Appendix B:
Written Comments Submitted by Small Entity Representatives

Small Business Advocacy Review Panel on EPA's Planned Proposed Rules
Worker Protection Standard for Agricultural Pesticides and Certification of Pesticide Applicators

B1: Written Comments from Potential Small Entity Representatives following the 06/30/2008 Pre-panel Outreach Meeting

Questions for Potential Small Entity Representatives to help us estimate the impact of potential new requirements the Agency is considering

Certification Rule

Adding certification categories for commercial applicators:

1. Does your state already have the four categories that the Agency is considering adding? Washington does not have an Aerial Category.
2. ~~2.~~If not, and you needed to be certified in one of these categories, what is your estimate of the time it will take to travel to the certification exam and take it? I would support Washington State to addopt the Aerial Category and exam in hopes that reciprocity would be granted to established business. I would like to be able to bring in help in the event of a temporary increase in workload e.g. cereal leaf beetle. In my opinion, reciprocity should only be granted to Pilots working for established businesses.
2.

Formatted: Bullets and Numbering

Applicator minimum age:

1. Of those applicators that apply Restricted Use Pesticides (RUPs) for your business, or others you know of, what is the minimum or youngest age of those applicators? This includes commercial applicators, private applicators, and anyone applying RUPs under the supervision of a commercial or private applicator. A comercial pilots license requires a minimum age of 18.
2. If a minimum age for an applicator is imposed, how would that impact your type of operation? The existing minimum age (18) would have no impact.

Applying RUPs under the supervision of Certified Applicators:

1. Do you, or others you know of, employ applicators that are not certified and that apply RUPs under the supervision of a certified applicator? Not for Aerial.
2. If yes, how many? None.
3. With respect to the requirements for supervision by the certified applicator:
   a. how close is supervisor to the application area?
   b. does supervisor communicate with the applicator at the application site? How?
   c. is training provided for non-certified applicators?
   d. if a means of instant communication between supervisor and applicator were required, how would you do it (for example, walkie talkie, cell phone). Would this be an additional cost for your business?

Worker Protection Standard

Training:

1. There is currently a 5 day grace period before workers have to be trained. If the grace period were reduced or eliminated, what would be the cost to employers? I think the 5 day grace period works. I have annual and recurrent training depending on workers tasks. Business owners should have the flexibiltiy to provide the training needed and not required. L&I, in WA, already has rules in place to protect workers. Any additional requirements could place detrimental liabilities on employers.
2. Currently, workers must be trained every 5 years. If this were reduced, would you have to train more frequently, or do you already train every year because of worker turnover, difficulty in verifying previous training, etc.? See above.
3. When workers are hired, can it be determined if they have been trained, or would most just train them anyway? Every new hire needs training for company policy.
4. Who does your training (eg., you, hired professional trainer, extension service)?
5. Do you have a difficult time finding trainers? Owner or employee.

Restricted Entry Intervals (REI):

1. If you had to post in the field a standard warning notice (reusable sign, not specific to the pesticide) for each application in each field:
   a. how long would it take for each posting? Could now effectively implement this for aerial without detrimental costs.
   b. how many times would you have to post in a year, on average? Unknown.
   c. How much time would it add if you had to record the name of the pesticide and the expiration of the REI on the sign? Grower responsibility.
2. How many times per year do you utilize the exceptions to REIs, to allow early entry? As an aerial applicator, I don't go into fields after spraying.

Application entry restricted area:

1. What impact would the requirement of a no-entry zone around fields during application have on you? None

Hazard Communication:

1. How do you know if your workers are following safety precautions related to pesticide use such as using PPE properly, and practicing post-exposure hygiene? Observation.
2. How much burden would it be for you to maintain a file with each pesticide MSDS and make them available for workers upon request? None
3. If an MSDS for each pesticide used was required to be posted and available to all at anytime, how much additional burden would it add? In my company, MSDS sheets are available but not posted. Posting would only be done prior to an inspection if required (sorry ☹)

Joe Hogue/DC/USEPA/US
07/07/2008 11:52 AM

To JoanB Rogers/DC/USEPA/US@EPA, Caryn Muellerleile/DC/USEPA/US@EPA, Bill Diamond/DC/USEPA/US@EPA, Carolyn
cc
bcc
Subject Comment from one SER - forwarded

FYI

Thanks,

Joe Hogue
EPA, Office of Pesticide Programs
FEAD/PRSB (7506C)
phone: Tues, Wed, Thurs > (703) 308-9072
Mon. & Fri. > (804) 448-8027

----- Forwarded by Joe Hogue/DC/USEPA/US on 07/07/2008 11:50 AM -----

"Kenny Crenshaw" <kcrenshaw@herbi-systems.com>
06/30/2008 04:33 PM

To Joe Hogue/DC/USEPA/US@EPA
cc
Subject RE: Follow-up to today's conference call with SERs

Joe,

Great conference call. Thanks for doing such a great job moderating. It looks like to me that most of what EPA is wanting to do is already being done by many if not most of the states. I do have some concerns and I will get that to you via email soon.

Thanks also for inviting the guys from Office of Advocacy. I get their newsletter and see the great work they do on behalf of small businesses.

Kenny Crenshaw

-----Original Message-----
From: Hogue.Joe@epamail.epa.gov [mailto:Hogue.Joe@epamail.epa.gov]
Sent: Monday, June 30, 2008 3:26 PM
To: cvh@centralvalleyheli.com; reedfly@aol.com; jhester@nicholsag.com; bilihun@spraytec.com; aaveritt@earthlink.net; dennisb@tvutel.com; cfemling@aol.com; elmst002@umn.edu; webbfarm@netzero.net; rmatoian@westernpistachio.org; dasherfarm@alltel.net; rmetzler@pearsonrealty.com; whjjr30@aol.com; richard@arbor-nomics.com; kcrenshaw@herbi-systems.com; lonniealonso@ColumbusPestControlinc.com; anne@royalpest.com; bruce@csipest.com; jackmarlowe@edenpest.com; mwright@woodpreservers.com
Cc: Rogers.JoanB@epamail.epa.gov
Subject: Follow-up to today's conference call with SERs

Hello again SERs:

Thanks to everyone who was on the call today, for not only taking the time, but for voicing your opinions and sharing your experiences. I realize that with a group this large, not everyone is able to participate on a given date & time. Those who were unable to participate today can do so by sending me their written comments.

We'd like to have an accurate record of everyone who participated today. We listed the names of those who introduced themselves at the beginning of the call. However, as some may have joined the call after introductions, or we may have missed a name, I'd like to confirm your participation. The names we listed were:

Ron Cline
John Hester
Frank Femling
Clint Webb
Richard Matoian
Randall Dasher
Dick Bare
Kenny Crenshaw
Lonnie Alonso
Bruce Carter
Jack Marlowe
Morgan Wright

If you were on the call today, and your name is NOT listed above, please respond to let me know so I can add your name (and I apologize for the oversight).

We took notes on your comments today, but it was difficult to keep up with everything from everybody. Please remember to send your written comments. This will ensure that your comments are captured accurately, and also give you a chance to add to your verbal comments.

Thanks,

Joe Hogue
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Fax: (703) 305-5884
Email: hogue.joe@epa.go

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July 11, 2008

Joe Hogue
EPA, Office of Pesticide Programs
FEAD/PRSB (7506C)

Dear Mr. Hogue:

Thank you for requesting comments from a variety of small business entities. I appreciate the EPA's diligence in following the guidelines laid out in the Regulatory Flexibility Act. It seems from the conference call on June 30, 2008 that EPA brought together a broad cross section of pesticide applicators who will be affected by new WPS regulations and certification standards.

Those of us in small business have been left out of the process of developing regulations for far too long. Following the RFA will help EPA promulgate regulations that are both sensible and effective. I look forward to this new direction.

Generally I am in agreement with the new standards for certifying commercial and private applicators of restricted use products. I am concerned, however, with parts of the proposed new WPS.

Following are some comments on the proposed rules for Certification of pesticide applicators and the Worker Protection Standard.

I am in agreement with requiring a minimum age for commercial applicators as long as it is not above 14. Many of us operate small family businesses and we rely on family help. Many 14 year olds are very responsible, and if they can pass the test they should be allowed to make a commercial application. I have five children who I hope to use in my business. I cannot put a monetary value on the hardship it would place on my business. I just hope you will set the age sufficiently low until there is some reason to raise it.

The 4 new categories will not have any effect on my small business.

Reducing the re-certification interval to 3 years would have no effect on us since every state we work in already requires re-certification every three years. Three years is a reasonable interval.

I am enthusiastically in agreement with the proposed requirements for administration of commercial applicator exams. The tests should be written, proctored, closed-book, and positive ID required. The exams should also be in ENGLISH ONLY. As long as English is the language of this country, the tests should be in English. Even if the applicator is competent in another language, English is what is likely to be spoken by regulators, emergency personnel, and doctors.

I think that Tennessee is generally in line with these new standards in already. We also operate in Arkansas. That state is an entirely different story. They do not have a written test for certification. It is very difficult and expensive to go through their certification process, as it requires classroom training, and so many hours in-the-field training. We have technicians with 10 plus years experience who can easily pass a certification test, but if they begin to work in Arkansas they must go through the training process from the beginning. Without a test there is no way to make sure someone knows the material. I agree with written, proctored, closed-book and positive identification. If the new standards were put into place it would actually lower our burden in Arkansas.

I am also in agreement that individuals applying restricted use pesticides under the supervision of a certified applicator should have some bare minimum of training or be in the presence of the certified applicator. With some level of training the distance between the certified applicator and the non-certified applicator might be increased. Also, "under direct supervision" needs to be better defined.

We currently carry copies of all labels used. One concern, however, is the number of generic products used in our business. We might possibly use 10 different brands of glyphosate in one year. There should be a provision that the labels should be "'essentially the same". In other words, if we are using Gly-4 instead of Roundup today, the Roundup label should suffice for the label carried. Otherwise, having to carry labels for every generic glyphosate and 2,4-D type products will be a huge burden and will possibly put our applicators at risk of citation for no good reason. I cannot calculate a cost, except to say that it would be very difficult to carry labels for as many as a dozen generic products for each active ingredient. We might possibly have to carry between 100 and 200 labels to make sure that we are in compliance,

One comment on REI's. Since we are not doing any work that requires REI's, the new standards will not affect us. BUT, if the REI's were to be expanded to lawn care, industrial, ROW, and similar areas, it would cripple our business and not provide any further level of safety to the public. REI's should not be expanded to cover any areas that are not likely to have people handling the treated crops.

The biggest concern I have is with the proposed elimination of the substitution of an enclosed cab for labeled respirator equipment. This would absolutely destroy our roadside herbicide application business. We use some products, that for some odd reason, and on some labels, require a respirator. It would be unreasonable, ridiculous, and dangerous to require a spray technician in a truck cab to wear a respirator. This requirement is so ridiculous as to defy common sense. The spray is directed away from the vehicle, the droplets are large, and there is no drift. The vehicle is not turning around and traveling through the spray. If this requirement were adopted, depending on what labels require a respirator, we could lose hundreds of thousands of dollars in business. We cannot require a person driving a truck for 10-12 hours a day to wear a respirator. I hope EPA will re-think this regulation change.

I think it may be useful to discuss respirators in general. The problem mainly lies in EPA requiring a respirator for products that are nearly harmless, and when diluted, become 100 to 1000 times less harmful even than that. In the last couple of years I have seen a respirator requirement for diuron and MSMA. There is absolutely no reason for this. These products have been used for decades with an excellent safety record. Diuron is even labeled for use in catfish ponds and home aquariums. Under conditions that are common to their use, I would dare say that not even a detectable amount of the product reaches the nostrils of the applicator. Spray equipment has evolved by leaps and bounds to the point where drift is rarely a problem.

There should never be a respirator required for products as safe as MSMA and diuron. This casts doubt in the mind of the applicator as to the whole process of the WPS. Respirators should be reserved for products that pose some real risk to the applicator. If EPA adopted a reasonable standard for the requirement of a respirator, we would never need one, and the enclosed cab exemption would be moot.

I think it is safe to say that pesticides generally in use in America, with the exception of some very toxic insecticides, are very safe. We have been in business for 24 years, with several hundred thousand hours logged. We have never had even a first aid incident with a pesticide.

Thank you again for the opportunity to comment.

Kenny Crenshaw
President

Subject: Response to WPS Changes

Certification Role:

Minnesota does not have the 4 categories, however, the DNR certifies for chemigation. The time to travel and take the test is minimal, maybe 3 hours.

Competency:

Other than farm owner's children, I think the child protection act sets the minimum age for hazardous jobs at age 18. For farm owner's children: They should be able to be certified at any age, as soon as they can pass the required test. As for Commercial applicators: For their children, maybe age 16 would be a compromise. My son passed certification at about age 16 for private certification. Establishing requirements for commercial applicators is a good thing in the subcategories. The Private applicators test should have some closed-book parts that they should know but some open book parts (maybe on how to calibrate sprayer or other areas that might only be used infrequently.)

Instant communication for applying RUP's by non-certified workers under supervision: We feel it may need an exemption in some extreme remote areas where radios or cell phones wouldn't have instant communication capabilities available to them. In non-remote areas, it is a cost, but compared to other costs, we feel the safety factor for employees, if an accident happens, is worth it. We feel it is a good business practice to have communication with just about everyone, if something happens, the appropriate people can be notified immediately. Our insurance company agrees. It helps keep negligence claims to a minimum. Age requirements for applying RUP's, under the supervision of a certified applicator, should be same as Private applicators. Other than more rules and bureaucracy to follow, which no one likes, we don't see a problem with the other rule changes that are proposed.

To improve effectiveness of worker training:

Reducing the retraining period would have a minimal effect on most of our growers. Everyone I talked to trains every year because of worker turn over. I don't see a cost issue by eliminating the grace period, but I feel that eliminating the grace period is a bad idea. The first day or two on the job the new employee has to learn the job, fields, farm and many other things. I think by waiting a few days before training, the worker retains more knowledge by not being so overwhelmed the first few days. On our farm, my wife and son are the trainers. On the other farms that I talked to, the owners or owner's adult children were the trainers.

Improved protection for workers in REI's:

Improving workers protection on REI is one of the most difficult areas of change. Our farm and none of the other growers I spoke with have had to utilize the exceptions to REI's. Posting multiple signs is very time consuming, especially when trying to get multiple sprays on several crops (small areas of one crop next to small areas of another crop.)

One grower suggested the following as an alternative to the posting of multiple signs: Create a field restriction map at the worker check in point. Number the fields with highly visible signs to match the field restriction map. The fields being sprayed would then be marked on the map at the check in point as well as having a red flag in the REI

field on the highly visible number sign. The workers would be required to initial a form each day stating that they looked at the map to see which field they could not enter. There could also be a color coded system for different colored flags if necessary and the workers could all be trained not to enter these flagged fields. Another idea would be to exempt the posting rules for small farms if all workers are certified applicators and are notified at the time of spraying. Posting multiple signs with different REI will be a major time and economic hardship and I think it needs to be thought through and discussed more before changing. We feel it is the supervisor's job to keep workers out of the fields that have REI's and how to make the supervisors accountable needs to be discussed.

There would be little impact of a requirement of a no-entry zone around fields that are being sprayed as long as the distance required is reasonable. We growers are doing that already, no one wants to have spray drift onto employees.

It is always a burden to maintain files and have them available upon request. It is one more thing to try to keep up to date that takes time from other things that need to be done. It will be a major burden when the inspector shows up and you haven't had the time to keep it up to date for new products you are using. If implemented, a more reasonable notification process or grace period would need to be put in place. Of all the growers I spoke with, none of them has had an employee ask for a MSDS. I don't know of many employees that know what a MSDS is.

Requiring a shower and changing area for handlers would be a major burden on small growers and I don't think the employees would use it. I know I wouldn't if I was an employee. I wouldn't use one now as an owner. I come home after spraying and leave my jeans and shirt by the door to go in and wash and take a shower. My clothes are then properly laundered. We realize the goal of this change is to minimize the exposure of chemicals at home. We feel that it is best done by properly training the handlers on how to minimize chemical exposures at home.

A lot of products sprayed do not require the use of a respirator while spraying. If the products do require a respirator then we agree that the enclosed cab should be required to meet filtering standards. If filtering standards cannot be met on the enclosed cab then a respirator must to be used while in the enclosed cab.

Requiring medical monitoring and fit testing for all handlers would be a major burden on small growers and should be discussed more in depth if it is going to be required. The costs involved can be quite expensive for a small grower to sustain.

All of the growers that I spoke with want to emphasize that keeping the paperwork to a minimum is a priority for us. Record keeping is one of our greatest burdens. We realize that record keeping is necessary for the safe operation of the farm but we also only want what is essential to keep workers safe.

Sincerely,

Frank Femling
Afton Apple Orchard
cfemling@aol.com

Joe,

As requested, I am sending comments from the meeting in written form.

I am a Pest Management Company operating in Washington State. So my comments are targeted to the certification issue. In general, the proposed changes already exist as state requirements so I do not see any extra burden. I do believe that 18 is a good minimum age although I could see some apprentice program where 16 would be allowed, although not to work alone. I am in favor of certification standards as I believe they are critical for not only worker and public safety, environmental protection, but also for the overall professionalism of our industry.

One suggestion, when requiring testing, there needs to be provisions for continued review of the tests. Many of our tests in Washington are extremely outdated, referencing materials that are no longer legal and methods that do not represent current practices so that the testing is a necessary evil for new employees, but does not in any meaningful way prepare them for the job. I am sure they did twenty years ago. When we confront the state agency responsible, they say there isn't funding to go through the process of developing new tests.

Hope that was helpful.

Jack Marlowe
Eden Advanced Pest Technologies

July 14, 2008

Joe Hogue
US EPA/OPPTS (7506-P)
1200 Pennsylvania Ave N.W.
Washington, D.C. 20460

Dear Mr. Hogue;

As a member of the Small Entity Representative regarding the impact of potential new requirements to the Agency regarding Ag Worker Protection Standards, I will respond to both the PowerPoint presentation and the written questions that were presented to us. I have the following thoughts:

From PowerPoint Slides:

I understand the need for additional training for fumigation, chemigation and aerial application, but don't quite understand the need for compound 1080 and M-44. Those baits do not pose a risk for human risk for application, whereas the other compounds have a acute toxicity level that should require additional training.

Regarding minimum age, I would have to disagree with many of the Small Entity Representatives (SER's) that were on the conference call that did not believe that a minimum age should be established. I could forsee a large PR nightmare if a worker were to get sick and it be determined that a 14 year old was responsible for the sickness. Rather, I believe a minimum age of between 16-18 should be established for commercial applicators. I would also agree with the prescribed method for testing, as outlined.

However, regarding private applicators, I believe a minimum age of 16 is appropriate. Regarding, ensuring competency of non-certified applicators applying Restricted Use Pesticides (RUP) under the supervision of a certified applicator, I agree with all the proposed standards, but would want to see some leniency regarding possession of the label. We are allowed to have the label within a reasonable distance of the application site, but not to be carried on the applicator's person.

Regarding improving protections to workers from Restricted Entry Intervals (REI), oral and written notification in my mind is not feasible. You cannot foretell who will be entering a given treated field, nor can you guard the field. Rather, posting for only Restricted Use Pesticides, or other materials that may have a high dermal exposure makes sense. In our table grapes, we can spray up 3 times per month for approximately a 4 month period, and during our gibrellic acid spray period, we are literally spraying every 4 days for about three weeks. Such oral and written notifications would take up to 1 hour per each spray performed to notify every possible person that COULD enter that field before the end of the REI. As a small business employer, I do not have the time to inform in such a manner Rather, place the requirement where it belongs, on Restricted

Use Pesticides instead, and place a reasonable posting requirement on that field….at the very least on each possible entry point and on each corner…..no more than that.

Also requiring a shower and changing area seems unreasonable. I do not have a shower facility on my properties, but rather a metal shed, hoses and electricity. Placing a requirement for a shower would be an undue requirement for me and could cost me in the tens of $1,000 for each ranch site that I have, especially those that do not have water or electricity nearby. Rather, the use of PPE for handlers, mixer loaders would make more sense. We give our handlers a Tyvek suit when they mix and load.

Cholinesterase testing restrictions were not very clear. Therefore, it was somewhat difficult to address. Regarding eliminating closed cabs…..this to me appears to be the best protection against drift. If the issue is the filtration system, encourage the manufacturers to develop new, better filters that provide some protection, or require some filter overwrap that provides the needed protection, but please do not eliminate closed cabs. It is the cheapest, quickest way to protect those who apply materials.

From Written questions:

Applying RUP's under supervision: yes, a supervisor should be somewhat close, but I am more concerned with the ability to communicate when there is a problem. Requiring some form of communication, I believe, is more cost effective for small business, as most if not all would have two-ways or cell phones. I do not think that would be an additional burden or cost.

The current 5 day grace period and its elimination is not really a cost issue, but more of timeliness issue. For me, the grace period allows me flexibility if I am busy on the first couple of days to provide me more time to complete the training. Again, a small business person is handling multiple tasks. Training every five years makes sense, but if there is concern with this, then require a written document showing that training has taken place rather than increasing the frequency. Specific, documented training should be for Restricted Use Pesticides, not on all product use. I am more concerned with appropriate training where the need dictates rather than just training for training sake.

I've already addressed posting, but to respond to the written question, posting could be quite difficult and time consuming. In a given year, I could spray my table grape vineyard up to 15 times (herbicide, foliar sprays, pesticides, fungicides, fertilizers). As I mentioned above, I could do 5-6 sprays within a three week period. Posting would take up a very large chunk of my time. I would rather post for RUP's. The only time I expect early reentry is for irrigation, which would be opening valves at the end of the row, for about 1 hour per day over a 2 day irrigation period. Minimal contact with foliage occurs during this time.

A No-Entry zone around the field would have a disastrous impact upon us. We have shared avenues with other producers, who are growing different crops, with different spray schedules…..this is impossible to accept.

Regarding MSDS's, unless you subscribe to a service, it is very difficult to obtain them. I have asked for them from my pesticide dealer, and they don't always have them, and trying to get them from the manufacturer is very difficult for a small business. They just don't have the manpower to get us what we need and we don't have the clout (because of our low volume purchasing) to get their attention.

I hope my comments have been helpful. Please let me know if I can answer and questions.

Sincerely,

Richard Matoian

Joe Hogue/DC/USEPA/US
07/07/2008 11:56 AM

To JoanB Rogers/DC/USEPA/US@EPA, Caryn Muellerleile/DC/USEPA/US@EPA, Bill Diamond/DC/USEPA/US@EPA, Carolyn
cc
bcc
Subject Detailed comments from another SER - forwarded

Thanks,

Joe Hogue
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----- Forwarded by Joe Hogue/DC/USEPA/US on 07/07/2008 11:53 AM -----

"webbfarm@netzero.net" <webbfarm@netzero.net>
07/06/2008 06:41 PM

To Joe Hogue/DC/USEPA/US@EPA
cc
Subject followup for Potential SER session 1

Joe,

Here is my writen followup to session 1. I enjoyed the conversation. One comment, I had difficulty hearing the other people in the room in Washington. I could hear you fine and most of the other callers, but not the ones that spoke up in the room.

Cint Webb SER Outreach follow up session 1.doc

Clint J. Webb
Webb Farms
6430 Dixie-Barwick Rd.
Boston, GA 31626
Family farm: cotton, peanuts, corn, hay
Commercial Applicator personal use only
One employee

June 30, 2008 Potential SER Outreach Meeting Follow up

Adding certification categories for commercial applicators:

Here in Georgia we already take two tests to become certified commercial applicators; one is general pesticide safety and worker protection standards and the other is specific to one of over 16 subcategories. The tests are proctored, closed book and only given at approved locations and times around the state. This can sometimes limit when a person may get certified, but it seems to be working fine today. I think this is the appropriate way to do it and any standardization on the national level would be an improvement.

Applicator minimum age:

I am not comfortable with the EPA establishing a generic minimum age for applicators. I personally know forty year old men that are not capable of applying RUPs and also twelve year olds that are fully capable and mature enough for the job. I personally started applying RUPs as early as 12 or 13, and I know some around that will use guys 16 or possibly younger. Speaking as a small family farm, we regularly use family labor that may be young for such jobs. They have been familiar with such tasks and are supervised by a licensed adult. Without the option for such labor, we would either have to rely only on the certified applicators to do the work or be forced to hire additional help of an older age. Both scenarios would add unnecessary expense to the operation and/or delay pesticide applications which will result in yield reductions. I think the certified applicator should be competent enough to determine if an individual is capable of safely applying the chemical.

I also feel there should be no minimum age on who can receive a pesticide license; whether private or commercial. The test should be of the caliber to address that concern. If one is capable of learning and understanding the concepts on the written test then they should be given the rights that come with that knowledge. If I am working a 12 or 15 or 25 year old employee, I would much rather they go take the private applicator test and be certified than they simply be under my supervision just because they have not crossed some arbitrary age threshold. I feel that in preparing for that test they will undoubtedly pick up important information on how to react to a situation that I may have overlooked because it is second nature to me as an experienced applicator.

Applying RUPs under the supervision of Certified Applicators:

I have one employee that is not a certified applicator. He works under my supervision and that of my dad, who is a private applicator. This employee has been with us for 23 years and is perhaps more familiar with pesticides that many recently passing the test. There are many farmers in the area that have applicators working under supervision. These employees are trained typically by the supervising applicator. I think there is no reason a licensed applicator cannot do the training. I do not have a problem with a more specific training program. It would be good to have a clear set of criteria that should be covered when doing employee training, but it should be done in house. I do not feel that it is necessary to carry employees off farm or bring in additional staff for training. That again adds expense to the operation.

Supervisors often range from being in the field with the applicator, perhaps on another piece of equipment, to being in the area, often checking in regularly as they manage multiple workers in different area. Having a means of instant communications is a great idea. Those that have two-way radios and cell phones certainly have an advantage, but it seems to be an overreach to require such devices. Such issues that may come up and need communications should be handled in the training. I understand that things happen, but a well trained employee should have been told ahead how to deal with situations like spills or contamination. We have some cell phones and some radios, but we are not covered in all areas at all times. I like to be in communication with my help, but there are times and equipment that is not currently possible. To make it so would be an added expense of several hundred if not thousands of dollars in equipment and future subscriptions.

Worker Protection Standard
Training:

Properly training employees is very important to both their safety as well the functioning of the company. It is important that they be trained thoroughly and promptly. However, the current grace period is essential to allow time for new employee training. I find it basically impossible to verify training so any new employee undergoes training, but it really helps to have the flexibility to know it can be worked around our busy schedules rather than having to stop some vital task to perform the training. That is especially true since I do my own training. As I said earlier, I think the training criteria should be clarified and would even like to see a consistent, concise training manual so that I know I have covered everything necessary.

I do not agree with shortening the retraining interval. In Georgia, my license has to be renewed every 5 years. If that is enough for a commercial applicators license then it is enough for worker training. We have no turn over, I know several that have very low if any turnover; I would hate to see regulation geared toward high turnover operations that simply puts us going over the same ground time after time. Each employer will have to do new training as his labor situation demands, but to retrain current employees more often than 5 years is simply unnecessary.

Restricted Entry Intervals (REI):

Here in Georgia we currently have to post a warning sign after applying RUPs. The sign is a standard written and pictorial sign issuing a warning of danger to stay out. They are to be posted for the duration of the REI. Putting the signs up as you leave the field is not a great burden, however, keeping track of different fields and times so they are not left up unnecessarily can be time consuming. We only have to place the signs at the entry to the field. Currently dealing only with RUPs, for crops like cotton or peanuts we will typically have to post a field five times a year. Proposals to require posting on all pesticides having an REI would dramatically increase that number to as much as 30 or 40 for crops like cotton. The task of keeping up with posting time and expiration times would be tremendous. For our small operation, only about 500 acres in cotton, it could take one person up to one hour each day just riding and updating posting signs. Add to that the cost of the gas and the vehicle and you just spent $25 a day in added costs all the while that worker is not doing some other important task.

There are two concerns with having to add the chemical name and REI expiration to the sign. One, the signs become consumable rather than reusable because the chemicals and times change with each posting. Two, with the chemical name present, you open the sigh to interpretation by employees rather than it standing alone as clearly “do not enter”.

The signs we currently use display a red octagon and a man with a hand indicating stop. These symbols work to convey the information of restricted access. Other suggestions such as the skull and crossbones would be much less effective as they do not simply say stay out but rather convey a message of impending danger; which is not the case with these pesticides so long as the REI is honored.

We discussed guidelines for posting signs in fields. I firmly believe it is only necessary to post such signs at logical points of entry. There is no reason to have to place signs along perimeters or other configurations around a field. The signs are there to inform authorized personnel and chance entrants of the dangers in the field; we are not trying to barricade the field with them. Postings in general, but especially any such regulation would have added effect on small farmers. Typically as farm size decreases average field size decreases. Under either scenario, the small farmer will have to put out more signs and spend more time per acre than a larger farm.

For example, on 500 acres with average field size of 30 acres, I would have to post 17 signs just at entrances. Add perimeter signage and you can increase that number by 10 to 100 fold. By comparison, take a farmer with 5000 acres of cotton with an average field size of 250 acres, he will post 20 signs, but each sign will cover three times as many acres as the small farmer. Also, in the case of perimeter postings, the larger the field, the fewer perimeter feet per acre equaling fewer signs per treated acre. It just begins to spiral into unbearable demands of time and manpower.

We rarely need to send in workers earlier than the labeled REI. Under such situations it is important to communicate with the workers that they understand the proper protections to take. There is no reason such communications must be in writing. The workers should be verbally informed about the restrictions and dangers posed by entry. Careful records should be kept of workers entering those areas in the event of adverse effects from exposure.

Application entry restricted area:

We currently have a policy of not applying pesticides with people in the immediate area of the application. There are times that it is necessary for a worker to be in the area. We have several fields with residential homes around them. We maintain a good working relationship with these people and inform them of the dangers of the pesticide we use. With that said, I feel that a no-entry zone for fields and forests is not possible like that of a contained structure like say a greenhouse. It is not practical for farmers or homeowners to force their yard into a no entry zone for an extended period of time. As for workers, it is important that they stay out of harms way during pesticide applications.

Hazard Communication:

We discuss proper PPE use and cleanup regularly with staff. We monitor their use of such equipment both visually and verbally to ensure their safety. We make every effort to provide adequate eye flush water and rinse water at mixing sites. The problem with many farms is that we have to be mobile. There may be one central shop or office, but for a farm to be productive the workers are rarely there and even fewer pesticides are used from there. Decontamination equipment such as soap, towels, and eye flush is kept in the mix wagon for applicators, but is not efficient or necessary to have an excessive amount of it or to mandate a shower system for every operation.

I feel a restriction on the amount of time handlers are allowed to work with OP and Carbamates is unnecessary. Following approved label PPE should adequately protect workers for these compounds. If that is not enough protections then the label should be altered so that it will. If there is a limit imposed we could run into a situation of having to delay pesticide applications that could reduce crop yields. On the same line, if a label establishes that an enclosed cab will replace a respirator then let it. If the enclosed cab is not adequate protection, then why were we allowed to use them in the first place? Such enclosed cabs should be maintained and routinely inspected with appropriate recordkeeping, just as respirators or any other piece of PPE should be. I firmly support safety, but there is no need to have duplication.

Requiring that MSDS be kept for all chemicals used will add many hours of time spent finding and printing sheets just to be placed in a file. You will have the added space necessary to keep the file. I would much rather have a database online where anyone could go at anytime to look up MSDS by chemical name. That way everyone will have them readily accessible without having to devote time and space to keeping up with them on every farm.

B2: Written Comments from Small Entity Representatives following the 09/25/2008 Panel Outreach Meeting

"Dennis Berglund"
<dennisb@tvutel.com>
10/09/2008 03:21 PM

To Caryn Muellerleile/DC/USEPA/US@EPA

cc "Al Averitt" <aaveritt@earthlink.net>, "Jim Steffel" <Jim@LABServices.com>, "Allison Jones \(Allison Jones\)" <JonesNAICC@aol.com>

bcc

Subject RE: Worker Protection Standard for Agricultural Pesticides and Certification of Pesticide Applicators - Small Business Advocacy Review Panel Outreach Meeting Invitation and Materials for Small Entity Representatives

Caryn,

I have attached 2 documents.

The "Final SER Comments to EPA 10-9-08.pdf" contains the joint comments from Al Averitt and Dennis Berglund.

The "NAICC Monitoring Profiles Report.pdf" is a report that NAICC gave to the EPA in 2005, and we referred to it in our comments, so I have included it in this e-mail.

Thank-you!

Dennis Berglund
Centrol Crop Consulting
Cell: 800-630-6848 or 218-766-6848
Office: 218-584-8562
Home: 218-584-8562
-----Original Message-----
From: Muellerleile.Caryn@epamail.epa.gov
[mailto:Muellerleile.Caryn@epamail.epa.gov]
Sent: Thursday, October 09, 2008 10:30 AM
To: Dennis Berglund
Subject: RE: Worker Protection Standard for Agricultural Pesticides and Certification of Pesticide Applicators - Small Business Advocacy Review Panel Outreach Meeting Invitation and Materials for Small Entity Representatives

Hello Mr. Berglund,

Yes, this email address would be great. Please send your comments as late today as you need.

thanks,
Caryn

Caryn Muellerleile
Office of Policy, Economics, and Innovation U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW (1806A) Washington, DC 20460
Phone: (202) 564-2855
Fax: (202) 564-0965
muellerleile.caryn@epa.gov

Comments to the Small Business Advocacy Review Panel on Worker Protection Standard for Agricultural Pesticides and Certification of Pesticide Applicators

Dear EPA:

Al Averitt and Dennis Berglund are sending these comments together as Crop Consultants and Small Entity Representatives.

Al Averitt is the current Chairman of the Governmental Affairs Committee for the National Alliance of Independent Crop Consultants (NAICC). Dennis Berglund is the Past-Chairman of that committee and currently sits on the committee.

Our main concern in making these comments is that we are able to retain our WPS exemption for Certified Crop Consultants and our direct employees.

First, an introduction to the WPS exemption for Certified Crop Consultants.

In 1995, EPA granted Certified Crop Consultants, and their direct employees, an exemption from certain portions of the Worker Protection Standards (WPS).

This exemption allows Certified Crop Consultants to use their discretion concerning the appropriate level of Personal Protective Equipment (PPE) that is needed.

Both EPA and USDA helped the Crop Consultants obtain this WPS exemption, and it is important that they help minimize any erosion to this WPS exemption.

The current situation:

1. In order for Certified Consultants to carry out Integrated Pest Management (IPM), they must be able to enter the field in a timely manner.
2. Fields are not commonly entered when a Re-Entry Interval (REI) is in effect.
3. The WPS exemption allows Certified Consultants to use their education and experience to decide how to protect themselves, when an REI is in effect.
4. The Consultant's ability to implement IPM in a grower's field will be reduced if he/she cannot enter the field during an REI, without being "suited up" in PPE.
5. We need to reserve the right to enter the field, according to our WPS exemption, in order to efficiently carry out our IPM duties.
6. According to the Crop Monitoring Profiles that we have provided EPA, the exposure from scouting is very low.

There are several "scouting scenarios":

1. If the field has recently been sprayed, then most consultants and employees will not enter the field.
2. If they do enter the field, with an REI in effect, it is usually "a field here and a field there", rather than "field after field".
3. If the field was sprayed "today", then the spray has not had time to work, and it is probably not necessary to check the field.
4. If the field was sprayed "yesterday", then the follow-up visit (when an REI is in effect) is often a cursory, quick look at the field, to check for efficacy, rather than an extensive field visit.
5. There can also be some "Incidental entry", where a consultant enters the field, realizes that it was recently sprayed, and then leaves the field without delay.

In 2004, we provided the NAICC Crop Monitoring Profiles to help EPA make informed decisions on the impact of WPS on consultants. A copy of that report has also been provided to this panel.

NAICC is comprised of Professional Crop Consultants and Professional Research Consultants. These consultants make their living by helping farmers and companies make better decisions by implementing Integrated Pest Management (IPM).

NAICC Policy Statement Concerning Employees of Certified Agricultural Professionals

Regarding the EPA Worker Protection Standard (WPS), The National Alliance of Independent Crop Consultants (NAICC) believes the exemption to certain portions of the WPS, which was granted by EPA in 1995 to qualified crop consultants, and their direct employees places responsibility on all exempted certified consultants to:

- Pursue additional continuing education on all matters relating to pesticide safety procedures
- Routinely conduct pesticide safety training for all employees covered by the NAICC WPS exemption
- Consider that such training should include information regarding appropriate personal protective equipments (PPE), appropriate clothing and the care and handling of same.
- Closely evaluate what are appropriate ages of current and prospective employees who will be engaging in tasks covered by the WPS exemption, such that these employees are able to bring sufficient knowledge and awareness to their respective duties.
- Refrain from directing employees into tasks that differ substantially, temporally or spatially from that of the consultant so as to avoid any inadvertent reduction in safety-related practices or procedures.
- The NAICC encourages all qualified consultants to adhere to these practices. Further, NAICC pledges to work with EPA to disseminate informational materials to consultant members through electronic media and printed materials.

The comments that follow are our answers to the written questions that were sent out. We followed the order of the written questions, even though the numbers may not exactly match the original questions.

We did not comment on the questions under “Applicator Certification Rule (Restricted Use Pesticides)” as we think that there will be good comments from other SER members concerning that.

General

1) We think that it would be helpful for small business to have some flexibility in complying with requirements. But, if the goal is to reduce risk, then the requirements should be general enough that they can be applied to protect the employees of small entities, as well as larger businesses.

Worker Protection Standard (Workers and handlers in plant agriculture)

Training:

1) If the current 5-day grace period for training was reduced or eliminated, then we would need to speed up the training, but the actual time required would be similar. In other words, it would be a little more hassle, but not much more cost.
2) We normally do WPS training every year, but if the WPS training interval were reduced from every 5 years to every year, then it would increase the time and effort expended by some entities by 4-5 times.
3) We typically train our employees, even if they have been trained previously.
4) We do our WPS and Safety training internally.
5) We would have a difficult time finding qualified trainers, if outside trainers were required.
6) We estimate that a training session for workers would take 30-60 minutes.

7) We estimate that a training session for handlers would take 45-60 minutes.
8) Our training materials are obtained through videtapes, videos on the internet, and the extension service. The actual cost is fairly minimal.
9) The EPA estimate of 6 minutes per training session to keep training records of who received pesticide safety training seems short. It's tough to do anything that quickly, and we think that it would take at least 30 minutes.
10) We do not supply any of our employees with WPS or Safety training cards
11) We were not aware of any federally funded training resources.

Restricted Entry Intervals (REI):

1) We estimate that it would take 30 minutes to post a single REI warning notice (reusable sign, not specific to the pesticide) at the usual point of entry.
2) We estimate that it would take at least 1 hour to post 4 signs at the corners.
3) In Minnesota, most growers have 20-40 fields, and spray 3-5 times, so our average grower would have over 100 to 200 postings per year.
4) In North Carolina, most growers have 50-200 fields, so some growers would require more than 1,000 postings, possibly requiring a full-time employee to do the posting.
5) The EPA estimate that recording pesticide name and REI expiration would add 30 minutes per field sounds about right, but the record-keeping would be tough.
6) If we consider the number of fields in North Carolina and estimate that it would take 1 employee to do the posting, then we have a concern.
    a) What about that employee's exposure, especially if they have to walk the perimeter of the field.
    b) Could the posting occur just prior to the application?
    c) If the posting was done prior to applications, then the posting requirements might postpone timely applications.
7) As Crop Consultants, we talk to our employees often about not going into fields that have recently been sprayed. We also try to schedule field visits outside the REI, usually by 3-4 days.
8) How many times per year do you utilize the exceptions to REIs, to allow early entry?
    a) We are crop consultants.
        i) We do not apply or handle any products, so we do not have exposure to concentrated product or spray solutions.
        ii) We normally wear boots, long pants, short- or long-sleeved shirts and a cap, which already fulfill many PPE requirements.
        iii) Our efforts to help the grower implement IPM should not be restricted
        iv) It is important to realize that most of the contact that we have with pesticide residues is with the dried residues, is incidental and very limited.
        v) Our employees do not stay in a sprayed field and work for 8 hours per day, like a worker might do when hand-harvesting.
        vi) Our employees are instructed to leave the field if they notice that it was recently sprayed.
    b) We would like to keep the WPS exemption for Certified Crop Consultants and Research Consultants
        i) We would also like to keep the WPS exemption for EMPLOYEES of Certified Crop Consultants and Research Consultants.
        ii) There has been some discussion at EPA about restricting the WPS exemption for employees of Certified Crop Consultants
            (1) EPA has indicated that they are not too worried about the Certified Crop Consultant being able to decide for themselves, but is concerned with the employee being able to make that decision.
                (a) If there is some employee training that would help lessen these fears that the EPA has, then we should be able to find a way to document it. (such as occupational training, safety training, WPS training, etc)

(2) The NAICC has had numerous discussions with EPA concerning our WPS exemption and appreciates the ability to work with EPA to find a way to meet the goals of WPS while effectively implementing IPM at the grower level.

c) If we can't keep the full exemption for EMPLOYEES, then it could possibly be modified to allow for "incidental exposure".
   i) This "incidental exposure" would mean that they would not enter the field at all if it was being sprayed and would leave the field WITHOUT DELAY (within 5-10 minutes?) if they noticed that it was recently sprayed and that it could be within the REI.
   ii) We would continue to give our employees Safety training along with WPS and IPM training.
d) Revoking the Certified Crop Consultant's WPS exemption would be burdensome.
   i) If we need to suit up in PPE in order to make a quick check, it would be burdensome.
   ii) We conservatively estimate that revoking our WPS exemption would cost a crop consultant at least:
      (1) $1,000-$3,000 per year, in unnecessary expenses, plus
      (2) $1,000-$3,000 per year, in inefficiencies, for a
      (3) Total of $2,000-$6,000/ year
   iii) There could also be health issues with heat and humidity, etc, when requiring PPE, when it is not necessary.

Application entry restricted area:

1) A no-entry zone of 25 to 100 feet around the field during application would not have much effect on us, as we do not enter the fields during application. We sometimes help the grower adjust the planter and have a concern if there would be an REI, if working behind the planter.

Hazard Communication:

1) We reinforce hygiene and safety to our employees often, but do not have a good way to monitor compliance. We normally wear boots, long pants, short- or long-sleeved shirts and a cap. We also sometimes wear gloves, for various reasons, such as cold temperatures, or to reduce transfer of disease to other fields.
2) Maintaining a file with each pesticide MSDS would take a significant amount of time, effort and management, and would be difficult and burdensome. While it would not cost that much in actual dollars, it would be costly in time and management.
3) Posting an MSDS for each pesticide that was used would take a lot of time, effort and management and would be very burdensome.

Decontamination:

1) We have a shower at our office for the employees, but it is not used much.
2) We are usually mobile, in pickups, on foot, or on ATVs and I don't know how we could provide a decontamination shower.
3) Requiring safety posters at the decontamination site in addition to the central display should not cost very much.

Sincerely,

Al Averitt
Crop Consultant
Small Entity Representative
Chair, NAICC Governmental Affairs Committee

Sincerely,

Dennis Berglund
Crop Consultant
Small Entity Representative
Member, NAICC Governmental Affairs Committee

This Report of the Monitoring Profiles Task Force has 8 Sections:

1. Executive Summary
2. Introduction
3. Background
4. Data Matrix
5. Crop Narratives
6. NAICC Employee Statement
7. Summary
8. Appendix

Executive Summary

In 1995, EPA granted Certified Crop Consultants, and their direct employees, an exemption from certain portions of the Worker Protection Standards (WPS). This exemption allows Certified Crop Consultants to use their discretion concerning the appropriate level of Personal Protective Equipment (PPE) that is needed.

EPA and USDA helped Crop Consultants obtain this WPS exemption, and it is important that they help minimize any erosion to this WPS exemption.

The current situation:

1. In order for Certified Consultants to carry out Integrated Pest Management (IPM), they must be able to enter the field in a timely manner.
2. Fields are not commonly entered when a Re-Entry Interval (REI) is in effect.
3. Certified Consultants are allowed to use their education and experience to decide how to protect themselves, when an REI is in effect.
4. The Consultant's ability to implement IPM in a grower's field will be reduced if he/she cannot enter the field during an REI, without being "suited up" in PPE.

Scenarios:

1. If the field has recently been sprayed, then most consultants and employees, will not enter the field.
2. If they do enter the field, it is usually "a field here and a field there", rather than "field after field" with an REI in effect.
3. If the field was sprayed "today", then the spray has not had time to work, and it is probably not necessary to check the field.
4. If the field was sprayed "yesterday", then the follow-up visit (when an REI is in effect) is often a cursory, quick look at the field, to check for efficacy, rather than an extensive field visit.

NAICC is doing these Crop Monitoring Profiles in order to:

1. Defend and maintain the Consultant's WPS exemption by documenting scouting exposure.
2. Help EPA make informed decisions on the impact of REI on consultants, so that they don't need to use the default assumption of 8 hours per day.
3. Continue to be proactive, rather than "wait and see" how rules affect our WPS exemption

The data included should prove that the WPS exemption for Crop Consultants, and their employees, should be maintained.

Introduction

NAICC Membership is comprised of Professional crop consultants and Professional research consultants. These consultants make their living by helping farmers and companies make better decisions by implementing Integrated Pest Management (IPM).

In order for Consultants to effectively do IPM, they need to enter the field on a timely manner. Fields are not usually entered when a Re-Entry Interval (REI) is in effect, but it is important to reserve the ability to go into the field during REI, for what is often a cursory, quick check of the field.

In 1995, EPA granted Certified Crop Consultants, and their direct employees, an exemption to certain portions of the WPS. This allows Certified Crop Consultants the ability to use their discretion concerning the appropriate level of personal protective equipment (PPE).

In 1999, NAICC shared with EPA "Example Crop Monitoring Profiles" (CMP) for:

1. Cotton
2. Spring wheat
3. Tomatoes

These "Example Crop Monitoring Profiles" suggested that Crop Consultants have a low risk from pesticide exposure, and the profiles are located in the Appendix.

In 2002, EPA asked NAICC for cooperation in developing Crop Monitoring Profiles (CMP) for other crops.

In late 2002, NAICC President Al Averitt appointed Dennis Berglund to Chair an NAICC Task Force to work with EPA to document the time crop consultants and their employees spend in the field doing their duties.

Why are we doing these Crop Monitoring Profiles?

1. To defend and maintain our Crop Consultant's WPS exemption.
2. We aren't in the field very often during the Re-Entry Interval (REI), but we must reserve the option to enter the field during REI, by using our professional judgment on PPE.

What are our Monitoring Profiles Task Force (MPTF) Objectives?

1. To help EPA make informed decisions on the impact of REI on consultants, so that they don't need to use the default assumption of 8 hours per day.
2. To defend and maintain our WPS exemption by documenting the exposure we have when scouting.
3. To develop a format for Crop Monitoring Profiles (CMP) and deliver the information to EPA.
4. To position NAICC as a credible, impartial source of information.

Background Data

Because this dynamic and fuzzy process called "MONITORING" is not easy to document in absolute numbers, an explanation of the whole thought process is needed.

The **Doane Survey from August 2002** was reviewed and shows:

A. Nearly half of the consultants surveyed do not enter fields during an REI
B. Clothing worn is usually long pants, work boots and a cap.
    a. As the crop grows taller, consultants switch from a short-sleeved shirt to long-sleeves.
    b. Shorts are seldom worn and respirators are seldom used.
C. That consultants are in the crops during an REI for 0-122 hours (0-15.3 days) per season
    a. The average was 31 hours per season (3.9 days)

Time Spent In Field During REI (Doane Survey – August 2002)

	Days/Year		Days/Week		Hours/Day	
	Contact	**No Contact**	**Contact**	**No Contact**	**Contact**	**No Contact**
Corn	10.9	26	2.1	2.6	3.2	3.9
Cotton	9.4	34.8	2.1	3.1	3.7	2.4
Sorghum/Milo	2.2	5.7	1.0	1.0	0	1.0
Grapes	5.7	8.3	1.5	1.0	1.0	2.5
Hay/Alfalfa	6.6	28.2	1.8	3.3	2.7	4.5
Peanuts	11.0	80.0	1.5	3.0	1.0	2.0
Potatoes	10.4	7.0	1.3	1.0	7.0	5.0
Rice	11.0	19.0	1.8	1.5	1.0	1.5
Soybeans	10.6	24.9	3.4	2.9	4.3	4.1
Sugarbeets	11.0	20.0	3.0	3.0	-	3.5
Sugarcane	21.0	80.0	3.0	5.0	2.0	10.0
Tobacco	4.0	2.0	-	-	0.5	0.5
Tree Fruits/Nuts	38.6	41.0	2.8	1.7	2.0	1.0
Turf	1.0	8.7	-	-	2.0	1.0
Vegetable	8.9	18.6	1.8	2.1	2.2	1.0
Wheat	27.2	23.1	2.4	2.0	4.5	2.0

PPE Worn By Growth Stage (Doane Survey – August 2002)

	Planting/ Sprouting	Ankle High	Knee High	Waist High	Shoulder High	Over Head
Long Pants	90%	92%	92%	92%	89%	91%
Work Boots	92%	91%	92%	92%	91%	93%
Hat/Cap	84%	81%	84%	86%	84%	84%
Long-sleeved Shirt	49%	47%	40%	51%	55%	59%
Short-sleeved Shirt	57%	58%	62%	53%	48%	46%
Gloves	37%	30%	26%	27%	30%	30%
Face Mask	2%	2%	2%	2%	7%	11%
Respirator	2%	2%	2%	2%	7%	9%
Shorts	6%	4%	4%	2%	5%	5%

The Doane Survey from August 2002 is NOT added to the Appendix, but can be obtained, by request, from:

- Doane, Lynn Henderson, (314) 569-2700
- NAICC Headquarters, Allison Jones, JonesNAICC@aol.com, (901) 861-0511
- CENTROL Crop Consulting, Dennis Berglund, dennisb@tvutel.com, (218) 584-5107

The "Risk Model" was reviewed by talking to EPA and a presentation by Jeff Dawson.

Things that influence risk are:

A. Crop type
    a. Orchards
    b. Vineyards
    c. Trellis (Berries)
    d. Row Crops
B. Leaf type
    a. Hairy
    b. Smooth
    c. Waxy
C. Crop height and crop stage
D. Field activities
E. Degree of contact
F. Duration of exposure

A "Lay-person's" simplified "Risk" equation is:

A. Transfer Coefficient * Toxicity * Dermal Contact * Time = Risk
    a. Transfer Coefficient and Toxicity are constants for a given chemical
    b. However, we can help EPA improve their estimate of "Time" and "Dermal Contact"

ARTF Videos

We reviewed the Ag Re-entry Task Force (ARTF) videos that form the basis of EPA's exposure estimates. We feel that our project should complement the ARTF videos and give EPA more information with which to base their estimates of monitoring exposure.

EPA asked NAICC for a proposal for developing CMP for other crops.

NAICC commends EPA's desire to collect and use better data than they currently have.
Since EPA gave us a lot of latitude here we started with some basic questions:

1. What format would be best?
2. Will this be a "Time and Motion" study?
3. What kind of funding is available?
4. Should it be general or specific?
5. 10 crops or 50 crops?
6. What crops would EPA recommend?
7. What Regions would EPA recommend?
8. How can we document the duration of exposure?

High Intensity Survey

1. We started with an extensive survey (which was expensive)
2. Guidelines
    a. We'll do 10-20 crops
    b. We'll have 10-30 scout participants
    c. Each survey would require about 40 hours of time
    d. Each scout would keep week-long time logs at three different times during the season and would document field time, travel time, office time, etc
    e. Quality assurance would be provided by Certified NAICC members being the participants
    f. Estimated cost is $1,000 per scout
    g. 10 crops with 30 scouts give 300 units @ $1000 = $300,000
    h. 20 crops with 30 scouts give 600 units @ $1000 = $600,000

We met with EPA in March of 2003 and reviewed the High Intensity Project. It was determined that funding was not available for a project of this magnitude. We talked with EPA about the value of a "low intensity" survey compared to the "high intensity" survey outlined above. We then started planning for a lower intensity survey, rather than the in-depth survey.

Lower Intensity Approach

We decided to take a "non-survey" approach to our Crop Monitoring Profiles. This would be similar to our Example Crop Monitoring Profiles (See Cotton, Tomatoes and Spring Wheat in Appendix).
We had a 2 day "focus group" meeting of EPA and NAICC members that had these goals:

1. Draw on our experience and expertise.
2. Stimulate discussion and arrive at consensus on scouting risk.
3. Construct a Data Matrix to give EPA realistic time and contact estimates to use in their risk assessments.

Data Matrix

1. Exposure definitions
    a. Average hours per employee in all fields per day
        i. The time that is spent in all fields of that specific crop
        ii. Early, Middle and Late crop stages
    b. Average hours per employee in contact with crop per day
        i. The amount of time spent in-contact with plant parts in that specific crop
        ii. Early, Middle and Late crop stages
    c. Number of Days in field/all activities
        i. Days that an employee is in that specific crop during the growing season
        ii. Early, Middle and Late crop stages
    d. Description
        i. Early, Middle and Late crop stages
        ii. According to development and varies by crop
    e. The data is applicable to both consultants and employees.
2. Time definition
    a. We estimated the actual time, whether it was 1/2 to 16 hours per day.
    b. We did incorporate averages, however, since some days we spend less time in fields than other times and some scouts spend more time than others.
3. The terms "scouting" and "monitoring" are used interchangeably.
4. The terms "scout" and "summer intern" are used interchangeably.

Data Matrix		**Average hours in all Fields per day All data is per employee**			**Average hours in contact with crop per day All data is per employee**			**Number of Days in field/all activities**			**Description of field activities**		
Crop	**Region/ State**	**Early**	**Mid**	**Late**	**Early**	**Mid**	**Late**	**Early**	**Mid**	**Late**	**Early**	**Mid**	**Late**
Vegetables													
Sweet Corn	**CA/WA**	1	4	2.3	0.6	2.8	1.8	10	60	13	Whorl	Silk	Harvest
Sweet Corn	**NY**	5	2	6	0.1	0.2	6	14	2	60	0-4 Leaf	5-tassel	Tassel-harvest
Sweet Corn	**FL**	3	4	5	0.1	2.4	5	56	70	90	0-4 Leaf	Whorl	Silking-harvest
Tomatoes	**FL**	2.8	4	4	1.1	1.6	1.6	60	80	50	Transplant	Fruit setting	Fruit maturation-harvest
Lettuce	**NM**	0.5	1	1.8	0	0.5	1.8	20	10	4	Planting-thinning	Thinning-head dev.	Heading-harvest
Lettuce	**FL**	3	3.4	4	0.4	1.5	2	64	80	64	Seeding-pre-cup	Cupping	Heading-harvest
Succulent (green) peas	**NY**	5	2.5	1	0.5	2.5	1	14	7	1	0-4 Node	5 Node-blossom	Blossom-harvest
Succulent (green) peas	**TX**	0.5	1	1	0.25	0.5	0.5	8	8	8	0-4 Node	5 Node-blossom	Blossom-harvest
Carrots	**MI**	2.5	3.1	3.4	0.25	1	3.4	25	10	45	0-5” Tall	6-11” Tall	>12” Tall
Carrots	**NY**	4	4	4	0.5	3	4	20	8	40	0-5” Tall	6-11” Tall	>12” Tall
Cabbage	**NY**	3	6	8	1.5	4	8	24	40	60	0-10 Leaf	Cupping	After head formation
Apples	**MI**	3	3	3	1.5	1.5	1.5	2	5	20	Dormant-delayed dormant	1/2" Green-petal fall	Petal fall to harvest
Apples	**WA**	6	6	4	2	2	2	3	4	23	Dormant-delayed dormant	½" Green-petal fall	Petal fall to harvest
Grapes	**CA**	6	6	6	1	1	1	24	24	24	Bloom	Early fruit	Late fruit
Peaches	**WA**	2	2	2	0.5	0.5	0.75	0.3	0.3	7	Dormant-delayed dormant	Green-tip	Petal fall to harvest
Oranges	**FL**	5	5	5	0.5	1	0.5	2	6	3	Bloom Feb-May	Early fruit Jun-Sept	Harvest Oct-Jan
Straw-berries	**CA/AZ/ WA**	5	5	5	2.5	3	3	80	80	80	Pre-bloom Oct-Nov	Pre-harvest	Harvest
Straw-berries	**FL**	3	2.6	2.6	1.5	1.8	2	48	48	48	Pre-bloom Oct-Nov	6 month crop Harvest - Dec-March	Harvest Dec-March
Pecans	**GA**	3	3	3	2	2	2	22	22	22	Dormant-50% bud break	Pollination-nut filling	Gel stage to shuck split

Pecans	**TX/NM**	2	4	2	0.5	1.5	1.5	60	120	120	Dormant-50% bud break	Pollination-nut filling	Gel stage to shuck split
Cotton	**West TX**	3	4	2	0.3	2.5	1	21	20	18			
Cotton	**GA/NC**	3	4	2	0.5	3	1.5	22	19	21	<36"	36-40"	36-40"
Cotton	**LA/MS**	3	5	2.5	0.6	3.5	2	25	24	26			
Corn	**IA/MN**	1.5	1	1.7	0.3	1	1.8	21	10	22	<24"	24-42"	>42"
Corn	**IL**	4	4	6	0.1	1.2	1	2	4	4	<24"	24-42"	>42"
Corn	**NE/KS**	3.5	4	4	1.3	3.2	4	26	8	25	<24"	24-42"	>42"
Corn	**Mid-South**	0.75	0.75	1.5	0.25	0.25	1.4	10	5	16	<24"	24-42"	>42"
Soybeans	**Mid-South**	0.5	1.5	3	0.2	1.2	2.8	5	10	15	Pre-flower	R2-4	R5-7
Soybeans	**MN/IA**	0.5	2.5	2.3	0.3	1.3	2.3	20	10	25	Pre-flower	R2-4	R5-7
Potatoes	**ID**	3.9	4.5	4.4	0.8	3	4.4	10	10	32	0-10” tall	10-18” Tall	Full canopy
Potatoes	**WA/OR**	2.1	5.1	5.1	0.6	2.6	5.1	4.1	8.2	40	0-10” tall	10-18” Tall	Full canopy
Potatoes	**MN/ND**	3	4	6	0.5	2	6	15	15	50	Emerging-ankle high	Ankle high-full canopy	Full canopy
Potatoes	**MI/NY**	3.1	4.3	4.6	0.6	2.9	4.6	20	10	36	< 10"	10-18"	18"+/Row close
Potatoes	**CO**	2.5	5	6.5	1	3.5	6.5	25	20	45	< 10"	10-18"	18"+/Row close
Sugarbeets	**MN/ND**	2.5	1.7	1.8	0.3	0.5	1.8	30	15	35	< 6 leaf	6-10 Leaf	12+
Sugarbeets	**ID**	1.5	1	1.5	0.2	0.3	0.25	35	24	40	< 6 leaf	6-10 Leaf	12+

Crop Narratives

This dynamic and fuzzy process called "MONITORING" is not easy to document in absolute numbers! Since our Data Matrix is somewhat "coarse", these Crop Narratives will be as important as the Data Matrix to give a good understanding of what we do in the field. The Crop Narratives follow on the next dozen or so pages.

- **Apples – (Tree Fruit) Pacific Northwest**
  - Clothing for scouts:
    - Upper Body – long or short sleeve shirts
    - Lower Body – long pants, socks, shoes or boots
    - Rubber boots and tyvek suits when needed
  - Early season: Dormant to Delayed Dormant – orchards are inspected once for evaluation prior to applications for pest controls
    - Approx. 4 hours per day
  - Mid-season: ½ inch green to petal fall – orchards are checked weekly, there is no foliage
    - Approx. 5.5 hours per day
  - Late season: Petal fall to harvest – foliage is present, scouts deploy traps and check them weekly
    - Approx. 5.5 hours per day
  - Scouts are equipped with 4 wheelers and wear proper clothing. They receive safety instructions including being told not to enter any orchard where there is evidence of recent applications (odor or residue) or if the orchard is posted.
  - Average actual contact hours with tree fruit foliage: mid-April through September = 577.5 hours

- **Cabbage - NY**
  - Early season: 0-10 leaf (precup)
    - Clothing worn
      - Short sleeved shirts, long pants, shoes, rubber boots and/or plastic rain pants when foliage is wet. Latex gloves optional.
    - Activities
      - Examination of foliage for pest infestation
      - Moderate contact
      - All fields walked
  - Mid-season: Cupping to head formation
    - Clothing worn
      - Short sleeved shirts, long pants, shoes, rubber boots and/or plastic rain pants when foliage is wet. Latex gloves optional.
    - Activities
      - Examination of foliage for pest infestation
      - Disease observation
      - 67% of time in contact with crop
      - All fields walked
  - Late season: Head formation to harvest
    - Clothing worn
      - Short sleeved shirts, long pants, shoes, rubber boots and/or plastic rain pants when foliage is wet. Latex gloves optional.
    - Activities
      - Examination of foliage for pest infestation
      - Disease observation
      - 100% of time in contact with crop
      - All fields walked

- **Carrots – MI and NY**
  - Scouting done weekly from early May till mid-late September. Some processing fields are not harvested until late October, but as temperatures cool very little spraying and scouting needs to be done. Fields generally not scouted during restricted entry intervals. Spray intervals are generally longer than 7 days except in heavy disease pressure years when spraying is done weekly late season.
  - Clothing worn
    - Short sleeved shirts, long pants, shoes, rubber boots and/or plastic rain pants when foliage is wet.
  - Early season: Planting to 3 true leaves or 5 inch plants. Stage lasts 5-6 weeks.
    - Minimal crop contact. Stand counts done with pen separating plants while counting. Weed control assessments made . Sweeping of grassy margins for aster leafhopper.
  - Mid season: 4-6 true leaves or 6-11 inch plants. Stage lasts only 2-3 weeks.
    - Crop contact only 25-33% of time while in fields. Sweep fields for aster leafhoppers. Begin spreading leaves, checking new growth, and examining petioles for disease symptoms.
  - Late season: Full canopy 7+ true leaves or 12+ inch plants. Stage lasts 8-10 weeks.
    - Crop contact 100% of time in field. Sweeping and plant checks for disease continues. Begin digging plants to check root health.

- **Citrus (oranges) - FL**
  - Clothing
    - Short sleeves and long pants, plastic chemically resistant gloves are worn 50% of the time (this is an individual trait and not based on pesticide applications), cap/hat, boots/shoes and socks.
  - Transportation
    - Drive pick-up or ATV up to field or grove edge and walk into and through and out of field and load back up.
  - Early season: Bloom/early fruit development (about Feb to May)
  - Mid-season: Early/mid fruit development (June to Sept)
  - Late season: Fruit maturation (Oct to Feb). Activity is essentially the same through out the crop: examining leaves or fruit for mites.

- **Corn – Illinois (GIS based type of scouting)**
  - Activities:
    - Early season: Stand counts, Insect and Disease Monitoring
      - Clothing: Boots, Long pants, long sleeve shirt, hat
    - Mid-season: Insect, Disease and Plant Vigor monitoring
      - Clothing: Boots, Long pants, Long sleeve shirt, hat
    - Late season: Pollination progress/success, Insect & Disease monitoring,
      - Yield Estimates
  - Clothing: Boots, Long pants, Long sleeve shirt, hat
  - All info is totally GIS based (this data)
  - Very little foliage contact up to about V5-V6 (10-12") as ATV is used to traverse fields.
  - Aerial imagery is used at all times as a navigation guide and time saver (dramatically reducing contact time)
  - Entrance and exit of field(s) is recorded in a Geo-referenced way-point with time, date, field name, activity performed, pertinent crop info, any compound applied/date, etc., etc. and attributed to the point for instant retrieval at any time.

- All observations are recorded in detail and attributed to a geo-referenced way-point which can also include an actual voice recording for instant retrieval at any time.
- All data is immediately transferred to the master GIS program for review, analysis and as a permanent record.
- In most of Illinois, very little post emergence compound of any type is ever applied. An occasional outbreak of European corn borer will occur 1 out of 5 or 6 years. Even in this situation, the field is only sprayed one time and seldom is a re-entry made. Chemical exposure during scouting operations is not a problem.

- **Corn - MN/IA**
  - Early season: 0-8" tall
    - Clothing worn
      - Cap or hat, jacket, gloves, long pants or coveralls, boots
    - Activities
      - Stand counts
      - Weed observation
      - Very little contact
    - ATVs, walking, etc
      - ATV's are mainly used
  - Mid-season: 8-24" tall
    - Clothing worn
      - Cap or hat, possibly jacket, long pants, boots
    - Activities
      - Final weed observation
      - Very little contact
    - ATVs, walking, etc
      - ATV's and walking
  - Late season: >24" tall
    - Clothing worn
      - Cap or hat, long pants, boots
    - Activities
      - Mainly insect and late weed observation
      - There is contact on the arms, face and clothing, but only until the spray decision is made, scouting pretty much ends.
      - When insects are sprayed monitoring ends, except for a quick look at the field
    - ATVs, walking, etc
      - Field are walked

- **Cotton**
  - Clothing worn (season long)
    - Long pants, shirt, boots or shoes, and hat
    - Wear rainsuit bottoms and/or tops when dew or rainfall is present
  - Scouts are given WPS handler training.
  - Early season: Emergence to 1st bloom
    - Activities
      - Touch top leaves with the hands for a few seconds
      - Hold stem or make visual observation of foliage
      - Examine terminal bud using tools while holding plant with several fingers – new terminal growth often is too fresh to have insecticide residues present

- Move on through field for a few minutes, examine another plant same way.
- Additional monitoring using sweep nets (contact limited to removing 0 – 8 leaves from the net prior to counting insects)
- Very limited contact while walking.

- Mid-season: 1st bloom – late bloom
  - Activities
    - Go through field
    - Examine terminal bud area
    - Pull and count squares, blooms, and bolls (20 – 50/field)
    - Use sweep net
    - Move through field and repeat process.
- Late season: Late bloom – maturity
  - Activities
    - Go through field
    - Examine terminal bud area, blooms, and bolls.
    - Pull small fruiting forms from plants
    - Move through field and repeat process.
    - Limited field activity after node above white flower of 5 + 350 DD-60's.
    - Mostly field observation from turnrow
- Cotton region comparisons and comments
  - 95 % of cotton in South and Southeast is scouted.
  - Cotton in LA and MS generally reaches 48".
    - Cotton in GA/NC seldom as tall as Mid-South cotton.
    - Cotton in West Texas seldom reaches knee-high, and insect pressure is substantially less than that in the Mid-South.
      - Overall crop height and density at full development is substantially less than Mid-south and SE areas, due to lack of soil moisture. Projected revenues do not justify high inputs, hence fewer pesticides are used.
  - Cotton in GA/NC treated much less than cotton in Mid-South due to less insect pressure.

- **Grapes - California**
  - Clothing
    - Long sleeves and long pants, plastic chemically resistant gloves, cap/hat, boots/shoes and socks.
  - Transportation
    - Drive up to the field or vineyard, get out and walk during the observations and get back in the truck
  - Grapes are not scouted as intensively as fruit and vegetables.
    - May to August the grapes are scouted on a weekly basis.
    - Scouts are in the field 6 hours per day
    - Foliage contact – averages less than 1 hour/day.
    - Grape being a perennial, May is blooming and fruit matures during the next 4 months during which the scouting occurs.
    - Contact consists of turning leaves over and looking for leafhoppers.

- **Lettuce - FL**
  - Clothing
    - Long sleeves and long pants, plastic chemically resistant gloves, cap/hat, boots/shoes and socks.

- Transportation
  - Drive pick-up or ATV up to field edge and walk into and through and out of field and load back up.
- Early season: Seedling to pre-cupping (about 10 leaf). Activity is examining a leaf sample for insects and diseases.
- Mid-season: Cupping stage. Activity is examining a sample of leaves and plants including roots for insects and diseases.
- Late season: Maturation. Activity is cutting off plants and examining for insects, diseases, and foreign objects.
- Lettuce is continuously cropped for 8 months. Seeding begins around September 1 and finishes February 15 with a 3 month overlap of planting and harvesting. The Number of Days for Early is 64 during September and October, for Mid is 80 for November to February (mostly the overlap period) and Late is March/April for a 64 day period.

- **Lettuce - NM**
  - Early season: Planting through thinning
    - Clothing worn
      - Hat, Boots, long pants, long sleeved shirt
    - Activities
      - Schedule irrigations
      - Monitor stand development
      - Monitor insects
    - Fields are walked
      - Very little foliar contact (foliage is removed with knife blade for inspection)
  - Mid-season: Thinning to head development
    - Clothing worn
      - Hat, Boots, long pants, long sleeved shirt
    - Activities
      - Schedule irrigations
      - Monitor insects
      - Monitor diseases
      - Monitor weeds
    - Fields are walked
      - Minimal foliar contact (mainly to hands)
  - Late season: Heading to harvest
    - Clothing worn
      - Hat, boots, long pants, long sleeved shirt, latex gloves
    - Activities
      - Monitoring crop maturity (scheduling harvest)
      - Scheduling irrigations
      - Monitoring insects
      - Monitoring diseases
    - Fields are walked
      - Minimal foliar contact (mostly to boots and lower pant legs)
      - Latex gloves are used when cutting heads to determine harvest date

  - March 2, 2004 comments on Lettuce – "I am currently checking lettuce fields in New Mexico that will harvest in April and May. These fields were planted from Dec. 7, 2003 through early February of 2004. As of March 2, 2004, none of the fields I am currently checking have been

sprayed with pesticides. There has been no pesticide exposure for over 70 days. This is typical for lettuce crops grown in this area at this time. Pesticides will only be used when insect populations reach treatable levels."

- **Pecans - Georgia**
  - Orchards are treated generally every 10 days.
  - All treatments before May are automatic
  - Scouting starts in May.
  - Scouting consists of driving up to a tree and examining leaves, which involves hand contact. After a few clusters of leaves are inspected, drive to another tree. This process continues until an orchard is finished.
    - Then drive to another farm. Repeat the process. Hands are in contact with leaves l/4 of day. Three days per week are involved with scouting. This continues until 2 weeks before harvest begins about 22 – 24 weeks.

- **Pecans – NM**
  - Early season: Full dormancy to 50% bud break
    - Clothing worn
      - Long pants, boots, long sleeved shirt, and hat
    - Activities
      - Irrigation scheduling
      - Foliar fertilizer recommendations (zinc sprays)
      - Monitor weed development
      - Place moth traps in trees
    - Exposure
      - Typically, no pesticides are applied at this stage.
  - Mid-season: 50% bud break through pollination
    - Clothing worn
      - Long pants, boots, long sleeved shirt, and hat.
    - Activities
      - Irrigation scheduling
      - Monitor weeds
      - Monitor moth traps
      - Check nut clusters for Pecan Nut Casebearer activity
    - Exposure
      - Typically, nut clusters are inspected when trap counts indicate a moth flight.
      - No pesticide exposure during this phase.
      - If inspection reveals that a treatment is required, a follow-up visit is done 7 days later.
      - 100 nut clusters are inspected.
      - Foliar contact is primarily to hands.

  - Late season: Pollination to shuck split
    - Clothing worn
      - Long pants, boots, long sleeved shirt, and hat.
    - Activities
      - Irrigation scheduling
      - Monitor moth traps
      - Collect leaf samples

        - Monitor aphid populations
    - Exposure
        - Typically, no pesticide treatments are made at this time.
        - If threshold levels of Black Pecan Aphids are observed, a treatment will be scheduled and a follow-up visit will be made 7 days later to evaluate the results.
        - Exposure is primarily to the hands.

- Additional comment
    - "In 2003, approximately 1/3 of the pecan acres I checked were sprayed with a foliar pesticide. The rest of the acreage was not treated due to sub-threshold insect populations."

- **Potatoes - Colorado**
    - The consultant checks them 5 days a week all day and does not do any other crops. He checks potatoes 100% of the time. His Narrative is as follows.
    - Early season: 0 to 10"
        - Cap, long sleeve shirt, long pants, jacket, boots.
        - Walking the field No ATV.
    - Mid-season: 10 to 18"
        - Cap, jacket, long pants, rubber boots, chemical resistant chaps, long sleeve shirt.
        - Walking the field No ATV
    - Late season: 18" thru senescence
        - Cap, long sleeve shirt, long pants, rubber boots, chemical resistant chaps.
        - Walking the field.
        - At this time they us a sweep net when checking for insects.

- **Potato – Columbia Basin (WA, ID, OR), MI and NY**
    - Clothing worn:
        - short sleeve shirt, long pants, socks and shoes. Mid-calf rubber boots and/or plastic rain pants or tyvec spray suit when foliage is wet. Many scouts wear latex gloves.
    - Generally, only enter potato fields to scout during REI's when there is late blight in an area and spraying intervals are reduced to 5 days or less. In the northwest, fields occasionally entered during a REI after a border mite spray. Most scouting occurs 72-96 hours (more in drier areas) after spraying.
    - Early season: Planting to 10 inch plants--early Vegetative stage. 1-10 visits
        - Pre-emergence visit and first post emergence visit on ATV primarily for weed scouting, emergence and stand assessment.
        - Next 2-3 visits check 5 plants/area for signs/symptoms of insects and diseases.
        - Dig 1 plant in each area sampled to assess root health and monitor soil moisture.
        - Sweep net and mid-plant leaf sampling begins for potato leafhoppers and aphids late in this stage. Minimal foliage contact occurs.
    - Mid-season: 10-18 inches--Rapid vegetative growth prior to full canopy. 2-6 visits
        - Plant and leaf sampling continues for disease and insect assessments.
        - Petiole sampling for nitrate or complete tissue analysis begins.
        - Soil moisture assessments for irrigation scheduling begin.
    - Late season: Full canopy-senescence. 6-20 visits.
        - Plant, leaf, petiole and soil moisture sampling continues.
        - Check 3-10 sample sites per field. In each sample site check 5 plants or shake/beat vines onto a beet sheet, check 10-20 leaves and do 25 sweeps of a sweep net. Dig 3-5 plants per field.

- Petiole sampling: remove newest fully expanded leaf and strip leaflets off petioles (30-50/field). If only doing petioles takes about 20 minutes when walking about 300 feet in the field.
- Leaf sampling: pick 80-100 or more mid-lower plant leaves/field and count aphids, mites and leafhoppers.
- Whole plant samples: move/shake plant leaves and stems to count insects and rate disease symptoms.
- Soil moisture assessments: using a shovel, dig in root zone and squeeze a handful of soil from different depths to see if it balls or ribbons. Check soil moisture sensors often requires only walking 300 feet in the field or take soil cores for gravimetric analysis.

- **Potatoes – MN/ND**
  - Early season: Emerging-ankle high
    - Mostly ATV
      - Little contact
  - Mid-season: Ankle high-full canopy
    - ½ ATV
    - ½ Walking
  - Late season: Full canopy
    - Usually walking in the field

- **Soybean - MN/IA**
  - Early season: 0-5”
    - Clothing worn
      - Cap or hat, jacket, gloves, long pants or coveralls, boots
    - Activities
      - Stand counts
      - Weed observation
      - Very little contact
    - ATVs, walking, etc
      - ATV’s are mainly used
  - Mid-season: 6-15”
    - Clothing worn
      - Cap or hat, possibly jacket, long pants, boots
    - Activities
      - Final weed observation
      - Very little contact
    - ATVs, walking, etc
      - ATV’s and walking
  - Late season: 15+ “
    - Clothing worn
      - Cap or hat, long pants, boots
    - Activities
      - Mainly insect and late weed observation
      - Most contact is on the pants and boots
    - ATVs, walking, etc
      - Field are walked
    - Soybeans are scouted heavily during full canopy, but once field is sprayed, scouting pretty much ends.

- **Strawberries - California and Florida**
  - Clothing
    - Long sleeves and long pants, plastic chemically resistant gloves, cap/hat, boots/shoes and socks.
  - Transportation
    - Drive pick-up or ATV up to field edge and walk into and through and out of field and load back up.
  - Foliage (leaf undersides) is examined for mites and canopy observed for diseases.
  - Scouts are in the crop 5 hours per day and 5 days per week.
  - Early season: Pre-bloom (about Sept to Nov, depending on southern or northern CA)
    - The next stage is harvesting from Nov-June (again depending on S or N CA)

- **Succulent Peas - NY**
  - Early season: 0-4 nodes
    - Clothing worn
      - Short sleeved shirts, long pants, shoes, rubber boots and/or plastic rain pants when foliage is wet.
    - Activities
      - Stand inspection
      - Weed inspection
      - Minimal crop contact
      - 95% of peas have NO pesticide applied prior to this stage.
    - Most fields scouted with ATV
  - Mid-season: 5 node to blossom
    - Clothing worn
      - Short sleeved shirts, long pants, shoes, rubber boots and/or plastic rain pants when foliage is wet.
    - Activities
      - Assessment of herbicide efficacy
      - Disease observation
      - 100% of time in contact with crop
      - All fields walked
  - Late season: Blossom to harvest
    - Clothing worn
      - Short sleeved shirts, long pants, shoes, rubber boots and/or plastic rain pants when foliage is wet.
    - Activities
      - Examination of foliage for pest infestation
      - Disease observation
      - 100% of time in contact with crop
      - All fields walked

- **Sweet Corn - FL**
  - Clothing
    - Long of short sleeves and long pants, plastic chemically resistant gloves worn by some, cap/hat, boots/shoes and socks. From mid-late stages water-proof aprons or pants are worn.
  - Transportation

        - Drive pick-up or ATV up to field or grove edge and walk into and through and out of field and load back up.
    - Early season: 2 to 3 leaf (about 2 weeks post-emerge). Activity is observing for weeds, taking stand counts and looking for worms.
    - Mid-season: Whorl stage to tassel-push. Activity is looking for worms and diseases.
    - Late season: Silking and harvesting. Activity is slightly opening the silks and closely examining for worms.
    - Most sweet corn in FL is continuously cropped for a 6 or 7 month cropping period.
    - The Number of Days
        - Early occurs around November/December and is 56
        - Mid is 70 at January/February
        - Late is 90 during March/April/May.

- **Sweet Corn - NY**
    - Early season: 0-4 leaf
        - Clothing worn
            - Short sleeved shirts, long pants, shoes, rubber boots and/or plastic rain pants when foliage is wet.
        - Activities
            - Stand inspection
            - Weed inspection
            - Minimal crop contact
            - All fields scouted with ATV
    - Mid-season: 5 leaf to tassel
        - Clothing worn
            - Short sleeved shirts, long pants, shoes, rubber boots and/or plastic rain pants when foliage is wet.
        - Activities
            - Assessment of herbicide efficacy
            - Disease observation
            - Moderate crop contact
            - Most fields walked
    - Late season: Tassel to harvest
        - Clothing worn
            - Hat, long sleeved shirts, long pants, shoes, rubber boots and/or rain suits when foliage is wet.
        - Activities
            - Examination of foliage for pest infestation
            - Disease observation
            - 100% of time in contact with crop
            - All fields walked

- **Sweet Corn – Pacific NW**
    - Clothing for scouts
        - Long sleeve shirts
        - Rain wear if fields are wet
        - Scarf, cap or bandana if individual does not want corn pollen in hair
        - Sturdy shoes, long pants, rubber boots, if field is wet
        - Masks and safety glasses are used according to preference

- Early season: Planting to late whorl stage
  - 50-60 days after planting
  - Limited crop exposure prior to late whorl
  - At late whorl, walk the field for % tassel emergence 2-3 times per week
- Mid-season: Silking stage (late whorl to 100% silk)
  - Scouts visit field every 1-2 days until 1st app is made (at 1-10% silk)
  - After 1st app, fields are visited the day prior to the next scheduled spray (every 4-6 days)
    - This continues until field maturity is reached or pest pressure declines
- Late season: Dry silk to harvest
  - Field would be checked 2-3 times for application success
- General
  - Field checks are usually completed in about 15-20 minutes per 140 acre center pivot field
  - Actual time in the field varies, but usually only 3-5 minutes of crop exposure is required at each sampling point, with 4 sampling points per field the norm
  - Due to humidity, pollen and temps, field work is typically finished by noon

- **Sugarbeets - Minnesota**
  - Early season: 0-6 leaf
    - Clothing worn
      - Cap or hat, jacket, gloves, long pants or coveralls, boots
    - Activities
      - Stand counts
      - Weed observation
      - Very little contact
    - ATVs, walking, etc
      - Scouting is done on an ATV early season, with very little contact.
  - Mid-season: 6-8 leaf
    - Clothing worn
      - Cap or hat, possibly jacket, long pants, boots
    - Activities
      - Final weed observation
      - Very little contact
    - ATVs, walking, etc
      - ATV's and walking
      - Scouting is done on an ATV early season, with very little contact.
  - Late season: 10+ leaf
    - Clothing worn
      - Cap or hat, long pants, boots
    - Activities
      - Insect and disease observation
      - Most contact is on the pants and boots
      - Scouting is done weekly or bi-weekly between fungicide applications.
    - ATVs, walking, etc
      - Field are walked

- **Tomatoes - FL**
  - Clothing
    - Long sleeves and long pants, plastic chemically resistant gloves, cap/hat, boots/shoes and socks.

- Transportation
  - Drive pick-up or ATV up to field or grove edge and walk into and through and out of field and load back up.
- Early season: Transplant (about a 2 wk interval). Activity is turning over leaves and looking for insects and examining foliage for diseases.
- Mid-season: Fruit setting (about week 3 to 8). Activity is picking 10 leaves per 10 acre stop and examining for leafminers and whiteflies. Also some foliage contact in turning over leaves for worm presence.
- Late season: Fruit maturation and harvest (week 9 to about 14).
- The Number of Days of Scouting refers to tomato crops that are planted every week starting in September 1 and finishing in December 31.
- These crops begin harvesting around December 1 and finish harvesting April 30.
- The Number of Days for potential contact is 60 for September and October, 80 for November to February and 50 for March and April.

NAICC Policy Statement Concerning Employees of Certified Agricultural Professionals

Regarding the EPA Worker Protection Standard (WPS), The National Alliance of Independent Crop Consultants (NAICC) believes the exemption to certain portions of the WPS, which was granted by EPA in 1995 to qualified crop consultants, and their direct employees places responsibility on all exempted certified consultants to:

- Pursue additional continuing education on all matters relating to pesticide safety procedures
- Routinely conduct pesticide safety training for all employees covered by the NAICC WPS exemption
- Consider that such training should include information regarding appropriate personal protective equipments (PPE), appropriate clothing and the care and handling of same.
- Closely evaluate what are appropriate ages of current and prospective employees who will be engaging in tasks covered by the WPS exemption, such that these employees are able to bring sufficient knowledge and awareness to their respective duties.
- Refrain from directing employees into tasks that differ substantially, temporally or spatially from that of the consultant so as to avoid any inadvertent reduction in safety-related practices or procedures.
- The NAICC encourages all qualified consultants to adhere to these practices. Further, NAICC pledges to work with EPA to disseminate informational materials to consultant members through electronic media and printed materials.

Summary

There will certainly be “gaps” in the Monitor Profiles crop data that we collect….

However, Consultants need to keep their WPS exemption!

Consultants and employees do not enter the fields during an REI very often, but we need to reserve the right to enter the field, according to our WPS exemption, in order to efficiently carry out our IPM duties.

NAICC welcomes EPA to use us as a resource and sounding board for their decisions.

NAICC hopes that this report will help EPA make better decisions by understanding what Consultants do in the field.

Appendix

SPRING WHEAT MONITORING PROFILE (sample)

prepared by
CENTROL, Inc.
Twin Valley, MN
Wheat acres estimated at 30% of the acres in area. Average consultant covers 25,000 acres of crop, so average wheat acres per consultant is 7,500 acres.

Growth Stage	% of Working Week	Duration in Weeks	Field Visits per Week	Total Field Visits per Day	% Time Crop Contact	Activities	Hours/ Day in Field	Hours/Day in Fields With REI	Minutes/Day Crop Contact In Fields With REI	Minutes/Week Crop Contact In Fields With REI	Total Minutes/Season Crop Contact In Fields With REI
Planting - Sprouting	20	2	0.5	25	0.1	Not in field much Walk into field and dig up a few seeds checking for seed depth	2.4	0.0	0.0	0.0	0.0
Emergence - 2 Leaf	50	2	1	50	0.1	ride ATV across field, dig up and examine roots no contact via walking Look for weeds Often wear coveralls and gloves	6.0	0.0	0.0	0.0	0.0
3rd - 5th Leaf	50	3	1	50	0.1	ride ATV over field, dig up and examine roots no contact via walking Often wear coveralls and gloves	6.0	0.9	5.6	28.1	84.2
5th - 6th Leaf	50	2	0.5	50	0.1	walk field and examine weed control and pests	6.0	0.9	5.6	14.0	28.1
Jointing - Boot	20	3	1	40	0.1	check for leaf disease, limited contact via walking, personnel wear boots and pants Rain pants worn if it is wet and wheat is over boot height	2.4	0.4	2.2	11.2	33.7
Heading - Maturity	10	3	0.5	35	0.1	spot check for disease and insects limited contact via walking, personnel wear boots and pants Rain pants worn if it is wet	1.2	0.2	1.1	2.8	8.4
Persons doing monitoring work an average of 50 - 70 hours/week. All employees wear pants and boots. Hands are washed before eating. Training usually includes Pest Scouting School at NDSU, Safety training video, and personal training by consultant Scout works in same general area as consultant, meeting with others 10-12 times per day, and carry 2-way radios and cell phones. Average work day = 12 hours											154.4 Total Minutes/Season Crop Contact In Fields With REI

COTTON MONITORING PROFILE

as prepared by
Roger Carter, Tim White, & Walter Myers
Agricultural Management Services, Inc.
Clayton, LA

GROWTH STAGE	% OF PERSONNEL WORKING	TIME	FREQUENCY	PLANTS/FIELD 40-400 acres	DESCRIPTION	TIME PER DAY IN FIELD	TIME/DAY IN FIELDS WITHIN REI	TIME PER DAY CROP CONTACT	TIME/DAY CROP CONTACT IN FIELDS WITHIN REI
emergence - 3rd node	10	2.5 weeks	1X/wk	20 - 50	hold stem and make visual observation of foliage no contact via walking	4 - 8 hrs	<1.0 hr	<0.5 hr	<0.2 HR
4th - 7th node	15	2 weeks	1X/wk	20 - 40	pull plants via stem, count nodes by touching petioles	4 - 8 hrs	< 1.0 hr	< 1 hr	< 0.4 HR
				40 - 80	examine terminal bud area using tools while holding plant with several fingers - new terminal growth often is too fresh to have insecticides on it. no contact via walking				
8th - 12th node or	65	3 weeks	1X/wk	20 - 40	pull plants via stem, count nodes by touching petioles	6 - 8 hrs	<1.0 hr	<0.5 hr	<0.2 hr
1st bloom				20 - 80	examine terminal bud area using tools while holding plant with several fingers - new terminal growth often is too fresh to have insecticides on it.		<1.0 hr	<0.5 hr	<0.2 hr
					additional monitoring using sweep nets - contact limited to removing 0 - 8 leaves from the sweep net prior to counting insects. limited contact via walking, personnel wear rubber sole boots - 12 - 16", all personnel wear long blue jeans or khakis; bottom slicker suits worn if it is wet and cotton is over boot height		<1.0 hr	<0.25 hr	<0.2 hr
1st bloom - late bloom	85	7 weeks	1X/4-5 days	20 - 80	examine terminal bud area using tools while holding	6 - 8 hrs	<1.0 hr	<0.5 hr	<0.2 hr
				40 - 200 fruit	pull and examine for damage & insects limited contact via walking, personnel wear rubber sole boots - 12 - 16", all personnel wear long blue jeans or khakis; bottom slicker suits worn if it is wet and cotton is over boot height		<1.0 hr	<0.5 hr	<0.2 hr
late bloom - maturity	15	3 -4 weeks	1X/wk	20 - 40	me as above except less time to examine terminal bu	4 - 8 hrs	<1.0 hr	<0.5 hr	<0.2 hr
				20 - 100 fruit	ore time to examine small bolls (less insecticide present on fruit lower on the stalk) rainsuits same as above		<1.0 hr	<0.5 hr	<0.2 hr

Persons doing monitoring work an average of 60 - 70 hours/week.

Tomato Monitoring Profile

The impact of WPS regulations on IPM in tomatoes – by Glades Crop Care

To determine the impact of WPS restricted-entry regulations on an IPM program in a typical fall tomato planting in south Florida two hypothetical spray programs was constructed. The number of applications of each pesticide was based on GCC's experience with this crop. The fall season was chosen because of typically high insect disease pressure brought on by high temperatures and abundant rainfall. These spray programs are presented in Tables 1 and 2. In the first scenario, it was assumed that scouts could scout the unsprayed portion of a planting on the day of application, and that entry would be restricted following application in all parts of the planting for the time period specified on the product label. The grower chose pesticides based on their efficacy and the frequency of application was based on the need to control pests, especially diseases during the rainy season. Insecticide applications in Table 1 reflect the use of reduced risk pesticides wherever possible. Due to their relatively high cost and narrow spectrum of activity, these pesticides require high information input from competent scouts. In Table 2, fungicide use is again based on the same rainy weather scenario. However, in Table 2, the choice of insecticides is made in the absence of scouting reports on key dates. In this scenario, scouts do not have the ability to enter fields before the restricted entry period has passed.

The impact on a program of scouting visits scheduled for twice each week beginning at planting and extending through the end of harvesting activities is summarized in Table 3. Interestingly, the difference in the impact of the pesticide program on scouting activities is negligible. In both scenarios, the major impact on scouting comes from the long restricted entry intervals for the fungicides, Bravo, Mancozeb and copper hydroxide. In the absence of effective controls alternatives for the most destructive Florida tomato diseases, bacterial spot and target spot, this situation is not likely to change in the near future!

Twenty two percent of the scouting visits to this representative field would be barred because of the restricted entry requirements. On 44% of the scheduled visits, scouting would only be allowed in the unsprayed portion of the planting. The remaining 34% of scouting visits would be unrestricted by the restricted entry interval. This situation is clearly unacceptable. To make things even worse, during periods when rainfall requires shortening the interval between fungicide applications, the planting could potentially be scouted only in part or not at all for periods of up to 12 days!

The grower is virtually forced to abandon the use of reduced risk pesticides in favor of the broad-spectrum insecticides, Lannate, Monitor and Thiodan. The more frequent use of these pesticides entails adding the product, Trigard, for control of leafminers, since the beneficial insect complex that would normally have brought about leafminer control in the latter part of the crop have been killed by the broad spectrum insecticides. Such a change, i.e., the use of relatively inexpensive broad-spectrum pesticides, would probably not change the overall cost of this grower's spray program. However, two of these are carbamate and organophosphate insecticides, which may potentially be eliminated by FQPA activities. Should this occur, the grower would be faced with the expensive proposition of making more frequent applications of relatively expensive materials such as Applaud, Knack, Spintor and confirm to manage silverleaf whiteflies and armyworms. The revocation of exemption from restricted entry regulations for crop advisors would thus have several undesirable outcomes:

- Growers would receive only partial crop and pest information from their scouts.
- Pesticide applications (especially insecticides) would revert to a calendar approach using the least expensive alternatives in the absence of timely pest evaluations needed to make best use of reduced risk pesticides. In this scenario, the economic damage to the grower is negligible.
- In the event FQPA reregistration activities make carbamates and organophosphates unavailable, the grower could potentially lose $150-200 per acre due to having to make more frequent applications of more expensive products.
- The latter scenario is made even more unattractive because of the increased risks of pests developing resistance to the powerful, but highly specific reduced risk pesticides.

To conclude, IPM in Florida tomatoes would be affected in a seriously negative way by the revocation of the early re-entry provisions for crop advisors (scouts). Under the current regulations, scouts who are properly attired for their work can proceed safely through nearly all their assigned acreage in a day. Exceptions occur when a freshly sprayed field is encountered. >From experience, this results in less than 5% of fields being skipped on a given visit. This pales in comparison with the scenario outlined in this exercise.

Table 1. A hypothetical spray program and its effects on scouting activities for a typical fall tomato planting in south Florida. Figures below each pesticide indicate the restricted entry interval following application. In the no entry column s= entry only in the unsprayed portion of the planting on the day of application, x= no entry. Scouting begins on the day of planting and is scheduled twice a week, i.e., on 3- and 4-day intervals.

Day	Scheduled scouting visit	No entry	Bravo	Copper hydroxide	Manzate	Methyl bromide/chloropicrin	Gramoxone	Sencor	Admire	Agrimek	Applaud	Asana	Bt	Confirm	Knack	Soap	Spintor
1		s				48											
2		x															
3		x															
4																	
5																	
6																	
7		s					24	12									
8		x															
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21	0.5	s							12								
22		s		24	24								4				
23		x															
24	x																
25		s		24	24								4				
26		x															
27																	
28	x																
29		s		24	24		24						4				
30		x															
31	0.5	s		24	24								4				
32		x															
33		s		24	24								4				
34		x															
35	0.5	s		24	24												4
36		x															
37																	
38	0.5	s		24	24								4				
39		x															
40																	
41																	
42	0.5	s		24	24								4				
43		x															
44		s		24	24								4				
45	0	x															
46		s		24	24												4
47		x															

48																	
49	x																
50		s		24	24								4				
51		x															
52	x																
53																	
54		s		24	24								4				
55		x															
56	x																
57																	
58		s		24	24								4				
59	0	x															
60																	
61		s		24	24								4				
62		x															
63	x																
64		s	48							12			4				
65		x															
66	0	x															
67		s		24	24								4				
68		x															
69																	
70	0.5	s	48										4		12		
71		x															
72		x															
73	0.5	s		24	24								4				
74		x															
75																	
76																	
77	0.5	s	48										4				
78		x															
79		x															
80	0.5	s		24	24					12			4				
81		x															
82		s		24	24								4				
83		x															
84	0.5	s	48								12						
85		x															
86		x															
87	0.5	s		24	24									4			
88		x															
89																	
90																	
91	0.5	s	48										4				
92		x															
93		x															
94	0.5	s		24	24								4				
95		x															
96																	
97		s	48										4		12		
98	0	x															
99		s		24	24								4				
100		x															
101	0.5	s	48														4

102		x															
103		x															
104		s	48										4			4	
105	0	x															
106		x															
107		s										12					
108	x																
109																	
110		s		24	24								4				
111		x															
112	x																
113																	
114		s	48										4			4	
115	0	x															
116		x															
117																	
118																	
119	x																
120																	
121		s		24	24								4				
122	0	x															
123																	
124																	
125																	
126	x																
127																	
128																	
129	x																
130																	

Table 2. A hypothetical spray program for a typical fall tomato planting in south Florida as affected by the lack of scouting reports resulting from revocation of the exemption from restricted entry requirements of the WPS. Figures below each pesticide indicate the restricted entry interval following application. In the no entry column s= entry only in the unsprayed portion of the planting on the day of application, x= no entry. Scouting begins on the day of planting and is scheduled twice a week, i.e., on 3- and 4-day intervals.

Day	Scheduled scouting visit	No entry	Bravo	Copper hydroxide	Manzate	Methyl bromide/chloropicrin	Gramoxone	Sencor	Admire	Agrimek	Asana	Bt	Lannate	Monitor	Soap	Thiodan	Trigard
1		s				48											
2		x															
3		x															
4																	
5																	
6																	
7		s					24	12									
8		x															

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15																	
16																	
17																	
18																	
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20																	
21	x	s							12								
22		s		24	24							4					
23		x															
24	x																
25		s		24	24							4					
26		x															
27																	
28	x																
29		s		24	24		24					4					
30		x															
31	x	s		24	24								48				
32		x															
33		x		24	24							4					
34		x															
35	x	s		24	24								48				
36		x															
37		x															
38	x	s		24	24							4					
39		x															
40																	
41																	
42	x	s		24	24								48				
43		x															
44		x		24	24							4					

45	x	x															
46		x		24	24								48				
47		x															
48		x															
49	x																
50		s		24	24							4					
51		x															
52	x																
53																	
54		s		24	24							4					
55		x															
56	x																
57																	
58		s		24	24							4					
59	x	x															
60																	
61		s		24	24							4					
62		x															
63	x																
64		s	48							12			48				
65		x															
66	x	x															
67		s		24	24							4					
68		x															
69																	
70	x	s	48								12	4		48			
71		x															
72		x															
73	x	s		24	24							4					
74		x															
75																	
76																	
77	x	s	48									4				24	
78		x															
79		x															
80	x	s		24	24							4					12

81		x															
82		s		24	24							4					
83		x															
84	x	s	48											48			
85		x															
86		x															
87	x	s		24	24												
88		x															
89																	
90																	
91	x	s	48									4					
92		x															
93		x															
94	x	s		24	24					12		4					
95		x															
96																	
97		s	48											48			
98	x	x															
99		x		24	24							4					
100		x															
101	x	s	48										48				
102		x															
103		x															
104		s	48									4			4		
105	x	x															
106		x															
107		s									12						
108	x																
109																	
110		s		24	24							4					
111		x															
112	X																
113																	
114		s	48									4			4		
115	X	x															
116		x															

117																	
118																	
119	X																
120																	
121		s		24	24							4					
122	X	x															
123																	
124																	
125																	
126	X																
127																	
128																	
129	X																
130																	

Table 3. The impact of WPS restricted entry regulations on scheduled scouting activities for a typical fall tomato planting in south Florida.

Impact of spray program and restricted entry intervals on scouting activities	Number of scheduled scouting visits affected
No Scout Entry	7
Scouting in unsprayed part of planting only	14
Unrestricted scouting	11

Participants

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Numerous other consultants helped with data collection, but will not be acknowledged.

Thanks to everyone for all their good work!

Other things that we talked about providing, but did not….

1. Verbiage that today's scouting times (in cotton) are less than what they were 10 years ago (Ray Young's Boll Weevil example)
2. Number of days after application (or days into REI) the field inspections are performed
3. How many acres each consultant on this task force consults on
4. What % of each crop is professionally consulted on
5. Timeline of crop development as it relates to pesticide use
6. Typical pests at each crop stage
7. Weather data, which affects residue
8. Data sheet on scouts, including clothing, age, education level, experience, training
9. Video of actual scouting procedures at various stages of crop development

"Rod Elmstrand"
<elmst002@umn.edu>
10/08/2008 02:59 PM

To Caryn Muellerleile/DC/USEPA/US@EPA
cc
bcc
Subject RE:comments on EPA rules' small business impacts due Thurs 10/9

I read through the attachments that you sent me, WPS is a problem on small farms, as is pointed out in the attachments 98% farms may be considered small. Here are some comments.

1. Is there a way for us to differentiate or define small farms. What may be a small farm in California will likely be a very large farm in Minnesota. I would suggest that family farms where the family puts in 75% of the labor and management should have a different set of rules than farms that are managed and staffed with hired labor.

2. Training short term workers is a time financial burden for small farmers. If growers are producing a crop were there is no RUP spray applications needed during harvest, then I would recommend that these short term employees not be trained. The crew supervisor should be trained to properly supervise the harvesting operation.

3. Verbal notification of applications should be all that is needed with small farms where the labor force is less than 10 non-family persons per farm and in places where workers are not involved in the direct application/handling of the pesticides.

Rod Elmstrand
Subject: reminder: comments on EPA rules' small business impacts due Thurs 10/9

Dear Small Entity Representative:

Thank you for your participation in the September 25 outreach meeting on Worker Protection Standards for Agricultural Pesticides & Certification of Pesticide Applicators. If you have not yet had the opportunity to do so, we are accepting written comments on impacts the potential rulemakings may have on your small business until close of business Thursday, October 9. We are happy to accept your written comments even if you were unable to participate in the teleconference meeting.

Please send your written comments to me and I will distribute them to all Panel members.

Caryn Muellerleile
Office of Policy, Economics, and Innovation
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (1806A)
Washington, DC 20460
Phone: (202) 564-2855
Fax: (202) 564-0965
muellerleile.caryn@epa.gov

Joe Hogue/DC/USEPA/US
10/02/2008 11:53 AM

To Caryn Muellerleile/DC/USEPA/US@EPA
cc
bcc
Subject Fw: Comments from September 25 meeting

Caryn -

I just received the 1st written comment since the panel outreach meeting. You may want to forward it to SBA & OMB before today's meeting, in case they could use it.

Thanks,

Joe Hogue
EPA, Office of Pesticide Programs
FEAD/PRSB (7506C)
phone: Tues, Wed, Thurs > (703) 308-9072
Mon. & Fri. > (804) 448-8027

----- Forwarded by Joe Hogue/DC/USEPA/US on 10/02/2008 11:51 AM -----

"John Hester" <jhester@nicholsag.com>
10/02/2008 12:10 PM

To Joe Hogue/DC/USEPA/US@EPA
cc
Subject Comments from September 25 meeting

Joe, I'm not very good with a computer and have the wrong date in the title, however, you will see that the comments are from the power point presentation from our last meeting. Call me if you have any questions.

John F. Hester

Owner/Manager
Nichols Ag
319-723-4221
319-631-1969
jhester@nicholsag.com

EPA comments from 8-25-08 meeting.docx

Small Business Advocacy Review Panel

Outreach meeting – September 25,2008

Comments from John Hester, Owner- Nichols Agriservice, Nichols, Iowa

General Overview and Perspective

My perspective is from over 35 years of recommending, selling, applying and training private and commercial applicators in Iowa where almost all activity is in corn and soybean production. Over 80% of all pesticide applications are done by commercial applicators like my company and the only people involved or close to the field are my applicators and the farmer. It should also be noted that because the Iowa economy is based on ag , rules and regulations concerning safety and proper application have been utilized for many years.

In reading your documentation for the need for more regulation, it appears that most of the input came from states that are involved in many specialty, high maintenance crops requiring more in-filed activity by non-family farmers or commercial applicators.

Certification of Pesticide Applicators

There is a large difference between the skill and training of the commercial and private applicator. Since commercial applicators apply a large percentage of pesticides, their business success requires experienced and safe applicators and constant training. The term “under supervision” does not apply since the licensed applicator is the person in the field doing all the spraying. “Under supervision does become important to the family farmer who may ask a family member to apply pesticides and occasionally there are mistakes made due to a lack of experience and training. I do not believe that anyone under the age of 18 should be allowed to handle or apply pesticides even though 30% of my pesticide sales are applied by family farmers and I am aware that the 16 year old son or daughter may actually be the loader/mixer and applicator. These products are too expensive and too complicated for a young person to fully comprehend.

Field Posting

_____It is common practice for a commercial applicator to place a copy of WPS guidelines at the field entrance after an application. My family farmers do not do this since they will likely be the only worker of any kind in the field during the REI period and the practical use of posting by the commercial applicator is to signify to the family farmer that the intended application is complete and the next planned field activity can occur. Over 80% of the fields where pesticide applications occur have 1 or 2 field entrances and they are both on the road side of the field. Posting 4 corners of someone's yard or lawn may be appropriate since they are open on most sides but posting all 4 corners of a farmer's field would be a complete waste of time since there are no entrances to the field other than the 1 or 2 that everyone utilizes. Not only would 4 corners posting be a wasted activity, it would add as much as 20% time to that field activity and would require traveling over and possibly damaging portions of the planted field to complete the process.

I can see a need for posting 1 common side of the field with WPS posting if the field will require non-family workers such as de-tasselers or hand pickers in the fruit and vegetable parts of the country

It has been difficult for me to get my applicators to leave these WPS sheets at the field entrance since most of my customers never read them, but we could do better.

Decontamination Supplies

Eyewash stations are only practical at permanent mix sites due to winter freezing and the large amount of very small fields and tremendous cost of the piping that would be required. We have found that giving an applicator a water bottle that fits into the shirt product works much better and is adequate in irrigating eyes until the effected person can move to a family farmer's home or commercial applicator's facility.

Emergency showers seem to be popular at commercial mixing stations but are almost never used. I have personally helped 2 different employees use one of

these showers and the shock of the cold water was much worse than the chemical on the skin. Regular shower stalls should be available at the mixing site and are common at over 99% of these sites in the mid-west.

Cholinesterase Testing

Less than 2% of the applications of pesticides used in corn or beans involve insecticides that are Cholinesterase. Inhibitors and even though I have had 1 employee become ill back years ago when these products were popular, the chlor. Test revealed little since there was no background test performed before the incident. We have found little need for these types of products since safer and more efficacious products are more plentiful today and are less expensive.

Charcoal Filtered Cabs

All of my application equipment have charcoal filters. These spray rigs cost about $200,000 and have very good, air conditioned cabs and with regular replacement of filters, are very effective in keeping out vapors or bad air or any chemical. There is a huge difference between these rigs and the open tractors that I see operating in the warmer climates where fruit and vegetables are grown.

Size Exemptions

Sheer number of people entering any field at any one time or in a seasonal total can differentiate in the need for some regulation. Almost 100% of corn, soybean, wheat and other commodity grown fields are never entered during an REI period or any other time other than 1 or 2 commercial applicators or 2-3 family farmer members. However, seed production fields in the mid-west and specialty, high-maintenance crop fields usually have more than 10 workers in a field at any one time and care is needed to insure that fields are posted on 1 side for the REI period

Conclusion

It should be noted that persons with a vested interest in proper and safe applications are inherently better suited in compliance and overall stewardship. A farmer will not likely ask one of his children to do something that may harm that

person or the environment where they live, so too with the commercial applicator who makes a living at doing things like spraying and recommending pesticide practices.

Thank You

John Hester

REEDFLY@aol.com
10/09/2008 07:34 PM

To Caryn Muellerleile/DC/USEPA/US@EPA
cc
bcc
Subject Re: reminder: comments on EPA rules' small business impacts due Thurs 10/9

Thank you, Caryn. I have attached my comments as a Word document to this e-mail.

Rick

 SBARP.docx

October 9, 2008

Alexander Cristofaro
c/o Caryn Muellerleile
1200 Pennsylvania Ave, NW
MC 1806A
Washington, DC 20460
muellerleile.caryn@epa.gov

Dear Mr. Cristofaro:

Thank you for the opportunity to comment on the forthcoming regulatory proposals. I shall keep my comments brief.

Applicator Certification Rule (Restricted Use Pesticides)

1. Illinois requires testing in specific categories every 3 years for commercial applicators. I personally take 7 different tests every tree years to remain qualified to do my job. In states that do not require repetitive testing, but rely upon Continuing Education programs, I anticipate that the certification categories you suggest would be taught and tested as part on their ongoing program.
2. The applicator minimum age proposal will not adversely affect those businesses who employ commercial applicators because my industry uses aircraft for our applications. We already have minimum age requirements for obtaining a commercial pilot's license.
3. We are not required to pay a fee (in Illinois) for taking the required tests, all of which are closed book, and proctored. Expense incurred in traveling to an exam site is really impossible to categorize and estimate for everyone involved.

Worker Protection Standard (Workers and handlers in plant agriculture)

1. The suggestion that requirements for additional posting of REI are being considered is truly interesting. I understand the rationale is to make sure "everyone" is adequately warned if a field has been treated. Realistically, the only individuals who are supposed to be entering that field are legal workers who have been instructed to enter at "the usual point of entry." Other individuals who might choose to enter the field from any direction are, in my opinion, trespassing. The WPS were written to protect workers and not trespassers. Other specific comments are:
   i) I doubt the rationale that trespassers would only choose to enter a field at the corners.
   ii) If the corners of a field are inaccessible by road, path, etc. would the posting still be required?
   iii) Time for posting would be considerable. For example a typical 160 acre square field with 4 distinct corners would necessitate a walk of 2 miles to place the signs. Some of the fields personally treat are considerable larger than that. The 15 minutes assumed by EPA is based on what?

iv) Consider the posting of very small fields of fruits and/or vegetables i.e. 1-2 acres. Posting the signs would take considerably less time than large fields, but to what advantage? You could stand in one place and be within 100 feet of every sign posted.
v) Some fields have considerably more than 4 corners and some don't have any corners at all. Where do you propose posting additional signs on a round, center pivot irrigated field?
vi) The requirement would be extremely time

2. The requirement of a no-entry zone of any distance would have no effect because applications are prohibited if any personnel, workers or otherwise, are present at the site of application.
3. It would not be a burden to maintain a pesticide MSDS file because we are already required to have MSDS information available. Adding a requirement that MSDS sheets be posted for viewing is possible but futile. They would simply never be utilized. The pertinent information a worker may be interested in is found on the EPA approved label that accompanies every product applied.
4. The proposed requirement to force the wearing of a respirator in a closed, sealed cab is without foundation, would cause undue hardship and discomfort, and possibly magnify the potential for inadvertent contamination. I have to question the motive here. During the teleconference, I heard that research has shown an enclosed cab's filtration system is less effective than a well designed, correctly fitted, clean respirator. I'm not surprised by that. I also have no doubt that a full decontamination suit, complete with bottled breathing air and a full face airtight helmet provides greater protection than the simple respirator. What exactly is the problem we're trying to fix? I propose that the enclosed cabs in use today are sufficient protection. Do we have statistics that show workers are becoming ill while making an application from an enclosed cab? If so, than the circumstances of that exposure should be studied and then remedied.

Respectfully,

Rick Reed
Reed's Fly-On Farming

"webbfarm@netzero.net"
<webbfarm@netzero.net>
10/03/2008 03:08 PM

To Caryn Muellerleile/DC/USEPA/US@EPA
cc
bcc
Subject Re: Worker Protection Standard for Agricultural Pesticides and Certifi cation of Pesticide Applicators - Small Business Advocacy Review Panel Outreach Meeting Invitation and Materials for Small Entity Representa tives

Mr. Cristofaro,

I apologize for my abscence from the Sept 25 teleconference. I have reviewed the materials sent out and I feel that my original comments from the June meeting sufficiently outline my positions on these proposals. I am resending those comments as an attachment for reference. I hope that is adequate participation on my behalf to aid in this panel's conclusions. Again, I apologize for the conflict in schedules and offer my continued support and assistance on these issues.

Clint Webb SER Outreach follow up session 1.doc

Clint J. Webb
Webb Farms
6430 Dixie-Barwick Rd.
Boston, GA 31626
Family farm: cotton, peanuts, corn, hay
Commercial Applicator personal use only
One employee

June 30, 2008 Potential SER Outreach Meeting Follow up

Adding certification categories for commercial applicators:

Here in Georgia we already take two tests to become certified commercial applicators; one is general pesticide safety and worker protection standards and the other is specific to one of over 16 subcategories. The tests are proctored, closed book and only given at approved locations and times around the state. This can sometimes limit when a person may get certified, but it seems to be working fine today. I think this is the appropriate way to do it and any standardization on the national level would be an improvement.

Applicator minimum age:

I am not comfortable with the EPA establishing a generic minimum age for applicators. I personally know forty year old men that are not capable of applying RUPs and also twelve year olds that are fully capable and mature enough for the job. I personally started applying RUPs as early as 12 or 13, and I know some around that will use guys 16 or possibly younger. Speaking as a small family farm, we regularly use family labor that may be young for such jobs. They have been familiar with such tasks and are supervised by a licensed adult. Without the option for such labor, we would either have to rely only on the certified applicators to do the work or be forced to hire additional help of an older age. Both scenarios would add unnecessary expense to the operation and/or delay pesticide applications which will result in yield reductions. I think the certified applicator should be competent enough to determine if an individual is capable of safely applying the chemical.

I also feel there should be no minimum age on who can receive a pesticide license; whether private or commercial. The test should be of the caliber to address that concern. If one is capable of learning and understanding the concepts on the written test then they should be given the rights that come with that knowledge. If I am working a 12 or 15 or 25 year old employee, I would much rather they go take the private applicator test and be certified than they simply be under my supervision just because they have not crossed some arbitrary age threshold. I feel that in preparing for that test they will undoubtedly pick up important information on how to react to a situation that I may have overlooked because it is second nature to me as an experienced applicator.

Applying RUPs under the supervision of Certified Applicators:

I have one employee that is not a certified applicator. He works under my supervision and that of my dad, who is a private applicator. This employee has been with us for 23 years and is perhaps more familiar with pesticides that many recently passing the test. There are many farmers in the area that have applicators working under supervision. These employees are trained typically by the supervising applicator. I think there is no reason a licensed applicator cannot do the training. I do not have a problem with a more specific training program. It would be good to have a clear set of criteria that should be covered when doing employee training, but it should be done in house. I do not feel that it is necessary to carry employees off farm or bring in additional staff for training. That again adds expense to the operation.

Supervisors often range from being in the field with the applicator, perhaps on another piece of equipment, to being in the area, often checking in regularly as they manage multiple workers in different area. Having a means of instant communications is a great idea. Those that have two-way radios and cell phones certainly have an advantage, but it seems to be an overreach to require such devices. Such issues that may come up and need communications should be handled in the training. I understand that things happen, but a well trained employee should have been told ahead how to deal with situations like spills or contamination. We have some cell phones and some radios, but we are not covered in all areas at all times. I like to be in communication with my help, but there are times and equipment that is not currently possible. To make it so would be an added expense of several hundred if not thousands of dollars in equipment and future subscriptions.

Worker Protection Standard
Training:

Properly training employees is very important to both their safety as well the functioning of the company. It is important that they be trained thoroughly and promptly. However, the current grace period is essential to allow time for new employee training. I find it basically impossible to verify training so any new employee undergoes training, but it really helps to have the flexibility to know it can be worked around our busy schedules rather than having to stop some vital task to perform the training. That is especially true since I do my own training. As I said earlier, I think the training criteria should be clarified and would even like to see a consistent, concise training manual so that I know I have covered everything necessary.

I do not agree with shortening the retraining interval. In Georgia, my license has to be renewed every 5 years. If that is enough for a commercial applicators license then it is enough for worker training. We have no turn over, I know several that have very low if any turnover; I would hate to see regulation geared toward high turnover operations that simply puts us going over the same ground time after time. Each employer will have to do new training as his labor situation demands, but to retrain current employees more often than 5 years is simply unnecessary.

Restricted Entry Intervals (REI):

Here in Georgia we currently have to post a warning sign after applying RUPs. The sign is a standard written and pictorial sign issuing a warning of danger to stay out. They are to be posted for the duration of the REI. Putting the signs up as you leave the field is not a great burden, however, keeping track of different fields and times so they are not left up unnecessarily can be time consuming. We only have to place the signs at the entry to the field. Currently dealing only with RUPs, for crops like cotton or peanuts we will typically have to post a field five times a year. Proposals to require posting on all pesticides having an REI would dramatically increase that number to as much as 30 or 40 for crops like cotton. The task of keeping up with posting time and expiration times would be tremendous. For our small operation, only about 500 acres in cotton, it could take one person up to one hour each day just riding and updating posting signs. Add to that the cost of the gas and the vehicle and you just spent $25 a day in added costs all the while that worker is not doing some other important task.

There are two concerns with having to add the chemical name and REI expiration to the sign. One, the signs become consumable rather than reusable because the chemicals and times change with each posting. Two, with the chemical name present, you open the sigh to interpretation by employees rather than it standing alone as clearly “do not enter”.

The signs we currently use display a red octagon and a man with a hand indicating stop. These symbols work to convey the information of restricted access. Other suggestions such as the skull and crossbones would be much less effective as they do not simply say stay out but rather convey a message of impending danger; which is not the case with these pesticides so long as the REI is honored.

We discussed guidelines for posting signs in fields. I firmly believe it is only necessary to post such signs at logical points of entry. There is no reason to have to place signs along perimeters or other configurations around a field. The signs are there to inform authorized personnel and chance entrants of the dangers in the field; we are not trying to barricade the field with them. Postings in general, but especially any such regulation would have added effect on small farmers. Typically as farm size decreases average field size decreases. Under either scenario, the small farmer will have to put out more signs and spend more time per acre than a larger farm.

For example, on 500 acres with average field size of 30 acres, I would have to post 17 signs just at entrances. Add perimeter signage and you can increase that number by 10 to 100 fold. By comparison, take a farmer with 5000 acres of cotton with an average field size of 250 acres, he will post 20 signs, but each sign will cover three times as many acres as the small farmer. Also, in the case of perimeter postings, the larger the field, the fewer perimeter feet per acre equaling fewer signs per treated acre. It just begins to spiral into unbearable demands of time and manpower.

We rarely need to send in workers earlier than the labeled REI. Under such situations it is important to communicate with the workers that they understand the proper protections to take. There is no reason such communications must be in writing. The workers should be verbally informed about the restrictions and dangers posed by entry. Careful records should be kept of workers entering those areas in the event of adverse effects from exposure.

Application entry restricted area:

We currently have a policy of not applying pesticides with people in the immediate area of the application. There are times that it is necessary for a worker to be in the area. We have several fields with residential homes around them. We maintain a good working relationship with these people and inform them of the dangers of the pesticide we use. With that said, I feel that a no-entry zone for fields and forests is not possible like that of a contained structure like say a greenhouse. It is not practical for farmers or homeowners to force their yard into a no entry zone for an extended period of time. As for workers, it is important that they stay out of harms way during pesticide applications.

Hazard Communication:

We discuss proper PPE use and cleanup regularly with staff. We monitor their use of such equipment both visually and verbally to ensure their safety. We make every effort to provide adequate eye flush water and rinse water at mixing sites. The problem with many farms is that we have to be mobile. There may be one central shop or office, but for a farm to be productive the workers are rarely there and even fewer pesticides are used from there. Decontamination equipment such as soap, towels, and eye flush is kept in the mix wagon for applicators, but is not efficient or necessary to have an excessive amount of it or to mandate a shower system for every operation.

I feel a restriction on the amount of time handlers are allowed to work with OP and Carbamates is unnecessary. Following approved label PPE should adequately protect workers for these compounds. If that is not enough protections then the label should be altered so that it will. If there is a limit imposed we could run into a situation of having to delay pesticide applications that could reduce crop yields. On the same line, if a label establishes that an enclosed cab will replace a respirator then let it. If the enclosed cab is not adequate protection, then why were we allowed to use them in the first place? Such enclosed cabs should be maintained and routinely inspected with appropriate recordkeeping, just as respirators or any other piece of PPE should be. I firmly support safety, but there is no need to have duplication.

Requiring that MSDS be kept for all chemicals used will add many hours of time spent finding and printing sheets just to be placed in a file. You will have the added space necessary to keep the file. I would much rather have a database online where anyone could go at anytime to look up MSDS by chemical name. That way everyone will have them readily accessible without having to devote time and space to keeping up with them on every farm.

"Tyler Wegmeyer" <tylerw@fb.org>
10/09/2008 12:03 PM

To Caryn Muellerleile/DC/USEPA/US@EPA
cc
bcc
Subject RE: reminder: comments on EPA rules' small business impacts due Thurs 10/9

Caryn,
Please find my attached comments.
Thanks,
Tyler

Tyler Wegmeyer
American Farm Bureau Federation(r)
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202-406-3663
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-----Original Message-----
From: Muellerleile.Caryn@epamail.epa.gov
[mailto:Muellerleile.Caryn@epamail.epa.gov]
Sent: Tuesday, October 07, 2008 1:21 PM
To: cvh@centralvalleyheli.com; reedfly@aol.com; jhester@nicholsag.com; bilihun@spraytec.com; aaveritt@earthlink.net; dennisb@tvutel.com; cfemling@aol.com; elmst002@umn.edu; webbfarm@netzero.net; rmatoian@westernpistachio.org; dasherfarm@alltel.net; rmetzler@pearsonrealty.com; whjjr30@aol.com; Tyler Wegmeyer; richard@arbor-nomics.com; kcrenshaw@herbi-systems.com; lonniealonso@ColumbusPestControlinc.com; anne@royalpest.com; bruce@csipest.com; jackmarlowe@edenpest.com; mwright@woodpreservers.com
Cc: Hogue.Joe@epamail.epa.gov
Subject: reminder: comments on EPA rules' small business impacts due Thurs 10/9

Dear Small Entity Representative:

Thank you for your participation in the September 25 outreach meeting on Worker Protection Standards for Agricultural Pesticides & Certification of Pesticide Applicators. If you have not yet had the opportunity to do so, we are accepting written comments on impacts the potential rulemakings may have on your small business until close of business Thursday, October 9. We are happy to accept your written comments even if you were unable to participate in the teleconference meeting.

Please send your written comments to me and I will distribute them to all Panel members.

Caryn Muellerleile
Office of Policy, Economics, and Innovation
U.S. Environmental Protection Agency
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AFBF Comments_10-9-08.pdf

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October 9, 2008

Mr. Alexander Cristofaro
Small Business Advocacy Chair
1200 Pennsylvania Avenue, NW
MC 1806A
Washington, DC 20460

RE: U.S. EPA's Small Business Advocacy Review Panel Comments

Dear Mr. Cristofaro:

Thank you for the opportunity to provide comments to EPA's Small Business Advocacy Review (SBAR) Panel regarding future proposed rules on the Worker Protection Standard (WPS) for Agricultural Pesticides and Certification of Pesticide Applicators (CPA). As the nation's largest general farm and ranch organization, American Farm Bureau Federation (AFBF) represents individuals and families engaged in all aspects of production agriculture throughout the 50 States and Puerto Rico. We believe these comments are representative of the different regions and states across the country.

General:

1. Flexibility is critically important for this type of regulation, primarily due to the diversity of producers that will be affected. For instance, a 40-acre vegetable farm is considered quite large while a 200-acre row crop farm is considered small. The 40-acre vegetable farm might well have a full-time employee who did record- and bookkeeping, maintained permit records, etc. in an administrative capacity. The 200-acre row crop farm, by contrast, would most likely be operated either by a single producer, or as a family farm where the owner/operator would work another job off-farm; stringent record keeping in such circumstances is extremely stressful and time consuming and be inordinately burdensome for family members.
2. In order to be successful, "small entity" would need to be defined for each different type of farm or producer. It would need to be flexible. Based on the different types of operations involved, the number of employees would come closest to determining size of operations. Any regulation of farms with five (5) or fewer employees would be problematic for record keeping and implementation.

<u>Certification of Pesticide Applicators</u>

Adding Certification Categories for Commercial Applicators

Certification categories vary state by state. In Iowa, for example the M44 device and compound 1080 for controlling livestock predators have not been considered for use. If there were demand for these types of predator controls where they could be used safely it would be considered. We would hope that EPA's new rule would not require states to develop a category if they have no use for these controls at this time. A state should have the option and flexibility to decide whether they need to develop the category or not and if the need arises in the future then the state could move forward to develop the category according to EPA's guidelines.

In addition, requiring states to develop additional categories would be a "raising of the bar" with regard to curriculum and protocols. Growers are concerned that it would make it considerably more difficult to pass the tests, maintain the license and require substantial more time studying and training to get and maintain a license. This would also unnecessarily require more resources by state agencies to develop study guides and training by staff.

Applicator Minimum Age:

1. In some states there are minimum age requirements for the application of RUP's and in other states there is not. Proposed 16 or 18 minimum ages should not have an impact on commercial applicators. However, there could be an impact on private applicators in family farm operations. We think a person that is 16 should be allowed to be certified as a private applicator if needed.
2. The minimum age requirement would primarily affect family farms with sons or daughters who work on the farm. Most family farms trust their own children more than hired labor because they have been raised on the farm, been taught for years by their parents how to treat chemicals and equipment, and have a respect and sense of responsibility that hired labor might not possess.
3. The family farm that is required to replace a family member would face all the costs associated with hired labor or outsourced commercial applicators. Hired labor requires a salary, unemployment taxes and worker compensation taxes. There is also the cost associated with reliability and the assumption that a certified worker will show up when needed.

Applying RUP's under the Supervision of Certified Applicator

1. Many states do not require certification to apply RUPs as long as they are under the supervision of a certified applicator. Some states do require certification but allow a certain grace period under supervision before getting certified.
2. The number of non-certified applicators applying RUPs under supervision will vary based on the type and size of farm.
3. Requirements vary state by state by state, farm by farm. For example, for large row crop farms, the supervisor will generally be within five miles of the application site. For smaller farms, the supervisor would be much closer, anywhere from a couple of hundred yards to two (2) miles.
   Instant communication would be conducted by cell phone, two-way radio or other device. Estimated costs of providing communication devices would be in the hundreds of dollars per person.

In general, we have the following concerns: Requiring supervisors and applicators to have "instant" communication would put the applicator at risk of pesticide exposure when trying to use the cell phone, two-way radio, or other device. Decontaminating first would prevent the ability for it to be "instant". Also, carrying the label on their person during application does not increase their safety because they are not going to refer to the label during the actual application. They would look at the label pre- or post- application to prevent pesticide contamination.

Exam Administration for Commercial Applicators

Exams vary state by state. In Iowa for example, their law requires that both commercial applicators and private applicators pass a written exam for initial certification. Iowa's rules also permit an oral exam for private applicators on a case by case basis. All exams are proctored, closed book exams. An applicator is permitted to review a failed exam with the correct answers under supervision of an exam proctor. They require all persons taking exams to provide a photo ID.

We believe the states should continue to have the flexibility to decide what type of exam is required. Positive identification should be required.

Worker Protection Standard (Workers and handlers in plant agriculture)

Training

1. The two (2) day grace period is unacceptable. Many of the RUP's are pre-plant herbicides, and planting is the most crucial and time-sensitive period of year. Employee hiring, or start dates, are held off as long as possible to reduce input cost. If the grace period were reduced, or eliminated, it would require the earlier hiring of employees and increase input costs $100-$200 per hire.

2. The retraining frequency of every 5 years has been effective in worker safety while not being an unusual burden for agricultural employers. While most workers are trained every year because of turnover and consistency issues, we do not support the training interval being reduced.

3. Currently, most producers probably do not check for training history at the time of employment. It is important to remember that 1) farmers are not recruiting on college campuses 2) farming is hard work and labor turnover is substantial 3) most farm labor does not give two week notice when they leave; they just don't show up 4) labor is hired just-in-time, therefore the person you hire today was probably unemployed yesterday.

It is extremely difficult for farmers to find good labor in a timely manner and to get them the proper training as soon as they are hired. Flexibility is needed. Smaller farmers with fewer than 5 employees are tremendously busy as each person has tasks that need to be completed in a timely manner with no extra person around to fill in the gaps. Training requirements that cause a severe burden and that do not allow important tasks to be

completed before training is done impose unacceptable costs without identifiable benefits. We estimate that in general, training sessions for workers will require 30+ minutes and for handlers 45+ minutes.

Restricted Use Intervals (REI)
WPS warning signs are only needed when the pesticide label indicates that areas need to be posted as well as oral warning for workers. Some agricultural sites are posted in lieu of the oral warnings, as provided for on the pesticide labels. The requirement for both oral warnings and postings are specific to pesticide products that pose a threat to workers health. Workers are taught to read the label and the information on REI should be located there. If more information should be needed, the label could direct you to the WPS.

Central posting of information with either oral or written notice should work adequately. Farms post on a dry erase or chalk board at a central location which fields have been sprayed and when. This is a common sense approach that works well. Workers frequent the common area to get the required information. Additional requirements would be time consuming and costly, and it should be noted that the time that it takes to place signs by an employee is time lost to productive activity elsewhere, thus greatly increasing input cost to the farmer. It does not make any sense to require that each corner of the field be posted. Were that the case, it might serve just as well to rope off the entire field – an approach which is totally impractical.

It is very time consuming to put up signs. If you have the signs in the spray rig or tractor, a conservative estimate is that it would take 10 minutes per sign. You have to count the time from when the machine stops, until you are back in the seat. That includes attaching a stake, and hammering it into the ground. Again, 10 minutes per sign should be used as a conservative estimate. If the signs are not in the spray rig or tractor, but are put out by another supervisor or employee, it would take an estimated 30-45 minutes per sign. It is important to note that some large fields would take 45 minutes or more just to drive around without placing the signs. In the case of aerial applications, the time placing signs is an additional employee that could be productive elsewhere and greatly increases input cost.

Flexibility is essential to allow the farmer to do what makes the most sense in their operation to inform workers on REI without compromising worker safety. Smaller operations have central meeting places where all types of information exist. Having REI information at this central spot is adequate.

Application Entry Restricted Area
We are adamantly opposed to a requirement of a no-entry zone around fields. A no-entry zone would be completely arbitrary and not based on science. Smaller vegetable farms with small fields would be severely impacted. Not being able to be 100 feet from a field being sprayed would eliminate potentially being able to be in several adjacent fields. Significant economic loss from this could occur as a result of work stoppages and loss of labor. We do not believe that lack of such a requirement would jeopardize worker safety.

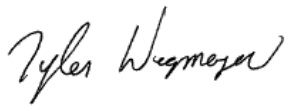
Hazard Communication
Pesticide labels have the correct PPE for handlers and early entry workers. No other document should be needed.

Decontamination
Flexibility is needed to address decontamination. Requiring a shower for handlers at every farm would be a financial burden for many agricultural employers and are simply not necessary. All farms using pesticides have flush water available. Portable decontamination showers cost between $5000 and $6000, plus water which would create an exceptional economic burden for many farms. A better requirement to protect workers and their family would be to require that workers remove early entry clothing including foot wear and do not take it home with them.

In summary, we oppose any curtailment of the safe and proper use of agricultural chemicals unless research and scientific data determine that injury to health and well-being would result. EPA contends that it is difficult to fully meet that standard under current regulations because there are gaps in protection resulting in unreasonable adverse health effects for workers and their families and gaps that allow potential for environmental damage. We do not concur with that assertion. Any new future requirements should allow state flexibility to address issues and concerns based on individual state data that pertain to their crop management systems. Federal rules should not be driven by regional needs or deficiencies in other state's programs.

AFBF appreciates the opportunity to submit these comments and looks forward to continuing discussions with EPA on all matters relating to WPS and CPA.

Sincerely,



Tyler Wegmeyer
Director
Congressional Relations

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"Morgan Wright" <MWright@woodpreservers.com>
10/07/2008 12:25 PM

To Caryn Muellerleile/DC/USEPA/US@EPA
cc
bcc
Subject Written Comments for Alexander Cristofaro in Reference to 09/25/08 Small Business Review Panel Meeting

Mr. Cristofaro,

I would like to submit the following written comments with respect to the Small Business Review Panel Meeting that was held via conference call on September 25, 2008.

1- I feel that wood preservatives are not within the scope of the agricultural worker protection standard (40CFR170), and therefore all of the issues related to 40CFR170 are not applicable to wood preservatives.

2- One issue being look at by this panel, that I feel is relevant to wood preservatives, is the certification of applicators of restricted use pesticides, rule (40CFR171). In developing a standard it would be nice to have the re-certification classes be based on subject matter that is relevant to the use of wood preservatives. In some states wood preservative applicators sit through classes that are geared toward the use of agriculture pesticides. The application of wood preservatives in a closed loop system has many differences from the application of agriculture pesticides in the field.

Thank you for the opportunity participate as a SER.

Morgan Wright
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