the question of toxicity to bees—both suggest treating at night, when most pollinators are not out. The good news is that these materials break down relatively quickly, idea is to kill the mosquitos on contact.

I like the program, and I looked at the complaints lodged. One of the complaints was that the people in those counties were not given enough notice, I would have agreed that a two day notice was not enough, until we had a discussion as I was collecting the information—that we could give people a two-week notice, but there's a chance that in that timeframe, people are going to contract this horrible, life-altering disease. Now your policy is 48 hrs advance notice—that's the max, that they're not going to go any longer than that because they don't want to put people at risk, is that right?

Jen: I would say it's correct to say that the minimum amount of notice we would give would be 48 hrs. In other words, we would not engage in aerial adulticiding without having made a public announcement at least 48hrs prior. If we could do more than that we would, but the moment we have enough evidence that a treatment is warranted, we are scrambling to do it as quickly as possible to protect human lives.

Fred: And that was some of the complaints that I'd heard from people up in those counties. From the work, as far as I can tell from OISC website—most board members know that every case that has a finding is put online for public access. I went to that and it looks like there were 2 complaints from beekeepers, one I'll dismiss because it was way after the fact of the treatment, they'd been having problems for a number of years, was more inquiring if the spray treatment could have been a factor.

The second was a more legitimate concern, this gentleman had 100+ hives impacted, he had hives scattered across many counties, some samples were positive for dibrom, some were not,

there is the possibility that some of this man's bees were killed by the treatment. But OISC found no violations in making the applications—but the question remains, did the chemistries reduce this man's hives, that would be up for discussion by people more qualified than I.

I will add that, even if it were found to have killed the bees, the Indiana State Department of Health has no funding available to pay for the losses of his hives.

Overall, no choice but to take action, product choice seems to have been the best one based on evidence, and accomplished the goal of minimizing EEE in Indiana

My only suggestion would be an information fact sheet for the website- to make your actions as transparent as possible. I can disagree with what you did, but at least I can see what you did and why you did it.

Then it's a question of what can we do to speed up the communication so the keepers can take all necessary action.

Jeff Burbrink: Elkhart County extension office, I got a call from Lee something like three weeks in advance. I called that beekeeper, he's got 1,100 hives, lost about 100—he can't pin them up for three weeks. I did contact him, his response was that he just couldn't get to them all in that timeline.

Megan: Agri-fly for gypsy moth applications—I know that the pesticide applicators have controls to help adjust where the spray is applied. Sprayed on just Bogs? Or just residential? Are you able to cut out the areas that the beekeepers might be in?

Jen: Shut off over certified organic farms, to allow them to retain their organic certification—shutting it off over bee properties, the challenge may be that the hive locations are not as concentrated, shutting off over the very small location may not be effective.

Jeff Burbrink: I've discussed that—yeah, they can't shut it off over singular hives.

Megan: What about where there are 20 or so hives?

Jen: If he also registers as an organic farm, then, yes, we can.

Don: Why are there no other options other than aerial—first of all, most aquatic applications don't do well in high organic loaded waters, they break down too quickly. The bird-mosquitoes breathe through cattails and are very hard to control—the only way to address them is adulticide.

Fred: Are the Amish getting their horses vaccinated?

Jeff Burbrink: They do not hesitate to get their horses vaccinated at all. I think they were under the impression that the EEE vaccination is like measles or mumps, but it's an annual vaccination, and I think they had shift to how they think about the process, but they're on board for vaccination.

Jeff: Huge (LaGrange left out of the loop) miscommunication in 2020.

Christian Krupke: Purdue entomology, what beekeepers can do—they don't usually have anywhere to move their hives to—hardware cloth in the entry, we've done all we can do letting people know exactly how to address their hives.

Every bee that dies will be attributed to this—not necessarily the case, but the upfront communication can help prevent that anger.

Brock Harper is our new bee specialist, I'm happy to work with him to set up some guidelines, recommendations, to distribute to beekeepers.

Jen: Absolutely, I'd love to get that sort of information (an FAQ sheet) out well in advance of even the possibility of spraying. And I'd love to establish the best method of communication with beekeepers.

Fred: We can coordinate, get a publication out there, get it posted.

Fred Whitford, Christian Krupke, Brock Harper, and Jeff Burbrink to collaborate and publish.

Ron: Anything else on this topic? If not, we have just one more item on the agenda. It's a relatively short one: Planning for pesticide rule revision overhaul process

7. Planning for pesticide rule revision overhaul process.

Dave Scott: For this one, we're just looking for a little bit of guidance from the board, with respect to ideas on process as we advised the board and introduced to the board last February, we've been working on drafting some updates to a whole variety of pesticide rules that the Board and the State Chemist's Office are responsible for. In some of the rules we're looking into relatively minor improvements and tweaks, and in a couple of the rules, we're looking at a couple of items, with respect to regulatory changes that might be considered a lot more significant.

Some examples, we're looking at our containment rules, storage and containment rules, that right now apply only to bulk and we've been asked over the years, "are there containment rules for small package items? So we're looking at the possibility of adding that to our storage and containment rule.

We're also looking at tweaking things with respect to allowed storages of mini-bulks out of containment, because they're intended to be delivery or point of application containers as opposed to more permanent storage containers.

As was introduced a couple of meetings ago, we're also looking at modifying certification and training rules to incorporate and address changes that the EPA made—I'd consider that as a more significant change. Some of the concepts we've introduced are, for example, maybe distinguishing between users of a restricted use pesticide versus the users of general use pesticides only.

We're looking for how do we proceed with that? Is the better approach just putting all the State Chemist ideas down on paper and floating it to the board at a board meeting, or would some of those activities be better served by a workgroup or several workgroups, as some of these rules are very industry specific and don't impact a lot of folks, would it be better to work on some of those things to build some kind of consensus, before we come to the board. I'm just throwing it out there to the board, I'd be happy to proceed either way, just looking for a little feedback from the board.

Ron Hellenthal: Is it possible to at least provide us a synopsis of which rules would need to be changed and a general description of the changes that are required? I think, if we had that list, we could then decide which of the issues need more thorough consideration and then set up workgroups appropriate to do so. It's hard to know in advance which things will need that kind of consideration without knowing what they are.

Dave: We can certainly do that.

Ron: Is that something you can present, initially, at the next meeting?

Dave: Absolutely.

Ron: Does that sound reasonable to other board members?

Bruce Bordelon: That does to me. Dave should certainly have a better idea of which concerns will need more discussion from outside groups—I'd be okay if you want to reach out to those

groups, Dave, before the next meeting, to set up tentative workgroup participants, those kinds of things that make the most sense, to me, that makes the most sense. To have by the next meeting, a list of "these will be easy to check off and these will need more consideration."

Ron: No matter how minor the change, each item will have to go out for public comment and economic review, correct?

Dave: That's correct, any change will require the full rule-making process, whether it's a big change or a little change. Some of them may be no brainers, some may need discussion.

Bruce: Would this be submitting all of these changes at once?

Dave: We could do it either way—we could submit them all together or do some little ones at a time.

Bruce: We still know the rule-changing process?

Dave: The steps have not changed appreciatively. It's still going to take a year to get done.

Bruce: The sooner we get started, the better.

Dave: And we can have something together by the next board meeting so you all know the scope of the project, we can also have some conversations with some specific industries—give you an example, the lawn posting and notification rule, that's going to impact the public, because they're a consumer, and that's going to impact the commercial lawn application industry and almost no one else; that's a relatively small group. We'll want to know what they think about it, that kind of thing.

Same thing with bulk containment, there's not a lot of people impacted by that.

The certification and training issue will impact everyone.

Megan Abraham: The more input you get on the front end, the more agreement, the less you'll see static on the back end, getting it approved.

Dave: Agreed.

Ron Hellenthal: Next Meeting—three months would be June, early June.

Fred: Week of June 1st

Dave: Tentatively set for June 3rd, I'll get an announcement out as soon as possible.

Motion to adjourn by Bruce Bordelon, seconded by Lee Green.

In Memoriam Steven Eugene Smith 1954-2021

As I'm sure is true of many Pesticide Review Board members and participants, I was saddened to learn of the recent death of Steve Smith.

For those of you who didn't know him, Steve was an outspoken advocate for specialty crop producers in Indiana and a frequent Board contributor and meeting attendee.

He earned his Bachelor's Degree in Agriculture, with Distinction, from Purdue in 1975 and joined Red Gold, Inc., in 1989. There he was Senior Director of Agriculture, where he oversaw agricultural activities from tomato variety development to harvesting. While at Red-Gold, he participated in Farm Bill development, co-chaired Red Gold's Sustainability Initiative, was the longest serving member of the Indiana Agricultural Advisory Board, served as a board member of Fieldwatch, Inc., and was the founder and chairman of the "Save Our Crops Coalition."

Steve was widely regarded as an expert on agricultural matters and, during his career, served on the Purdue University Dean of Agriculture Advisory Board, the Sysco Corporation National Sustainability Advisory Board, and the USDA Fruit and Vegetable Industry Advisory Committee.

Among his awards and achievements were: The Distinguished Purdue Agricultural Alumni Award in 2009, the Mid America Food Processors Association "H.D. Brown Person of the Year Award" in 2015, and the "Indiana Certified Crop Advisor of the Year" award in 2020.

The Board will greatly miss Steve's insight and advice, and sends its sincere sympathy to his wife and children.

Unless there are objections from Board Members, I ask that this be included in the Minutes of today's meeting and that it be forwarded to his family.

Ron Hellenthal, IPRB Chair 164th Meeting of the Indiana Pesticide Review Board, March 2nd, 2021