Office of INDIANA STATE CHEMIST AND SEED COMMISSIONER



Protecting Indiana's Agriculture and Environment - Feed, Fertilizer, Pesticide and Seed

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AUTHORIZED FOR SUBMISSION BY:

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The following comments are being provided by the Office of Indiana State Chemist (OISC). OISC is the state lead agency (SLA) for pesticides for the state of Indiana. Prior to making specific comments on the proposed federal applicator certification and training rule (the rule) itself, OISC believes it is important to provide some general background that should be helpful in establishing context for our comments. That background includes the following:

- 1) These comments have been developed as a joint effort by OISC staff responsible for pesticide program administration, program management, rule and policy development, program implementation, certification regulation compliance and enforcement, and OISC and Purdue University staff responsible for pesticide applicator outreach, education and competency measurement.
- 2) Each of the commenters referenced above has been working on the identified activities for at least 15 years. Several commenters were actively engaged in pesticide applicator education and certification during the period in which the original federal applicator certification and training rule requirements were first implemented.
- 3) OISC and Purdue University staff members have been extremely active in national association activities and committees and have been partners with USEPA and USDA in the development, implementation, and enforcement of pesticide regulatory programs for over 40 years. Specific to the proposed rule, OISC and Purdue University have been contributing participants in the Association of American Pesticide Control Officials (AAPCO), the Association of Structural Pesticide Control Regulatory Officials (ASPCRO), the American Association of Pesticide Safety Educators (AAPSE), the States FIFRA Research and Evaluation Group (SFIREG), and the Certification and Training Assessment Group (CTAG).

- 4) Indiana has codified and implemented most of the provisions being addressed in the proposed rule through the establishment of state rules. Development of these state rules is charged by Indiana Code to either OISC or the Indiana Pesticide Review Board (IPRB). The IPRB is the Governor appointed body charged with developing both rules and pesticide policy for Indiana. The board is composed of over 20 members representing pesticide users, the pesticide manufacturing and distributing industry, university researchers and scientists, related state agencies, the Cooperative Extension Service, and the public. Whether promulgation of the referenced applicator certification and training rules is charged to OISC or the IPRB, the development process for the rules and any rule revisions has been the same. That process has been open, public, and inclusive of all stakeholders, and one that has vetted carefully crafted rule drafts through the IPRB and its stakeholder committees over extended periods of time.
- 5) Indiana has been progressive in expanding, as demonstrated by need within the state, the scope of regulatory requirements and standards for both certified and non-certified applicators using pesticides, both restricted use pesticides (RUPs) and unclassified or general use pesticides (GUPs). For example, non-certified applicator competency requirements, including a requirement for passing a closed-book written examination, have evolved as needed over many years to address public safety and regulatory compliance issues. These rules originated with a "registered technician" requirement for non-certified termiticide applicators, expanded to commercial lawn care applicators, and eventually were extended to encompass all users of RUPs and commercial users of any pesticide. The point being, these rules were developed over the course of time, with careful consideration of need, value added elements for the public and the regulated industries, capabilities and resources necessary for implementation, maintenance, and compliance monitoring.
- (6) The rule and related conversations with USEPA staff to date have included the comment that this rule applies only to users of RUPs, therefore, the universe of impacts to regulated individuals as well as state regulatory and training should be considerably less than that of many existing state requirements. In practice, many current state rules apply to users of both RUPs and GUPs. While this may be true in theory, 40 years of first-hand experience in administering an applicator certification and licensing program have demonstrated to OISC that continual daily effort and considerable resources are required for effective program implementation. The complexities of creating the infrastructure and communicating the regulatory requirements for applicators and those that they are required to supervise is quite challenging for a one-tiered program. The idea that a two tiered program, one for RUP use and another for whatever the state may determine to be appropriate, is beyond our agency's resources and political capabilities. If modifying certain elements of the Indiana rules to comply with some of the more significant differences being proposed in this rule was to be required for approval of a "state plan", Indiana may be forced to relinquish

implementation of the federal program back to the USEPA.

The following comments are organized according to the Unit Numbers used in the proposed rule. For each section the Unit Number is provided along with a brief subtitle of the topic. Please note that OISC staff has been closely involved with the AAPCO work group charged with developing comments for submission by AAPCO. For each section listed below, it should be understood that OISC agrees with and supports the AAPCO position unless specifically noted or augmented otherwise. We urge EPA to review our comments carefully, since there are a number of issues for which the AAPCO positions and the Indiana positions will vary.

Unit VI.A: Private Applicator Competency.

The Environmental Protection Agency's (EPA) Executive Summary of this proposed rule states that EPA expects the proposed rule change would:

- Improve competency of private and commercial applicators and noncertified applicators using RUPs under their direct supervision.
- Provide more uniform competency among certified applicators across the nation, thereby assuring the effectiveness of restricted use registration as a risk management tool.
- Protect applicators, workers, the public, and the environment from unreasonable adverse effects from the use of RUPs.
- Ensure that applicators are competent to use high-risk application methods.
- Ensure applicator's ongoing competency to use RUPs.
- Protect children by establishing a minimum age for commercial, private, and noncertified applicators.
- Improve human health and environmental protection in Indian country.
- Clarify and streamline requirements for States, Tribes, and Federal agencies to administer their own certification programs (EPA, August 24, 2015, p. 51357).

Certification in the context of EPA's Executive Summary to this proposed rule, and throughout the document which it introduces, is understood as licensure, "...or requirements [that] are imposed by state and local governments to ensure that those licensed possess knowledge and skills in sufficient degree to perform important occupational activities safely and effectively (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999, p.156)."

Shimberg (1981, p.1) observed that, "The purpose of licensure is to protect the public health, safety, and welfare." Bulleted items three, six, seven, and eight above, clearly conform to Shimberg's (1981) universally-accepted claim. However, bullets one, two, four, and five invoke competency concerns without making any explicit connection to public and environmental protection. Use of the term 'competent' and its variants in this manner, in the absence of any reference to technical aspects of licensure testing, is the focus of OISC's comments on the proposed pesticide applicator rule change. Special attention is given to proposed revisions to 40 CFR 171 Subparts A and B, specifically:

- §171.3 Definitions
- §171.101 Commercial applicator certification categories
- §171.103 Standards for certification of commercial applicators
- §171.105 Standards for certification of private applicators
- §171.107 Standards for recertification of certified applicators

The Core and category standards referenced in the proposed rule (EPA, August 24, 2015, p. 51404-51409) are not strictly standards (i.e., performance expectations). They are, however, competencies (i.e., job knowledge and skill statements). Unfortunately, no indication is provided as to how they were determined to be necessary to the effective and safe performance of important job tasks. OISC recommends, pursuant to accepted test development practices, the following changes to §171.103 - Standards for certification of commercial applicators in the proposed rule:

- Properly reference standards as competencies
- Require states to adopt either federal Core and category competency statements regarding examination content *or those identified by a documented job analysis*.

OISC offers the same rationale and recommendations for proposed §171.105.

1) Should EPA consider adding or deleting proposed competency standards from the rule?

OISC recommends deleting the proposed competency standards for private applicators for several reasons. First, private applicators generally apply a limited number of pesticides to a static number of sites only a few times each year, as opposed to commercial applicators who deal with numerous pesticides on a wide variety of sites. The frequency and risk potential of pesticide exposure to private applicators and the environment are, therefore, much less than for commercial applicators. The private applicator training and competency is adequately met by current standards. Secondly, adding new competency standards for private applicators will result in OISC having to revise certification regulations. OISC is uncertain if the current political environment in the state would support those rule revisions.

2) Are the competencies necessary to protect pollinators adequately covered in the proposed standards?

Competencies or standards specifically for protection of pollinators should not be included as part of a federal rule that is likely to remain unchanged for a long period of time. The future and extent of EPA's pollinator protection efforts are unclear at this time. Inserting a static standard into a rule for the latest narrowly focused environmental protection issue seems like bad policy. Stipulating specific species, sites or situations that warrant special consideration as part of the private applicator competency standards is unwarranted and sets a troubling precedent. Competency standards for private applicators should be limited to basic concepts of understanding a pesticide label, knowing the difference between mandatory and advisory/informational label language, and what each specific section of a pesticide label means. In addition to the basic standards just referenced it should be left to the state certification plan to determine what the additional standards should include. Furthermore, because the proposed rule has no current definition of "competency", and specific to private applicators, because FIFRA prohibits EPA from mandating testing for competency, it is better left to the states to define it and decide how to measure and demonstrate it. Establishing competency standards for pollinators by federal rule when the EPA has not yet mandated protection should not be done. This and other narrowly focused issues should be addressed through clear, concise and enforceable label language. OISC believes strongly that periodically emerging and evolving issues such as pollinator protection are best addressed and custom made for a well-conceived and timely recertification or continuing education program. If a state already has a high functioning recertification program to accommodate such issues EPA should recognize and accommodate such a program rather than attempting to restructure certification standards and basic requirements.

3) Provide comment on the proposed structure of the non-exam option.

While OISC believes the mandatory non-test option required by FIFRA is inadequate to demonstrate competency of private applicators, we recognize this option is required by FIFRA. Therefore, OISC has no substantive changes or recommendations to make to this part of the proposed rule.

4) Would a different training requirement adequately convey the necessary information to private applicators?

OISC assumes that this question is targeted toward eliciting comments on the amount of time and content proposed for the private applicator certification program. OISC believes that both the proposed minimal time requirement and the training content are inappropriate for inclusion in a federal rule. Regarding the proposed Continuing Educational Unit (CEU) time of 6 CEUs for the core training and 3 CEUs for each category, OISC feels this is excessive, and must

point out our firm belief that Indiana private applicators are currently competent and adequately trained without this amount or type of training. In addition, OISC feels very strongly that the distinction between core and category training and CEUs is artificial and next to impossible to segregate fairly, equitably, and consistently. Our over thirty years of experience in reviewing CEU programs and assigning content and numeric evaluations have taught us that nearly all training could justifiably be categorized as either core or category if broken down into its basic components. Forcing certifying agencies to do so will create a subjective and unnecessary bureaucratic requirement. OISC is unconvinced of EPA's assertion that private applicators are inadequately trained and that expanding the mandatory number of training hours and scope of training information will result in any decrease in the number of human health or environmental impacts. OISC urges EPA not to assume private applicators (or anyone for that matter) will learn more just because the total time in a classroom is lengthened. In fact, 40 years of conducting and monitoring such training has demonstrated to OISC that applicators frequently lose interest and patience with applicator training after two or three hours. It would be better to improve the quality of the training offered over the amount time spent on delivery. OISC notes there did not appear to be any evidence in the proposed rule of actual examples of state applicator certification programs producing incompetent private applicators. This then begs the question: Where is the problem that this solution is meant to fix? OISC is also concerned whether EPA believes hard working, dedicated professional educators in numerous land grant universities are failing to properly educate private applicators, since that is who conducts the majority of the training for private applicators.

5) Is it necessary for EPA to specify a minimum length of time for the training program?

The minimum time period for training should not be included in the final rule. Instead the rule should stipulate that state certification plans be the determining authority for establishing training content and time. Arbitrary universal training times are impossible to establish and defend without first knowing precisely what specific training content is to be conveyed to the trainee. Based on Indiana's experience, training content can only be reasonably established by a careful practitioner job analysis or a detailed and objective study of the needs of the trainees and the program. Identifying the correct needs on a nationwide basis is very difficult to do.

Unit VI.C: Eliminate the Non-Reader Option.

1) Would the elimination of the non-reader provision cause hardship to specific groups of private applicators?

OISC believes eliminating the non-reader provision would cause limited hardship to the Indiana applicator certification program, however, it is believed that there is a percentage of the population of pesticide applicators who are English language illiterate and are employed to apply English labeled RUPs. OISC is concerned about how we will verify the literacy of non-English speaking applicators. In addition, OISC believes that asking a certification candidate to demonstrate reading proficiency does, in fact, amount to an examination, and if this is a requirement for private applicators, EPA may be mandating a requirement specifically prohibited by FIFRA. OISC also refers EPA to the CTAG policy paper on applicator reading ability as a useful reference document in how to approach reading proficiency.

2) Should EPA allow private applicators currently certified under the non-reader provision to retain their certification if the non-reader provision was eliminated ("grandfathering in")?

OISC has no comments regarding grandfathering currently certified applicators, except to note that adequate records may no longer exist for how a currently certified private applicator may have originally achieved that certification at some point in the past. Determining who all may need to meet a new or different standard may not be possible.

Units VII and VIII: Private and Commercial Applicator Method-Specific Categories (soil fumigation, non-soil fumigation, aerial).

The proposed separation of "(a) Pest control certification categories" from "(b) Application method-specific certification categories (EPA, August 24, 2015, p. 51403)" amounts to an arbitrary distinction. In the absence of a definition of category (in either the current rule or its proposed revision), OISC draws the inference that each category referenced in (a) amounts to an occupational group (i.e., consisting of similar jobs across a variety of settings). However, while the application method-specific categories in (b) might be method-specific, one is also site-specific, two are formulation-specific (and describe an occupational group—fumigation), while another is equipment-specific (and also describes an occupation—aerial application).

Further, the application method-specific categories identified in (b) present another problem in that they illustrate how any category (a) can be parsed in any number of ways; by application method, formulation use, equipment type, or application setting. For example, turf and ornamental pest management is readily subdivided into lawn care pest management, golf course pest management, athletic fields pest management, parks and recreational areas pest management, landscape pest management, etc. Parsing categories ultimately raises two questions, "(1) Are there any corresponding benefits in terms of public protection and (2) are there any limitations on efficiencies in licensure test construction?"

The Standards for Educational and Psychological Testing provides direction to licensing agencies faced with exam development where practitioners may work in a variety of settings (e.g., fumigation performed in agricultural fields vs. grain bins vs. private and commercial structures vs. transport vehicles), "If the same examination is used in the licensure or certification of people employed in a variety of settings and specialties, a number of different job settings may need to be analyzed (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999, Standard 14.14, p. 161)." Clearly, a single licensure examination can perform its intended function across an entire occupational group, if a group of job holders representative of the variety of settings are included in the job analysis.

There is an obvious need for the addition of two federal categories, fumigation and aerial application, for purposes of public protection, but in a manner that does not burden state licensing agencies with unnecessary exam development activities by focusing unwarranted attention on occupational settings. OISC recommends striking a balance in §171.101 – Commercial applicator certification categories in the proposed rule by:

- Deleting (b) Application method-specific certification categories
- Adding to (a) a fumigation category without further subdivision
- Adding to (a) an aerial application category
 - 1) Would the proposed categories adequately establish competency for the specified application methods?

No. OISC already includes many, but not all, of these categories for commercial applicators and private applicators. For example, we do not break applicator categories for fumigation out into general fumigation and soil fumigation. Justification for one fumigation certification category has been provided in other portions of these comments. In addition, OISC is not convinced that EPA's approach to certification of aerial application is the best method to address EPA's expressed concerns. It should be noted that aerial applicators are already working in a sector of the industry that is heavily regulated. While the method of delivery of an aerially applied pesticide might be unique, the pesticides applied and the target sites are similar to those of ground-based applicators. Creating a requirement that mandates aerial applicators obtain primary certification in every area of competency in which they might apply a pesticide would result in an unwarranted over-regulation of that sector. OISC recommends EPA identify aerial application as a stand-alone category that places a strong emphasis on label compliance and not identify aerial application as a method-specific category that is secondary to multiple target sites. To do so would require some aerial applicators to obtain certification in four, five or six different categories, which in turn expands their training requirements dramatically. Additionally, there will inevitably be a significant amount of content overlap between different categories, resulting in needless and frustrating overlap of standards and training for aerial

applicators. OISC recommends that EPA comply with the direction already established through the EPA-funded job analysis and exam blueprint for aerial applicators. Those documentable and defensible activities established that aerial application is in fact an application "job" category in and of itself without a strong link or relationship to all of the skills and tasks associated with numerous other categories such as agriculture, right-of-way, forestry, and public health pest control.

2) Should EPA consider adding or deleting any of the proposed private applicator application method-specific certification categories?

OISC recommends deleting the split of the general fumigation and soil fumigation categories. A careful review of the proposed standards for those "separate" categories reflects that 80% of those standards will be identical. Any separate categories with such a high degree of similarity should be considered for consolidation.

3) Provide feedback on whether EPA has proposed sufficient detail on private applicator application method-specific categories.

Adequate detail has been provided by EPA, but adequate justification has not. See OISC comments on multiple fumigation categories.

4) Should EPA consider adding or deleting any of the proposed commercial applicator application method-specific certification categories?

EPA should delete all references to method-specific certification categories. Most states, including Indiana, have already established categories as needed. For example, Indiana already has a stand-alone fumigation category and an aerial application category that fit the needs and job tasks for Indiana applicators quite adequately. EPA splitting categories out differently and assigning them to a new class of category labeled "method-specific certification" makes no practical sense for a well-functioning program. In addition, EPA should make it abundantly clear in the final rule that if a state or certification jurisdiction has no practical use for any of the federal categories, i.e. no predator pest control is conducted, then that state plan would not be required to address or include such a category.

5) Should EPA require that commercial applicators be certified in one or more pest control categories in order to be certified in one of the application method-specific certification categories? If so, specify which categories should be prerequisites for which sub-categories.

OISC is opposed to the approach EPA has proposed for application methodspecific categories. In practice, OISC has used two basic methods of classifying pesticide applicators; by the type of work they do, or the type of pesticide or method of application they use. The use of each of these approaches has been based on the needs of our established regulated applicators and industries. It is a mistake for EPA to force states to change effective certification programs just for the sake of national consistency. The proposed rule would result in many applicators who are already well trained and competent to add more categories to their certification, attend more training meetings, spend more time traveling, taking more time away from work or home, and all for very little added value. OISC is opposed to making any category a pre-requisite to other method-specific categories. Again, EPA is reminded that the EPA-funded job analysis activities already conducted for aerial applicators and soil fumigators have concluded that these are jobs or categories in and of themselves. Creating additional requirements or requiring 'stacking' of categories adds little if any value to the standards.

6) Should EPA consider adding any commercial categories?

OISC agrees with EPA's proposed rule assessment that indicates there are no plans to pursue chemigation as a category and recommends EPA not reconsider this position. In addition, OISC recommends that states be allowed to delete from their state plans any categories that are not utilized in their state.

7) What are the factors EPA should take into account to allow for a limited-use category for commercial applicators?

OISC recommends EPA give serious consideration to providing for creation of limited use categories in their state plans, as needed or dictated by local conditions. Our long and active certification administration experience has taught us that there is a place for niche categories that cannot always be anticipated during the category and standard setting process. Each state has a unique set of circumstances that are best met by allowing states the greatest degree of flexibility in their certification programs. For this reason, OISC believes allowing states to certify applicators in a limited-use category that is further identified by the state certification plan and appropriate training is provided is an appropriate delegation of authority to the states.

8) Provide any relevant information on how the regulation could best balance flexibility and uniformity of the certification categories used in different jurisdictions?

It is unclear to OISC what the purpose of this question may be. However, if the intent is to explore options for standardizing categories between certification jurisdictions for purposes of facilitating reciprocity between those jurisdictions, OISC has no constructive recommendations. OISC believes that many existing state certification categories are so well established at this point that any attempts at retroactive standardization would be an abject failure. Most state categories

have evolved and changed with time for specific reasons, based on local needs and conditions. Trying to overhaul those categories for purpose of reciprocity would meet with considerable opposition from SLAs as well as many members of the regulated industries. In addition, there would be very few value-added reasons for an SLA to engage in a reciprocity process if the state does not do so now.

9) Does the Ag Animal category adequately cover treating bee hives with RUPs?

The concept of lumping bees into a classification as animals for the purpose of applicator certification makes no common sense. EPA should not lump bee hives into animal agriculture, since there is no known training offered in that category that applies to bees, bee hives, or bee keepers. The only RUPs that might potentially be applied to empty bee hives are fumigants, which also have nothing to do with Ag Animal pest control and would be more appropriately classified in fumigation. EPA needs to remove any reference of a category encompassing bee hives in the proposed or final rule. If anything pest control in bee hives is so specific, it would be custom made for a Limited-use certification category.

10) What were the impacts of EPA's decision to make all soil fumigants RUPs and require certification for applicators?

EPA should have a significant body of comments gathered during and after the reregistration eligibility decision process as well as input from AAPCO/SFIREG and AAPSE during both Phases 1 and 2 of the relabeling effort. To summarize those impacts, states were and still are seriously challenged to monitor soil fumigation compliance, provide training and certification services and response to alleged misapplications of soil fumigants. Industry was seriously affected by the overwhelming number of new requirements that effectively hampered operations in higher risk areas. It could be argued that further revision to fumigant labels will have the same impact, but at what cost? What added value or reduced risk will EPA realize by adding new burdens to certification programs that already are unable to keep up with the new requirements?

When discussing alternative options considered by EPA but not proposed, EPA cited four references in the proposed rule (reference numbers 46, 47, 48 and 49) when stating "The Agency learned that applicators, States, and cooperative extension service programs did not support this approach and faced significant burdens when this approach was used to regulate soil fumigants." In review of these references (two were AAPCO/SFIREG letters, two were AAPSE letters), it is possible that EPA misunderstood the intent and focus of the letters. The AAPCO/SFIREG letters were written to address serious concerns state lead agencies had about the implementation timeline to accomplish a significant amount of work, as all soil fumigant labels would require additional training of applicators. The two AAPSE letters to EPA expressed concerns about mandating industry training that would usurp university training programs. Neither AAPSE

letter expressly spoke to concerns about adding risk-reduction language to soil fumigant labels as a way of improving applicator compliance. Because of this, the OISC feels method-specific risk reduction efforts are more appropriate in label language and not as an expansion of state certification programs.

11) Would states encounter additional changes or regulatory burdens if EPA includes soil fumigation as a method-specific category?

Yes, many states would be required to revise state laws and regulations, mostly for private applicators. Some states have a broadly inclusive commercial fumigation category that includes both soil and structural fumigations, therefore those states would have to create new categories and require applicators to either add or drop the certification they currently have. Many states that see few private applicator fumigations have no method-specific categories, and those states would either need to add these to the private certification program, or prohibit private application of fumigants entirely. In any scenario, states would be faced with statutory or regulation revisions to accommodate a rule that has questionable added value or risk reduction that has not been measured at this point. In addition, recent EPA activities relative to the training and approval of soil fumigation applicators have involved EPA's Registration and Re-evaluation Divisions rather than the Field and External Affairs Division, who have been historically responsible for establishing and ensuring applicator standards. It is unclear to OISC how these multiple standard setting divisions within EPA will be coordinated relative to this proposed rule.

12) Please provide an analysis of the costs incurred by the state for implementation of the soil fumigation certification labeling requirements

OISC is unaware of any state that has actually captured data relating to the cost of implementing the soil fumigation label revisions.

13) Provide comments on the use of 1080 collars and M-44 capsules in the state and what adding those pesticides as single categories would result in burden to the state.

The use of 1080 livestock collars and M-44 capsules is limited to those states with predator control issues. Indiana is not currently one of those states. It is a small subset of states, and is currently well regulated under existing labeling and rules. To further require states to create product-specific categories is an unnecessary exercise to those states that have no practical use for that category. Of concern to OISC is whether this proposal represents a mandate for states to add these product-specific categories to state certification plans where there is no use of the products. EPA should not mandate categories by product just because the products carry a high risk, when there is no data to support that decision (i.e. no

documented evidence of human health or environmental impacts since labels were last revised to provide for additional risk mitigation.

Unit IX: Exam and Training Security.

1) Should EPA consider an exception for requiring government-issued ID? If so, under what circumstances and what options are available?

EPA should consider as many options as possible for credible applicator identification, given the many different forms of personal identification that are currently available and reliably trustworthy. EPA must be very careful to take into consideration the cultural and religious aspects of applicators who might not be allowed to have their image taken or shown, as well as those who may not be able to drive, therefore, preventing them from securing a valid driver's license.

OISC recommends including in the rule a provision such as, "persons who object to photographs, based on religious reasons, may present a government-issued ID without a photograph or present the same documentation that is required by the state to obtain a photo-exempt personal ID."

2) Are there other options for training and testing security that should be considered?

OISC strongly encourages EPA to consider requiring valid personal identification for anyone involved in initial testing but allowing states the option of making the personal identification process mandatory for recertification. OISC considered such a requirement when we last codified our applicator recertification rule. However, OISC's over thirty years of experience conducting and monitoring a recertification program taught us that the incidence of violation of the process were quite rare. In addition, the considerable added burden and disruption to the recertification training process, particularly large recertification training programs, did support this as a truly value-added requirement. OISC also encourages EPA to find language that allows for future avenues of initial certification and recertification training so that it includes electronic identification methods not currently widely used or considered by states.

Unit X.A: Non-Certified Applicator Competence.

1) Should EPA allow states to adopt different non-certified applicator training standards than what EPA has proposed?

There are many approaches to how states address non-certified applicators and their training. Some states have very specific rules on how long non-certified applicators may operate without certification, how much training they must receive, how frequently that training is given, and how the training is documented. There are also states that prohibit any application of RUPs by non-certified applicators. In consideration of these already well established and

variable standards EPA should make no rules regarding mandatory national standards for training non-certified applicators. In addition, the proposed rule uses the phrase "recertifying non-certified applicators". This terminology is unnecessarily confusing, since logic would hold an uncertified person cannot be recertified.

2) Should EPA require non-certified applicators to receive training on pollinator protection?

OISC recognizes the importance of creating an appreciation of protecting pollinators. However, many pesticide users, not just RUP users could benefit from such information, but OISC is deeply concerned that incorporating a very specific "issue of the day" into a relatively static rule is a mistake. It begs the question how EPA would propose to incorporate future "hot topics" into the required applicator standards. In addition, OISC believes that many applicator groups do not apply pesticides that impact pollinators (i.e.: termiticides, non-soil fumigants, algaecides, sewer treatments, etc.). Therefore, OISC urges EPA to not mandate pollinator protection for any category, but instead allow states to determine how and where to incorporate it into their state plans. As stated previously, OISC believes strongly that these emerging and evolving "hot topics" are tailor made for a well-conceived applicator continuing education program. States that have such programs should be allowed to continue to implement them rather than be forced to adjust or re-create other parts of their certification programs.

3) Should EPA consider a single recertification training period for all non-certified applicators, rather than the 1-year for training and 3-year for core testing?

OISC believes it should be left to the states to determine how and when a non-certified applicator is to be trained or tested. OISC is also opposed to mandating a national standard of three years for non-certified applicators, and allow states to determine what is appropriate as currently specified in state law or regulation. OISC references the extensive research and effort already expended by Indiana to determine well established state standards for Indiana non-certified applicators. Specifically, OISC is committed to the belief that non-certified applicators who qualify to use pesticides by passing a written examination should be afforded the opportunity to maintain that qualification, just as certified applicators are, by accumulating an appropriate number of CEUs over the same certification period/cycle established for certified applicators. Why would EPA not want the non-certified applicator to have the opportunity to increase the depth and breadth of their knowledge by attending continuing education activities rather than being restricted to the same repetitive 'core' information year after year?

Unit X.B: Non-Certified Applicator Competence.

- 1) EPA determined in the proposed rule that an allowance for on-site supervision of non-certified applicators was not a feasible option, when many states already allow or require such an option. By contrast, OISC is of the opinion that on-site supervision is the most responsible and enforceable option. OISC requests that EPA reconsider their position in the proposed rule and allow this option as an acceptable method of ensuring non-certified applicators apply pesticides correctly. This option would allow illiterate applicators to operate safely, which in turn would provide a favorable alternative for EPA's proposal to eliminate the non-reader option. OISC believes that EPA should give serious consideration to including a 'line-of-site', 'within site', or 'on-site' supervision option in the final rule. In practice, closely supervised on-site training and observation is usually the most effective training that a brand new employee can receive. Forcing an unexperienced non-certified individual to immediately sit through a scripted training regimen for which he/she may have no context seems like an exercise with minimal added value. Such provisions for supervision and training new applicators should be encouraged rather than prohibited by rule.
- 2) OISC believes the proposed trainer qualifications provisions are unnecessarily confusing, and appear to be nothing more than attempt to establish a supervisor training standard similar to that already required for the Worker Protection Standard, with little if any value-added component.

Unit X.C: Non-Certified Applicator Competency.

1) Would non-certified applicators and their supervisors rely on cell phones rather than two-way radios as a means to establish immediate communication?

The type of communication devices applicators use varies widely, and is dependent on the cost and coverage of the devices. EPA should not specify any specific communication technology, but allow for future technologies that allow immediate "two-way communication in real time" rather than limit it to voice contact.

2) Should EPA consider other qualifications for supervising applicators?

EPA should require supervising applicators to be certified in the same category as the type of work the non-certified applicator is conducting and be directly responsibility for the actions of the non-certified applicator.

3) Should EPA require certified applicators to be within a certain distance or time of the non-certified applicator?

No. Distances and times from the certified supervisor to the non-certified applicator pesticide use site are going to be highly variable depending on such factors as the type of application, product being applied, industry operating procedures, geographic locations, etc. Likewise, the need for a certified applicator

to make an appearance at the use site are going to be impacted by the same variables and more. On several different occasions during the last thirty years OISC attempted to address this very issue in state rule making. However, in spite of repeated attempts, Indiana was unsuccessful in identifying the right blend of time, distance, and demonstrated need for such a regulatory requirement. Generalized guidance was the best solution at which we were able to arrive. OISC contends that EPA will be no more successful in identifying times or distances federally than we were as a state.

4) Should EPA limit the number of non-certified applicators a single certified applicator can supervise?

OISC recognizes the importance of limiting the number of non-certified applicators any one supervisor can supervise; however, we do not have substantive data of what an appropriate number might be. Almost ten years ago, Indiana arbitrarily included into rule a limit of 10 non-certified applicators to be supervised by a certified applicator. This regulatory requirement has proven to be very difficult to track and enforce, even in consideration of the fact that all non-certified applicators in Indiana are required to hold a credential issued by OISC. It seemed like a good idea, but we have not been able to point to any tangible benefits derived from the requirement. Therefore, OISC recommends EPA not set an arbitrary number of non-certified applicators to any given supervisor, but allow for states to set that number based on each state's laws, regulations, and demonstrated need.

Unit XI: Expand Commercial Applicator Recordkeeping to Include Noncertified Applicator Training.

1) Should EPA require certified supervising applicators to keep records of noncertified applicator training and why?

OISC recognizes the value in training non-certified applicators, however, due to the wide range of training required in states, there is also a similar wide range in how that training is recorded and reported or made available to the state regulatory agency. OISC recommends that record keeping of non-certified applicator training be required but not stipulate what those records must contain beyond the name of the trainee and date of the training. It should be left to the state's compliance and enforcement program to determine if training was appropriate, and compliant with state and federal requirements.

2) Should EPA require a copy of the training record be provided to the non-certified applicator and any subsequent certified applicators supervising the non-certified applicator?

OISC believes training records should be made available to the state or federal agency and the person receiving the training. OISC is opposed to any requirement

in federal regulation that places a burden on the trainer or employer to provide those records to anyone outside of the immediate hierarchy of the trainer's employer. The records should be considered confidential employee records and not something that becomes a right of a future employer to demand from a previous employer.

Units XII and XIII: Establish a Minimum Age for Certified and Non-Certified Applicators.

1) What would be the impacts to the state if the mandatory minimum age was set at 18?

Currently states have a wide variety of minimum age requirements for applicators, with some states having no minimum age and others, ranging from 14 to 18 years old. OISC would prefer EPA not promulgate rules regarding any mandatory minimum age, since any state that would have to change their current laws or regulations would face a an anticipated negative acceptance by state elected officials and advocacy groups. Specific to the question, OISC believes the impacts to the states would include: 1) a number would amend state laws and regulations to match the federal standard; 2) others would be unable to do so due to current or future political considerations in state legislatures.

2) Are there additional benefits or burdens associated with establishing a minimum age that EPA has not considered?

OISC believes EPA's assessment in the proposed rule has taken into consideration many of the aspects of setting a national minimum age but recommends EPA reconsider this proposal by offering an option if establishing a minimum age for pesticide users. OISC recommends requiring non-certified applicators under the age of 18 wishing to use pesticides to first pass an exam demonstrating their understanding of the inherent risks of applying pesticides. In this regard, young applicators could demonstrate some level of competency they may not already be required to demonstrate. This then would eliminate the concerns raised in question 3 below.

3) Would this proposal have an impact on training programs for adolescents (such as FFA or 4-H)?

While OISC has no direct involvement in youth education programs, we do wish to support those efforts as a mechanism to provide training of the next generation of applicators. OISC believes setting a minimum age of 18 with no option for inclusion would unnecessarily hamper those effective training and education programs.

4) Is there a need for an exemption from the minimum age requirement for immediate family members of farmers?

OISC believes if EPA decides not to allow for states to set their minimum age standards that they allow for an exemption of the minimum age for immediate family members of farmers.

Unit XIV.A: Establish a National Certification Period and Standards for Recertification.

1) Should EPA consider a different maximum recertification period? If so, what period and why?

Yes, EPA should consider a maximum recertification period as long as the longest period currently recognized by any state, tribe, or territory. There are two primary reasons EPA must consider a period longer than a three-year recertification cycle/period. The first is that EPA has provided no logical justification for a three year period. Even if the majority of regulating entities currently recognize a three year period, EPA has not provided the justification that those entities utilized to arrive at the three year period. If ensuring applicator retention of information and competence is the logic, why not make the period one year instead of three? Better yet, why not make the period six months? OISC agrees that the recertification period should not be unlimited, but the point being that without scientifically supported justification, arbitrarily selecting a three year maximum could be terribly disruptive to some very well-established and currently effective certification/recertification programs. This brings us to the second reason. Mandating a three year recertification cycle will require Indiana to change regulations, policies, computer programming and applicator databases, websites (many of which are under contract), revenue and billing cycles, and internal administration and management structures. All of these changes will require both significant personnel and financial resources. In addition, regulation changes are not completely within the realm of items that OISC can ensure will occur. Stakeholders and state officials outside of the agency will play a role in any rule revisions. Over thirty years ago, Indiana switched, by rule, from a three year recertification period to a five year period. This rule revision was based primarily on the realization that both OISC and the regulated industries were spending more energy and resources on recertification accounting, recordkeeping, and compliance than we were on achieving quality recertification standards. So after considerable deliberation and input from all stakeholders the period was stretched out to five years. In conclusion, we consider Indiana applicators as competent and well-trained as any applicators in the nation.

To provide additional detail to the previously stated reasons for other than a three year mandated period, for those states with recertification periods longer than three years, changing to a maximum 3-year cycle will effectively increase the number of applicators the state agency has to handle in a single year's time (i.e. if a state certified 30,000 people in a 5-year period of time, the new rule would

require the same number of people be recertified in a 3-year period of time). This then puts a significant additional stress on the certification agency and the university training program to accomplish the same amount of work in three years they previously had four or five years to accomplish.

OISC is emphatic that it will not be practical to administer parallel certification programs; one for RUP applicators and another for all other applicators. The proposed rule would require OISC to implement the federal standards for all statespecific categories. Other than agricultural applicators and fumigators, most applicator categories use very few, if any RUPs. However, based on extremely minimal or even potential RUP use, Indiana applicators would be required to comply with often inappropriate federal standards. There is really very little value added by such a requirement for many categories of applicators. This possibility of a dual set of standards was not considered in the economic assessment in the proposed rule, and it is without question under-estimating the total number of applicators for which OISC must account. OISC has a number of state-specified categories, developed over time to address known competency and public safety issues. OISC will be hard pressed to choose between maintaining those categories due to the added burden, or eliminate them and force applicators into categories that might not apply to the kind of specialized work they perform. Again, such a mandated federal requirement would actually be forcing the Indiana program in a less protective direction.

OISC is very concerned about what appears to be a lack of guidance on how states are to determine what training constitutes core training and what constitutes category training (for purposes of continuing education credits). Related to this concern is how states are to determine when or if training in one category or core is also allowed for credit in another category. If states were able to accept a single training event to count toward both core and category, or toward multiple categories, it would make meeting the federal standard much easier. Our many years of experience have taught us that there are many overlaps in different applicator training programs and activities. Those overlaps include similar personal protective equipment, similar sites of application, similar application equipment, similar label language, and similar pests. OISC contends it is both logical and realistic to allow states to decide which training events count toward more than one category or core competency.

Unit XIV.B: Recertification Requirements (CEU Program).

The origins of the proposed certified applicator recertification terms, by continuing education credit, are at best unclear. OISC assumes that they amount to a regulatory decision based on a rough average of current state recertification practices. There are, admittedly, few articles in the refereed credentialing literature to guide decision-making about the proper length of recertification terms (or minimum numbers of continuing education credit hours per year). However, the issue has been addressed in the context of pesticide applicator certification (Martin, Reed, Whitford, & Becovitz, 2009). Their

article makes clear that establishing a rationally-determined recertification program amounts to equal parts measurement process and democratic negotiation with the regulated community. Further, a one-size-fits-all approach to minimum numbers of continuing education credit hours per year per applicator category is inappropriate. A rationally-determined minimum numbers of continuing education credit hours per year per applicator category is expected to vary depending on job-related factors including application frequency, application variety, application complexity, potential threats to people and the environment, and potential for technological change.

OISC recommends that §171.107 - Standards for recertification of certified applicators in the proposed rule reflect what our own scholarship actually informs the pesticide applicator licensing community about recertification by continuing education credits:

- Establish a maximum five-year recertification cycle to serve as a baseline for state programs.
- Establish a minimum number of continuing education credits per year per category based on available, published empirical data (see Martin, Reed, Whitford, & Becovitz, 2009)
 - 1) Is the proposed number of recertification CEUs too low or too high?

The primary variables that must be considered when determining the appropriate recertification/CEU standard include: 1) the complexity and personal risk of the category that stipulates both the amount and type of education needed to adequately train the applicator; 2) the available training material for any category, since some categories have a limited amount of training material available; 3) the ability of the applicator to retain information over time; and 4) the ability of the state lead agency and state education institution (typically a land grant university) to administer the educational program.

The number of hours EPA has proposed in the rule is inappropriate, and appears to be more arbitrary than based on a clear understanding of the variables listed above. Specific to the question, the proposed CEU hours are both too high and possibly too low, based on the category in question. OISC believes establishing a CEU program as proposed will force the majority of states to either revise their current CEU tracking programs, or create new ones all together. OISC will be required to do this. This is not something that appears to have been taking into account in the economic assessment in the proposed rule. OISC will face software and hardware costs in the \$80,000-\$100,000 range. OISC recognizes the perceived advantages a consistent nationwide standard might provide, which is primarily more consistency for reciprocity between states; however, those advantages do not outweigh the added resource and financial burden to state lead agencies and universities, when carefully considering the available resources that are in place to administer such a broadly expanded program. EPA has indicated the only added funding that will be available to states is through two national cooperative agreements, and then only for those categories that are similar across the county. This means specialty or niche categories, or those that vary in nature

geographically, will not likely benefit from federal funding. It also means the funding to pay for state tracking programs would likely come from applicator certification fees. It is our opinion that the Indiana Legislatures is not currently interested in adding more fees or taxes to the general population or our regulated industries just to modify a regulatory program that already operates and works quite well. The categories that will not be accommodated by EPA's cooperative agreements are the precise categories that should not be boxed into a minimum number of CEUs to obtain recertification, since they will have to be customized by the state using whatever state resources that can be created or found. OISC strongly urges EPA to reconsider setting mandatory credit hour standards of 6 CEUs for the core and 6 CEUs for all categories, and instead allow states to make this determination based on their current state laws and regulations. OISC does not know how to state our position more emphatically. Please try to consider if there is a true value-added component for the Indiana program.

2) Is EPA's proposal to require that applicators earn a minimum of one-half of the required CEUs during the 18-month period preceding the expiration date of the certification clear?

OISC wishes to express to EPA, in the strongest way possible, that mandating a minimum of 50 percent of the total required CEUs be obtained in the last 18 months of the certification cycle is not reasonable or acceptable by OISC, Purdue University Cooperative Extension Service, or applicator groups. This proposal discredits the intelligence of professional applicators, that should be considered similar to other professional practitioners. Commercial applicators demonstrate and refine their competency every time they make a pesticide application, whether or not the pesticide is an RUP. To believe a professional applicator forgets these core competencies in 18 months is a rather myopic perspective, and appears to demonstrate a lack of understanding of the pesticide applicator industry. In addition, Indiana attempted to implement a similar requirement in the past, and it developed into an accounting nightmare. Again competency of the applicator became less the focus, but complying with numbers of CEUs within specified time periods became the focus. OISC feels this is definitely counterproductive. In addition, OISC must point out that merely requiring a minimum number of CEUs for core and category training by rule doesn't mean that training will be available in reasonably accessible parts of the state and at times when it can be attended by most Indiana applicators. It is already difficult for many applicators to find appropriate training opportunities for their specific recertification needs. Mandating a certain number of CEUs be earned in three or less years, with at least 50% of those CEUs earned in the 18 month period before the recertification cycle ends, places a significant burden on applicators to find the time and appropriate training opportunities. This provision also gives the appearance of EPA attempting to micromanage a variable and complex mix of certification/recertification programs for the entire nation. This level of management of administrative detail on a national scale would prove to be very

challenging for EPA in consideration of the fact that so many state programs are already so well established relative to such detail.

OISC strongly urges EPA to eliminate any and all language that would mandate any percentage of CEUs be acquired by an applicator in any shorter time period than the maximum allowed by the state for recertification.

3) Should EPA reconsider the proposal to require that applicators earn a minimum of one-half of the required CEUs during the 18-month period preceding the expiration date?

Yes, absolutely. See response above.

4) Should EPA consider a different time period for applicator recertification?

OISC believes EPA most definitely needs to reconsider the proposed three year maximum recertification period. Given the number of states that have recertification programs other than three year cycles, it is evident that this proposal, which OISC believes is not based in sound logic, would be directly responsible for forcing a majority of states with excellent certification programs to change both state laws and regulations for no other reason than to create a national standard. OISC believes states should be allowed to qualify and operate under an equivalency option program that demonstrates the state meets the minimum educational and competency standards appropriate for their state. OISC also feels strongly that such an equivalency measurement process should be operated by a consistent and focused group of professionals rather than farmed out to EPA Regional offices to try to implement as best as they can. It should be noted that OISC's extensive experience in developing and implementing a certification and training program under EPA Regional oversight through our pesticide cooperative agreement suggests very clearly that certification and training expertise rests primarily in the state, not in the EPA Region.

5) Should EPA require commercial and private applicators to have the same recertification requirements for category recertification?

Requiring private and commercial applicators to have the same recertification standards is not fair, practical, or logical. Private applicators essentially work in the same fields/sites and in the same structures/sites on a repeated basis, and therefore don't need as much special training as commercial applicators that face new situations and sites almost every time they make an application. In addition, private applicators may need to make pesticide applications to these limited sites only a few times each year rather than multiple different sites on a more year-round basis, as commercial applicators do. Due to the limited number of application sites, application methods and pesticides used by private applicators, CEU requirements should be less for this applicator group, as compared to commercial applicators.

6) Should EPA do more to harmonize requirements for recertification to further facilitate reciprocity?

OISC urges EPA to not promulgate rules that mandate reciprocal certification standards, nor establish any rule that encourages states to do so. States that do not offer reciprocity now are unlikely to do so with or without a federal rule change. It is a state's prerogative or legal state mandate whether they choose to reciprocate with another certification credentialing entity. OISC has been pressing many states for many years to enter into either formal or informal reciprocal certification agreements with our agency. Our experience has been that some state laws prohibit reciprocity or that there are long-standing state-specific standard differences that make it impractical. Even if a new federal standard is created most of those existing state differences will not automatically eliminated. And lastly, the additional administrative effort required of a state to coordinate certification standards and records with other states makes reciprocity unattractive to some credentialing bodies. While OISC strongly supports the concept of reciprocity, we feel equally strong that the issue and process needs to remain in the hands of the states. If there are applicator or industry groups that want to push for expansion of reciprocity between states, we feel that they should work through associations such as AAPCO and ASPCRO rather than complicating a federal rule.

Unit XV.3.i and viii: Revise State Certification Plan Requirements.

OISC is quite concerned about the possible impacts to our delegated use enforcement primacy should EPA decide our current or revised state certification plan is unacceptable under the revised rule. We strongly urge EPA to include in the final rule a clear and understandable outline showing the expected process by which the state and federal agency will work toward a mutually acceptable outcome, and what the consequences to the state will be if EPA cannot accept the state's revised plan. We are very concerned about the chaos that would result in a state left with a dual compliance standard, one administered and enforced by EPA for federal RUP use, and a second administered and enforced by a state for state RUP and general use pesticide (GUP) use. As mentioned elsewhere in these comments, EPA should work at the front end of this rulemaking process to establish a clear and reasonable equivalency measurement framework.

Unit XV.3.ii: Program Reporting and Accountability.

OISC objects very strongly to proposed section 171.303(c)(1)(x) which stipulates a state will be required to submit, as part of our annual reporting, "a narrative summary and causal analysis of any misuse incidents or enforcement actions related to use of restricted use pesticides during the last 12 month reporting period. The summary should include the pesticide name and registration number, use or site involved, nature of violation, any

adverse effects, most recent date of the certified applicator's certification or recertification and, if applicable, the date of qualification of any non-certified applicator using restricted use pesticides under the direct supervision of the certified applicator. This summary should include a discussion of potential changes in policy or procedure to prevent future incidents or violations."

This requirement is redundant with data already reported to EPA's Office of Enforcement and Compliance Assurance, and the recently revised Enforcement Performance Measures (see the 2015-2017 Cooperative Agreement Guidance, Section VII. Reporting and Enforcement Measures). The Cooperative Agreement Guidance was revised such that all states would use a national, standardized template to establish mutually agreeable objectives and reporting criteria. In it, EPA and AAPCO worked for three years to revise and adopt significantly improved reporting measures which include much of the information EPA has proposed in the certification and training rule. It is redundant to ask states to report this data twice, and objectionable to states that have worked hard to eliminate the amount of narrative dialog submitted with annual reports, given EPA's own admission that those narratives are rarely reviewed by management at EPA Headquarters. OISC strongly urges EPA's Office of Pesticide Programs to consult with EPA's Office of Enforcement and Compliance Assurance to share the data states already report. If EPA currently has difficulty communicating effectively between different Agency sections or feels the need to amend cooperative agreement reporting data, those issues should be addressed in forum outside of a federal rule.

Unit XV.3.iii: Civil and Criminal Penalty Authority.

EPA proposes to "expressly require that states have both civil and criminal penalty provisions." OISC recognizes FIFRA already requires this as part of a state's certification plan, and that the current regulation is unclear regarding the requirement that states have both civil and criminal penalty authority. However, OISC strongly objects to EPA's inclusion of record keeping violations being a part of criminal penalty prosecution. We are concerned that expanding the language in the manner that EPA has proposed will serve notice to industry and the public that states are obligated to prosecute minor infractions under criminal code, and we believe that will potentially create conflict at the state level, and eventually weaken the ability of the states to effectively enforce state laws. This part of the regulation should be left unchanged. If EPA feels compelled to address enforcement options in a revision to the certification and training rule justified in part as an attempt to 'catchup with many current state requirements' EPA should pursue regulatory language that removes record keeping violations from criminal code provisions.

Unit XV.3.vi: Certified Applicator Credentials.

EPA proposes uniform information be displayed on issued applicator licenses, regardless of certification credentialing jurisdiction. OISC believes this is an unwarranted and unnecessary requirement in the proposed rule. The content of any state-issued certification should be left to the state. Changing a current state requirement or process

just to provide some form of national consistency would not only be a serious additional regulatory or administrative burden to most states, but the added value to states, applicators, or the general public is not completely clear at this point. This appears to be yet another example of the Agency arriving very late to an issue and offering a very limited-value proposal that will disrupt well established state and local processes.

Unit XV.3.vii: Reciprocal Applicator Certification:

- 1) Are there approaches to facilitate reciprocity that would minimize burdens and disruption at the lead agency level and improve protections? Should EPA require all States, Tribes and Federal agencies to adopt the same certification standards and to mandate reciprocity between states?
 - As discussed in other comments to this rule, OISC is adamant that a national standard for certification reciprocity is unreasonable and fails to recognize the uniqueness of state programs that have been developed over more than 30 years to cater to their constituents.
- 2) Should EPA consider other types of information on required records for RUP dealers or commercial applicators?
 - OISC believes the proposed rule adequately addresses the kind and amount of information a RUP dealer should record. We have no additional recommendations for this part of the proposed rule.
- 3) Is there any other information related to reciprocal certification that EPA should consider incorporating into the regulation?
 - No. As previously stated, federally facilitated reciprocity will not work with the current myriad of state regulatory requirements, standards, and philosophies. If EPA truly wishes to work toward facilitating improved reciprocity between credentialing agencies, they should work through SFIREG, AAPCO, and ASPCRO rather than a federal rule revision. This rule is the wrong venue for reciprocity issues.
- 4) Should EPA consider requiring states to make available publicly a list of all applicators holding a valid certification? If so, should the list be available electronically? Should the list be updated in real time, or would periodic updates be acceptable? If periodic, what period would be acceptable?
 - OISC already makes applicator certification and credentialing information and list creation publicly available and accessible through our web site. We believe the information serves a potential public service. However, we are very concerned about any federal mandates for identifying the scope of and posting such information because of our state law which protects as private some of the applicator information in our data. For example, Indiana law prohibits any state

agency from publishing personal information that could identify an individual by both name and a unique identifier number (i.e. certification number). Therefore, our applicator credential/account numbers are not made publicly available.

5) Should EPA consider requiring certifying authorities to require their commercial applicators to report incidents that would meet the reporting criteria of 40 CFR 159.184 if known to the pesticide registrant?

No. The proposed regulation should not require applicators to report incidents that pesticide registrants are already required to report. Doing so would add an extra level of bureaucracy to an already burdensome rule, and likely result in poor compliance, since there is no provision in the rule for enforcement or compliance. In addition, OISC believes such a requirement would likely lead to double reporting or worse in the EPA data with no obvious mechanism for reconciling the data. And lastly such a requirement would be confusing in that it would create one standard for reporting of any pesticide incidents and a second standard for only RUP incidents covered by the scope of this proposed rule. There would be no public value to such a complex and convoluted set of reporting requirements.

Unit XV.3.viii: State Plan Maintenance, Modification and Withdrawal.

EPA indicates in the proposed rule they will clarify regulatory language that stipulates when and how a state certification plan meets the term of "substantial modification", which would then require additional review and approval by EPA. OISC believes adding clarifying language is a positive proposal but is concerned that the way the proposal is worded places a burden on the state to conduct regular reviews and inform EPA of any certification plan modification. OISC recommends the language clearly indicate that states would only need to notify EPA of proposed substantial modifications during the end-of-year cooperative agreement review or during the pre-award negotiation meeting.

Unit XIX: Add, Revise and Delete Certain Definitions.

1) The proposed definition of *competent* entails possession of, "...practical knowledge necessary to perform functions associated with restricted use pesticide application... (EPA, August 24, 2015, p. 51402)." The term practical knowledge is subsequently defined as, "...the possession of pertinent facts and comprehension sufficient to properly perform functions associated with application of restricted use pesticides... (EPA, August 24, 2015, p. 51402)." The first definition is unsatisfactory because it only raises the question, "Who determines what counts as practical?" The second, supporting definition fails entirely because it neither answers the question suggested by the first, nor clarifies the qualifier 'practical.'

The credentialing community addresses the identification of "practical knowledge" (and its determiner) by stipulating job analysis as the primary basis for licensure test content (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999, Standard 14.14, p. 161). Job analysis is understood as the collection and organization of information about a job in terms of what jobholders do and the qualities they need to possess in order to perform the job (Williams & Crafts, 1997). Job analysis data are derived from representative jobholders and yield competencies (i.e., job knowledge and skills) necessary for safe and effective practice with special emphasis on activities related to public protection.

In order to bring clarity to the aforementioned definitions and to ground federal pesticide applicator certification rules in the basic tenets of credentialing practice, OISC recommends the following revisions to §171.3 – Definitions in the proposed rule:

- Delete the definition of competent and replace it with a definition of competencies to read, "The collective knowledge, skills, and abilities necessary to perform a job."
- Delete the definition of practical knowledge and replace it with a definition of job knowledge to read, "An article of information that jobholders need to know in order to perform the job."
- Add a definition of job skill to read, "An acquired proficiency needed to perform a job activity."
- Add a definition of job analysis to read, "The collection and organization of information about a job in terms of what jobholders do and the qualities they need to possess in order to perform the job—derived from actual jobholders or persons who immediately supervise the work."
- Add a definition of standard to read, "A recognized degree of proficiency, as determined by a passing score on a job-related examination."
- 2) The term "application" as proposed in the rule would include: "the dispersal of a pesticide on, in, at or around a target site." OISC is concerned that the inclusion of the word "around" in this definition effectively opens the door to allowing pesticide overspray or drift, since a target site is a defined area, and applying a pesticide around that area is assumed by a reasonable person to be outside of that area. OISC strongly urges EPA to not include the word "around" in this definition.
- 3) The term "mishap" is not appropriate in the proposed rule, and inconsistent with terminology used for pesticide incidents or events. OISC urges EPA to remove this term from the proposed rule, or revise it such that it is more consistent with what the majority of states already have in statute or regulation.

- 4) The term "use" as proposed in the rule is seriously flawed by including preapplication activities. It is also not consistent with how this term is used in other parts of FIFRA, especially Section 12 where "use inconsistent with the label" is perhaps the most frequently used violation states cite for enforcement purposes. OISC is deeply concerned that the proposed definition would include activities conducted prior to the actual handling of the pesticide, such as arranging for the application of a pesticide. That creates an alarmingly broad universe of possibilities, and would potentially include making any pest control management decision, discussing the application with a crop consultant or salesman, or presenting information on the pesticide in a meeting or seminar. OISC strongly urges EPA to remove any "pre-application activities" from the definition of the term "use". In addition, Indiana has a definition of "use" in state law. Including "arranging for an application" as part of the definition would require a law change for us.
- 5) OISC recommends that EPA add a definition for the terms "immediate" or "immediately available" as it applies to the availability of a supervisor of a non-certified applicator. While in practice adequate supervision is going to vary considerably by site, situation, pesticide being used, geography, abilities of the supervisor, etc., OISC recognizes there may be a need to not leave the terms completely open-ended. Therefore, OISC would suggest these terms allow for the supervisor to be able to arrive at the site of application within three hours of communication from the non-certified applicator, or physically present at the site of application.

Unit XX: Implementation.

- 1) Would states be able to submit revised certification plans within 2 years of the effective date of the rule?
 - OISC believes that two years from the effective date of the proposed rule is insufficient time for states to go through a full certification plan revision. This is due in large part to anticipated requirements of securing approval from both internal agency administrators as well as state legislatures before the plan be finalized and submitted. Many state legislatures operate on a two-year cycle, with some restricting routine administrative revisions to only one of the two years. If EPA promulgates the final rule in March of a given year, there could be states that would be unable to submit any proposed statutory changes for nearly two years, if the federal rule happened to fall on the first year of the two-year legislative cycle. This then puts the state agency at a serious disadvantage, and would likely result in failure to submit a revised certification plan within the two-year period. The OISC recommends the final rule be revised so that it allows at least three, if not four years for states to modify and submit revised certification plans.
- 2) Would states need additional time after EPA approves the revised state certification plan to implement their new state plan?

OISC believes states will need a considerable amount of time to fully implement any revised certification plan, and EPA needs to understand and add language to the final rule recognizing this challenge. Even if a state was able to submit a revised certification plan within the proposed two-year period, they would be very hesitant to initiate statutory or regulation changes until such time as EPA approves the revised plan. There does not appear to be any provision in the proposed rule that allows states time to initiate statutory and regulatory changes after the revised plan is approved, and in some cases this will take up to ten years for some states that have to overhaul their entire certification programs to accommodate different categories, recertification cycles, tracking mechanisms, and certification credentials. EPA should understand how difficult, costly and time consuming wholesale changes on the scale being proposed will be. The proposed rule, if promulgated unchanged, represents the most significant federally forced set of changes imposed upon states since EPA was created and states entered into initial cooperative agreements with the Agency. It cannot be understated how dramatic and costly the impact will be on state programs.

3) Would the implementation schedule be reasonable if EPA provided exams and training materials for the proposed changes?

OISC is concerned about the conciliatory nature of this question. Specifically OISC is concerned that EPA is underestimating the resources required to develop quality and timely training and competency measurement materials that meet variable state needs and may be overestimating the Agency's ability to deliver said materials. OISC staff remembers attempts by EPA to develop national training and testing materials when the federal certification program was first introduced in the late 1970s. It did not take long for most states to abandon the federally developed materials and develop training materials and exams more suitable for their local needs. Again, EPA needs to be cognizant of the fact that state materials are designed and developed to address users of both RUPs and GUPs. Thinking these materials can be segregated for RUPs and GUPs is completely impractical and unnecessarily costly when it comes to implementation. Even with EPA's proposed training and exam development assistance, OISC feels the proposed rule impacts on Indiana's program will be great enough that there will be serious consideration of giving up authority to significantly restructure and conduct our current state/federal certification program. Instead the likelihood would be for Indiana to continue to implement our thoughtfully developed program and allow EPA to assume the regulatory primacy for certification of federal RUP applicators. It should be noted that even with a federal rule change for RUP applicators, state requirements for state RUP users would not be eliminated.

4) What support would states need to receive during the implementation of the final rule?

OISC believes EPA is ill prepared to provide the kind of support and assistance it would take to implement the proposed rule. States are quite literally facing hundreds of millions of dollars in added costs to their regulator programs, university educational programs, and the applicator industry. It is not an overestimation to say EPA would need to provide a minimum of \$500 million nationally in each of the first ten years the new rule was in effect in order for states to adequately meet the added regulatory burden. OISC believes EPA has not seriously considered, at least not in a way that was apparent in the proposed rule, what the impact would be to the federal agency if multiple states were to decide to cease certifying applicators, relinquishing RUP applicator certification responsibilities to EPA. It is OISC's belief that EPA has no resources in either funding or staff to conduct a certification program in the manner proposed in the rule, in even one state, let alone a number of states. To expect states to do so without significant financial support places serious doubt that the rule is warranted.

5) What time frame would be needed for EPA to evaluate the effectiveness and impacts of the final rule? Please provide any ideas of methodology of such evaluation.

OISC believes it would take a minimum of ten years to even begin to determine if the new rule was effective in a way that would be measurable for the identified need. States are not currently equipped to measure improved competency of pesticide applicators, and the proposed rule does not appear to offer any suggested or recommended performance measures to do so.

In addition, OISC feels the proposed rule has failed to adequately address Executive Order 13563, which mandates all federal agencies to establish adequate performance measures for any new or revised federal rule. In the publication Improving Our Regulations: Final Plan for Periodic Retrospective Reviews of Existing Regulations EPA stated the following: "A central goal, consistent with Executive Order 13563, is to identify methods for reducing unjustified burdens and costs." And also: "Therefore, EPA intends to apply the principles and directives of EO 13563 to both retrospective reviews of existing regulations and the development of new regulations." Later in that document, Section 2.2.15 cites the following: Certification of pesticide applicators: eliminating uncertainties and improving efficiencies. Reason for inclusion: EPA intends to review regulations for certification and training of pesticide applicators (40 CFR 171) to help clarify requirements and modify potentially redundant or restrictive requirements, in keeping with EO 13563's directive to reduce regulatory burden. OISC's concerns regarding the economic assessment are underscored by the explanation in this document that describes the foundational principles EPA indicates they will follow for retrospective reviews: For example, the first principle listed in EO 13563 is: "[T]o the extent permitted by law, each agency

must, among other things propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify)."

OISC is of the opinion that EPA has not convincingly demonstrated the benefits of the proposed rule justify the costs states and pesticide applicators will have to bear.

Economic Assessment (EA)

The EA is introduced the Executive Summary, Section E, page 9 of the proposed rule. In it, EPA indicates the economic benefits are estimated at \$80.5 M while the estimated costs are \$47.2 M. The full EA is provided in detail in Reference 3 of the proposed rule. OISC believes the EA falls considerably short of taking into account the full economic impact the proposed rule will have on states and the pesticide applicators it regulates. Texas A & M University Extension specialists analyzed the EA in depth, providing states with a condensed version that helps them better understand how to apply the EA to their own state's situation. In this condensed version, it became quickly apparent that the EA failed to fully account for the amount time and expense a pesticide applicator will have to spend to meet the additional recertification standards states will be expected to implement.

The EA also appears to not fully account for the internal administrative costs states will have to bear in order to revise or overhaul their certification programs to meet the new standards. This is especially true in states that will have to change internal and external information technology and tracking programs. In the EA introduction in the preamble of the proposed rule, EPA indicates the primary benefits are "monetized benefits avoided for acute pesticide incidents", and qualitative benefits that include reduced latent effects of avoided acute pesticide exposures, and reduced chronic effects from lower chronic pesticide exposures (chronic diseases). OISC would like to point out, in the strongest possible way, that the benefits of the EA are not based on known and demonstrated data, but on estimates of poorly reported data and anecdotal evidence from poison control centers. In EPA's own words from page 2 of the Executive Summary of the EA: "It is difficult to quantify a specific level of risk and project the human health risk reduction that would result from this rule, because people are potentially exposed to such a wide variety of pesticides, and few of these incidents are reported." It is therefore just as accurate to say there may be a high percentage of pesticide exposures reported, or the number represents an over estimate of the actual number of pesticide exposures. States routinely investigate alleged pesticide exposure incidents that are determined to have been falsely reported. To assume (as stated in the EA, same paragraph as the citation above) that "there is sufficient evidence in the peer-reviewed literature to suggest reducing such exposure would result in a benefit to public health through reduced acute and chronic illness" speaks to an apparent philosophical position the EPA has that the states and industry perhaps do not share. OISC does not share the same conclusion as EPA with regard to the benefits of the proposed rule, and in fact, we believe there is very

little benefit that would result in expanding state and tribal certification programs in the ways EPA has proposed. It is for this, and other reasons, that OISC must make it as clear as possible to EPA that the proposed rule will not achieve the additional protections to humans and the environment that they have stated will occur after the rule is promulgated.

To state this in another way, EPA relies exclusively on state, tribal and territorial regulatory agencies to carry out the national pesticide applicator certification program. Without those partners, EPA would not be able to implement the kind of applicator certification program that currently exists in the United States. If the states, tribes and territories do not agree with EPA's economic assessment, or the benefits they believe the rule will produce is based on incorrect assumptions, there is a very high likelihood the national applicator certification program will actually regress in its effectiveness, and the end result will be a higher risk to human and environmental health. This is because there will be some state, tribal or territorial programs that will simply be unable to meet the new higher standards mandated by the new rule. Those programs will be forced to make the undesirable choice of relinquishing their certification programs back to EPA, or running a much reduced program for applicators that do not apply RUPs. EPA has indicated they do not have the capacity to accept local certification programs and run them on the same scale and level of attention to detail that the states do, and their only choice is to establish a certification program focused exclusively on RUPs. This then ignores the larger percentage of pesticides and pesticide applications that cause the vast majority of pesticide exposures. It is OISC's assertion, based in true and factual data, that if the proposed rule is implemented as written, the result will be an increase in the number of human and environmental health problems, not a reduction. Fewer applicators will be trained and certified, but the total number of applicators actually making pesticide applications will remain the same. This then represents an increase in the number of untrained, uncertified, and less competent applicators. The proposed rule, if left unchanged, will result in the opposite end result of the stated intent.

As to the actual cost estimates of the EA, OISC would like to point to the work done by Texas A&M University Extension specialists that show the EA has grossly underestimated the true costs to state regulatory programs, university extension programs, and the applicator industry. The EA fails to accurately take into account the significantly greater number of hours of training and days in training sessions applicators will have to endure in order to retain the same certification they do now. The EA also failed to recognize the significant amount of funding states contribute to their certification programs that is never accounted for in their cooperative agreement budgets. In some cases EPA funding is only five to ten percent of the total cost states spend to conduct their certification program. States that have used the Texas A&M model and modified it for their own specific state situations have found similar results to that of Texas A&M. Those results, while variable from state to state, almost universally show an increase in estimated costs to state programs in multiple factors of ten, not just small percentages over what the EA presented. This is eye-opening, and cannot be ignored if EPA is sincere in their desire to achieve an effective national certification program. OISC

respectfully requests that EPA reassess the entire economic analysis, and find a way to include states, tribes and territories in the process.

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