

PESTICIDE REPORTS

Division of Agricultural Sciences and Natural Resources • Oklahoma State University

<http://pested.okstate.edu>



July, 2022

CHEM

- 1 EPA FINALIZES BIOLOGICAL EVALUATIONS ASSESSING POTENTIAL EFFECTS OF THREE NEONICOTINOID PESTICIDES ON ENDANGERED SPECIES
- 3 SUPREME COURT REJECTS ROUNDUP PETITION
- 4 RHODE ISLAND PASSES BILL RESTRICTING USE OF NEONICS
- 5 ARE FARMERS NEARING THE END OF AN ERA WITH HERBICIDES?
- 7 NYC'S RAT ACTIVITY FLOURISHES AMID COVID PIVOTING
- 9 CEU MEETINGS
- 9 ONLINE CEU LINKS
- 10 ODAFF TEST INFORMATION

EPA FINALIZES BIOLOGICAL EVALUATIONS ASSESSING POTENTIAL EFFECTS OF THREE NEONICOTINOID PESTICIDES ON ENDANGERED SPECIES

EPA has released its final biological evaluations (BEs) for clothianidin, imidacloprid, and thiamethoxam, part of a group of insecticides known as neonicotinoids, and its responses to comments received on the draft BEs. These neonicotinoids are used on a variety of crops, turf, and ornamentals, and for other residential and commercial indoor and outdoor uses.

In these BEs, EPA evaluated clothianidin, imidacloprid, and thiamethoxam to determine whether they may affect one or more federally listed endangered or threatened (listed) species or their designated critical habitats. These evaluations, which encompass all registered uses and approved product labels for pesticide products containing these chemicals, are part of EPA's efforts to meet its obligations under the Endangered Species Act (ESA). This work furthers the goals outlined in [EPA's April 2022 ESA Workplan](#) to provide practical protections from pesticides for listed species.

The BEs evaluate the effects of clothianidin, imidacloprid, and thiamethoxam on over 1,700 listed species and over 800 designated critical habitats in the United States, determining that:

- Clothianidin:
 - Will have no effect on 14 percent of species and 17 percent of critical habitats.
 - May affect but is not likely to adversely affect 19 percent of species and 27 percent of critical habitats; and
 - Is likely to adversely affect 67 percent of species and 56 percent of critical habitats.
- Imidacloprid:
 - Will have no effect on 11 percent of species and 10 percent of critical habitats.
 - May affect but is not likely to adversely affect 9 percent of species and 7 percent of critical habitats.
 - Is likely to adversely affect 79 percent of species and 83 percent of critical habitats.
- Thiamethoxam:
 - Will have no effect on 12 percent of species and 11 percent of critical habitats.
 - May affect but is not likely to adversely affect 11 percent of species and 7 percent of critical habitats; and
 - Is likely to adversely affect 77 percent species and 81 percent of critical habitats.

The “[likely to adversely affect](#)” (LAA) [determination](#) means that EPA reasonably expects that at least one individual animal or plant, among a variety of listed species, may be exposed to the pesticide at a sufficient level to have an adverse effect. The likely “take,” which includes unintentional harm or death, of even one individual of a species, is enough to trigger an LAA determination. This is the case even if a species is almost recovered to a point where it may no longer need to be listed. As a result, there are often a high number of LAA determinations in a BE. An LAA determination, however, does not necessarily mean that a pesticide is putting a species in jeopardy.

Because of these findings, EPA has initiated formal consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services). EPA will be working with the Services throughout the

consultation process to clarify how the effects determinations included in the final BEs and comments received on the draft BEs can best inform the Services’ biological opinions (BiOps). EPA’s support is intended to make consultation more efficient and allow the Services to focus their resources on developing additional mitigations to protect species that are the most vulnerable to potential exposures.

During consultation, the Services will develop BiOps, which will include their official determinations of whether a pesticide is likely to jeopardize each relevant listed species or adversely modify its critical habitat, and include any additional mitigation measures the Services develop in coordination with EPA and stakeholders. EPA will then implement any necessary mitigation measures to protect listed species, in collaboration with pesticide registrants.

These final BEs follow the draft BEs for clothianidin, imidacloprid, and thiamethoxam, which EPA released for public comment in August 2021. The draft BEs were developed after the release of EPA’s proposed interim decisions (PIDs) for the neonicotinoid pesticides in January 2020. The PIDs are part of EPA’s registration review process for pesticides, required under the Federal Insecticide, Fungicide, and Rodenticide Act, to identify risks from pesticides and actions that can mitigate risks. In the PIDs, EPA proposed a suite of mitigation measures including annual application rate reductions, application timing restrictions, and measures to reduce spray drift. The Agency anticipates releasing amended PIDs in 2023, which will include updates to some of the previously proposed mitigations, and early mitigation measures to reduce neonicotinoid exposures for listed species. Mitigation measures will be finalized in the interim decisions, which EPA expects to release in 2024. EPA and the Services will consider these final mitigations during consultation.

Read the final BEs for [clothianidin](#), [imidacloprid](#), and [thiamethoxam](#). To learn more about these BEs, see the [Frequently Asked Questions](#)

(EPA, June, 16, 2022)
<https://www.epa.gov/pesticides/epa-finalizes-biological-evaluations-assessing-potential-effects-three-neonicotinoid>

SUPREME COURT REJECTS ROUNDUP PETITION

The Supreme Court on Monday rejected Bayer AG's petition to review a \$25 million Roundup product-liability verdict issued by a California court.

In 2019, a jury awarded Edwin Hardeman \$80 million in damages after the ruling his non-Hodgkin's lymphoma was caused by his use of Roundup. The damages later were reduced to \$25 million.

Bayer argued in its petition to the Supreme Court that the Federal Insecticide, Fungicide and Rodenticide Act, or FIFRA, bars states from adding new label requirements. Bayer has argued federal law pre-empts state law when it comes to Roundup labels.

The court didn't agree. The ruling currently does not affect Roundup's availability to farmers.

The ruling comes just days after the Ninth Circuit Court of Appeals in California rejected EPA's analysis for determining that glyphosate is likely not carcinogenic and ordered EPA to reevaluate its conclusions. <https://www.dtnpf.com/...>

Bayer said in a statement to DTN it "respectfully disagrees" with the Supreme Court's decision.

"The company believes that the decision undermines the ability of companies to rely on official actions taken by expert regulatory agencies, as it permits every U.S. state to require a different product label, which conflicts with the clear intent of the 'uniformity clause' adopted by the U.S. Congress in FIFRA and similar statutes," the company said in a statement."

Bayer added there will likely be future cases sent to the Supreme Court with similar questions related to federal versus state jurisdiction.

"While this decision brings an end to the Hardeman case, there are likely to be future cases, including Roundup cases, that present the U.S. Supreme Court with preemption questions like Hardeman and could also create a circuit split. The company is strongly

encouraged by the widespread support from public officials, agricultural organizations and other stakeholders following the U.S. government's legal reversal in Hardeman."

Bayer also noted how farm groups opposed the solicitor general's brief over science-based regulations.

"These third parties expressed opposition to the solicitor general's brief and raised significant concerns that it departed from science-based regulation, could exacerbate food shortages at a critical time, threatened environmental sustainability and was prepared without consultation with the U.S. Department of Agriculture which has a vital interest in the outcome of the case."

In July 2021, Bayer announced a five-point plan to manage and resolve future litigation risk from Roundup. Among the moves, Bayer said it would stop selling Roundup products for residential use beginning in 2023.

As part of the 2021 Bayer announcement the company said it would be setting aside about \$4.5 billion for potential future legal claims and settlements if the Supreme Court did not agree to a review. That would put the total payout of Roundup claims at more than \$14 billion.

Bayer has settled about 107,000 cases out of 138,000. The U.S. District Court for the District of Northern California last year rejected the \$2 billion settlement, expressing concern it would not adequately address the concerns of families who may later be diagnosed with non-Hodgkin's lymphoma.

"The voluntary claims resolution program for the U.S. Roundup product-liability litigation is a key element of the company's five-point plan to help bring closure to the litigation in the United States," Bayer said in a statement.

"The company is fully prepared to launch the claims resolution program, but that decision will depend on key developments in the litigation, including trials and appeals."

Bayer said it is "confident" the "extensive body of science and consistently favorable views" from regulatory bodies across the world "provide a strong foundation on which it can successfully defend Roundup in court when necessary. The company will only consider resolving outstanding current cases and claims if it is strategically advantageous to do so."

Bayer officials told DTN in recent weeks it is weighing what the ruling means for companies in terms of the costs to bring products to market, and their ability to depend on consistent federal oversight and uniform regulations governing ag chemicals.

Last week a jury in Jackson County, Oregon, found Roundup didn't cause a man's cancer.

It is the fourth case in a row that Bayer has won in less than a year, with the company dealing with a wave of claims since it took over Monsanto Co., the product's original owner, in 2018.

In an earlier ruling, a jury in Jackson County, Missouri, on June 9 ruled the glyphosate-based Roundup did not cause non-Hodgkin's lymphoma in plaintiff Allan Shelton. Last year, two other juries sided with Bayer in other similar cases in California.

Also two weeks ago, the European Chemical Agency found no scientific link between glyphosate use and cancer, <https://echa.europa.eu/...>

The Biden administration drew the ire of agriculture groups and federal lawmakers, when the U.S. solicitor general issued a brief on the Hardeman case calling for the Supreme Court to reject the Bayer petition, <https://www.dtnpf.com/...>

Bayer also petitioned the court to review a verdict in a Roundup product liability case, *Pilliod v Monsanto*.

In addition, a lawsuit filed by Georgia Roundup plaintiff John Carson also may find its way to the Supreme Court.

On June 8, Bayer urged the U.S. Court of Appeals for the 11th Circuit in Atlanta to rule state law failure-to-warn claims are preempted by federal law. Such a ruling would be in conflict with a previous ruling by the U.S.

Court of Appeals for the Ninth Circuit in California and likely would send the case to the Supreme Court.

(Progressive Farmer, June 21, 2022)

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2022/06/21/scotus-rejects-roundup-case>

RHODE ISLAND PASSES BILL RESTRICTING USE OF NEONICS

On June 22, Rhode Island legislators passed [S. 2299](#), a bill that would restrict the use of neonicotinoids. The bill has been sent to Rhode Island Gov. Daniel McKee (D), who will determine whether to sign it into law.

The bill would restrict the use of pesticides containing neonicotinoids outdoors, allowing only certified applicators to purchase or use them.

Leonard Brown, director of public policy, National Pest Management Association, said NPMA and its members were able to get both House and Senate bills "deferred from a vote in the committee process," but a late push by activist groups made Rhode Island legislative committee members reconsider.

Brown said NPMA is currently working with a coalition of agriculture and non-agriculture organizations to ask Gov. McKee to veto the bill. NPMA is running an active VoterVoice campaign for members that live in Rhode Island to tell the Governor to veto the bill. [Click here](#) for a link to this campaign.

In Rhode Island, restricted use products (RUPs) require direct line of sight supervision of licensed applicators, which will be the challenge for Rhode Island pest management professionals, according to Griggs & Browne Pest Control's Ted Brayton, who is the New England SPARR (State Policy Affairs Representative) for NPMA. "I don't know of any other states in the country like that, certainly not in New England," he said.

Brayton said Rhode Island's stringent RUP requirement was, understandably, created to ensure the safe, professional use of more volatile products (e.g., fumigants, subsurface liquid termiticide applications, rodent tracking powders, etc.) – not neonicotinoids. “That is really the sticking point,” he said.

The Rhode Island bill *does* include an exception for the use application neonicotinoids indoors by licensed professionals. However, as the bill is written that exception only applies if the product does not have an exterior application on the label and Brayton said to his knowledge there is only one neonicotinoid product that does not have exterior application language on the label.

(PCT Online June 30, 2022)

<https://www.pctonline.com/article/rise-supports-fifra/>
<https://www.pctonline.com/article/rhode-island-passes-neonic-restriction/>

ARE FARMERS NEARING THE END OF AN ERA WITH HERBICIDES?

It isn't easy trying to control Palmer amaranth or pigweed in row crops in some parts of the Mid-South these days.

Compared to the late 1990s when farmers could spray a pint of Roundup a couple of times, growers in some areas are finding the currently available herbicide tools aren't working as well as they did even a year or two ago.

The new reality – increasing resistance to dicamba and 2,4-D, cross resistance to the auxin herbicides and some residuals and the potential for metabolic resistance in a few weed species – is leading weed scientists to ask if we are approaching the end of an era in herbicides.

“One of our growers in Tennessee said: ‘I don't try to grow cotton anymore – I try not to grow pigweed,’ said Dr. Larry Steckel, professor of weed science at the University of Tennessee's West Tennessee Research and

Education Center in Jackson. “That's his mindset going into raising his crop.”

Steckel was asked about the reasons for such a turnaround in a grower's thinking on the Crop Doctors Podcast, which is broadcast weekly and hosted by Drs. Tom Allen, plant pathologist, and Jason Bond, weed scientist with the Mississippi State University Delta Research and Extension Center at Stoneville, Miss.

Resistance discussion

That included an update on the initial reports of the development of resistance in Palmer amaranth to dicamba in west Tennessee the trio discussed in a Crop Doctors podcast last year.

“We've done a lot of greenhouse dicamba screens this year on Tennessee pigweed populations, and we clearly have some populations that have upped their game,” said Steckel. “We're seeing some living through pretty high dicamba rates in the greenhouse, moving toward resistance. So, it's really gotten worse.

“Some of it is cross resistance to 2,4-D; some of it is and some isn't. In some of these populations, there's a little bit of metabolic resistance, similar to what they're seeing in Arkansas with Dual and Warrant. The number of days of residual you get from those is being reduced. It's not zero, but it's not the three-plus weeks like you would expect.”

Steckel was a relatively new weed scientist at the University of Tennessee when reports of glyphosate resistance in Palmer amaranth begin popping up, first in Georgia and then in the Mid-South states in the early 2000s. Bond became an Extension weed scientist at Mississippi State a short time later.

“What I remember with glyphosate and Palmer amaranth down here, particularly after two or three years of dealing with the problem, is you would see two things,” said Bond. “One would be uniform 50 to 70 percent control at seven days. A bunch of the resistant ones would regrow, and some would die.

“Then you might go five miles down the road and spray and the control would be zero. You would have to look for something else, another weed in the field, to know you had even sprayed.”

Tank mixes

Thus far, similar problems with the dicamba and 2-4,D formulations appear to be occurring primarily in west Tennessee and to a lesser extent in Arkansas, according to Steckel. Glyphosate resistance in Palmer amaranth may have played a role in situations where farmers have continued to tank mix glyphosate and dicamba.

“The glyphosate was just no help at all (on Palmer amaranth),” said Steckel, referring to when dicamba- and 2,4-D-resistant crops were first labeled. “So dicamba had to do all the heavy lifting. People went back to the old habits of not using residuals and all that kind of stuff.

“Now we’re going back to using residuals, but the horse is out of the barn. I don’t know where we’re going here on herbicides. I don’t know any new one that will bail us out. We’re overlapping residuals, and maybe the HPPD trait will help some. There’s resistance to that in Palmer in some states so that may be a short-lived answer.”

Allen asked about the need for additional resource investment in surveys to determine how widespread the resistance issue continues to be when growers are seeing control failures?

“I think we have to monitor it now to try to find any port in the storm,” said Steckel. “If we can get partial control out of any herbicide, it has to be thought of as a tool. We have to get a handle on what’s working and what isn’t and formulate a plan around using those herbicides.”

Nearing the end

Steckel referred to a speech by Dr. Patrick J. Tranel, a crops researcher at the University of Illinois, who said farmers and weed scientists may be nearing the end of an era for herbicides for weed control.

“Tranel is one of the smarter metabolic herbicide researchers on the planet,” said Steckel, “And from where I’m standing, especially with pigweed, I couldn’t

argue with him. We definitely need newer herbicides, but that metabolic resistance issue makes you wonder if those will be all that effective for very long?”

(Metabolic resistance describes the defense mechanism plants have developed over time to protect them from toxic substances. In some cases, weeds can develop enzymes that can convert an active ingredient into metabolites that don’t kill the plant.)

“These enzymes can detoxify herbicides and not just one herbicide like we’ve been used to,” Steckel noted. “It’s not full-blown resistance on a lot of them; it’s just kind of incremental resistance. It just adds up over time, and it it’s broad spectrum. It can be Dual, it can be dicamba, it could be Roundup. If they’re all in play, that’s the real concern we’ve got going forward.”

“And that’s different than what a lot of people associate with herbicide resistance,” said Bond. “You can kill glyphosate-resistant Palmer with Liberty, for example. That’s not metabolic resistance. Metabolic resistance is often described as just Pandora’s box. Once you open it up, you’re going to have challenges with a variety of different products.”

The Crop Doctors Podcast is made available through the Mississippi Crop Situation Blog which is updated on a regular basis and has a Saturday email alerting subscribers to the newly posted content by the Mississippi State University Extension Service. To listen to this podcast, visit <http://extension.msstate.edu/shows/mississippi-crop-situation>.

(Southwest FarmPress, June 29, 2022)
<https://www.farmprogress.com/weeds/are-farmers-nearing-end-era-herbicides>

NYC'S RAT ACTIVITY FLOURISHES AMID COVID PIVOTING

On May 26, New York City councilman Eric Bottcher, who lives in the city's Chelsea neighborhood and sees the city's rat problems first-hand, [introduced a bill](#) requiring that applicants for some construction permits confirm that they have employed a pest management professional for their projects.

Bottcher told the [New York Daily News](#), "I've never seen so many rats in my life. They're running over our feet. They're dashing out in front of us as we walk. They're climbing into trash cans on the corners."

PCT reached out to several New York City pest management professionals for their rat observations during the past two years.

Timothy Best, technical manager, Terminix, Manhattan, concurred with the councilman that Chelsea is a "hot spot" for rodents now, and that Terminix has been working the neighborhood with a fair amount of regularity. "We saw some significant shifts in rodent behavior during the pandemic that have yet to otherwise 'normalize,'" he said. "I cannot provide quantified empirical data, but anecdotally speaking from our own service and inspection reports and trending data, complaints of Norway rats have certainly become denser between 8th and 10th Avenues, from as far south as 15th Street up to 29th Street."

Another PCO who confirmed an explosion in rodent work in Chelsea (and throughout New York City) is Timothy Wong, owner of M&M Environmental Services, Long Island City, New York. "We do tons of rodent work in that area, including rodent exclusion work, burrow treatments. Rodents have been a big issue in New York City the past couple of years and it's been worse during the pandemic."

One way to gauge New York City's rodent problems is by comparing year over year complaints registered by the city's 311 rodent complaint hotline. As reported in the [Associated Press](#), through April, people have called in some 7,400 rat sightings to the hotline, an increase of

6,150 during the same period last year, and up by more than 60% from roughly the first four months of 2019.

While these sightings, as well as pest control company data, do indicate rodents are thriving in the Big Apple even more today than in years past, PCOs said the "city being overrun by rats" narrative should be tempered, noting that increased rodent sighting by the public are related to (1) an uptick in construction projects; and (2) COVID trends, including people spending more time in their homes, gardens and parks, thus noticing rodents more.

MORE CONSTRUCTION. COVID-19 stopped existing construction projects and pushed back start dates of others. As the city came out of strict COVID restrictions, construction picked up again, including in areas like Chelsea.

As Wong noted, "When they're doing construction nine out of ten times there will be always rats on the construction site because you're lifting the dirt and you're disrupting their homes." In this example, it's most likely that citizens are not witnessing a new rat population, rather they are now just *seeing* an existing rat population.

New York City already does address rats on construction sites with a regulation requiring that prior to demolition buildings must be inspected and baited by a licensed rodent pest management professional.

While pest professionals say demolition regulation has some impact on rodent populations at the demo sites – and they appreciate the business opportunity – it is hindered by (1) a lack of oversight and (2) builders awarding contracts to pest control firms that provide the lowest bid. "What the city needs to do is stop [awarding] the lowest bidders on city properties," said Joseph Sheehan, CEO, Colony Pest Management, Brooklyn, N.Y.

Moreover, rodent abatement on the demo site is only part of the problem. What really is needed, they say, is a regulation requiring builders to contract with a pest management professional for a rodent abatement program throughout the entirety of a construction project.

Gil Bloom, president of Standard Pest Management, said the real increase in rat activity at a construction site comes from the “army of laborers” whose temporary work shacks don’t have a sanitation plan. “So, the trash builds up around these construction sites. Harborage increases with pipes, cement and beams, and all the all the stuff that it takes to build a building. And the surrounding areas are tangentially affected because garbage trucks can’t get through, and things pile up. So, you really have a change in the environment. It’s not as simple as putting a hole in the ground and rats pour out. You are changing this micro-environment to be supportive of rodents.”

Wong agreed with this need for rodent abatement throughout construction, adding “You’re talking about millions of dollars of development and you’re talking about a few thousand dollars for pest control,” he said.

PMPs contacted by PCT said Bottcher’s proposed bill will have a limited impact if it does not go beyond mandating the installation of exterior bait stations on demolition sites.

“The onus of responsibility to manage or otherwise ‘control’ rodents cannot be the sole responsibility of the PMP, and this bill, as it’s written (or at least interpreted by me), may inadvertently imply that,” said Best. “We all know that rodent management takes a collective effort, so the contractor(s) should be aware of their roles and responsibilities as well; for example, maintaining sanitation on the job site (among other tasks). If I was in a position to inform the councilman about this proposed bill, I would perhaps recommend to at least include some additional language via subclause(s) that speaks to known best practices for rodent pest management, and better, more clearly defines roles and responsibilities by party.”

COVID-RELATED IMPACTS. While COVID-era construction is one factor cited in increase rodent sightings, there are several other important ones.

“It’s all things COVID- related,” said Sheehan, “Outdoor dining. The economy. No one paying their bills. No one working. Commercial spaces cutting back on pest control.”

New York City restauranteurs pivoted during the pandemic, creating make-shift outdoor dining areas. “Outside dining is one of the best things that could have happened for rodents in New York City,” said Bloom. “It is it is a nightmare. It is unregulated.”

One example Bloom provided was restaurants adding aesthetically pleasing dirt-walled traffic barriers (e.g., planters). “Rodents are burrowing in the very walls of these outside [structures],” he said.

Also, these outdoor dining areas are constructed with plywood as platforms atop 2 by 4s. “One they are hard to clean and two they provide shelter underneath for rodents,” said M&M’s Wong.

Bloom said there is really no provision to enable cleaning underneath these platforms. “The water flows, the food flows. Sanitation can’t come through with the trucks and clean the streets anymore. The garbage restaurants are throwing out, which was bad enough when it was curbside, it’s now sandwiched between one wooden village and another. And it’s totally horrendous.”

New York PCOs also cited issues related to garbage pick-up as reasons for the rodent explosion in New York City.

COVID-19 threw off regularly scheduled trash pick-up, allowing garbage to pile up. And budget cuts have had an impact. As Best noted, “In a residential neighborhood like Chelsea, the cuts in the sanitation budget meant more garbage (more food) for the rats. There was illegal dumping of refuse and waste on the streets, street corner wastebaskets were billowing with trash, lengthy delays between trash pick-ups; all equating to rats having easier access to these resources.”

Botther’s bill is not the only the only anti-rat efforts being pushed for at New York City Hall. As the Daily News reported, in April, NYC mayor Eric Adams announced the city was expanding a pilot program bringing sealed trash bins to the five boroughs, and in May, Councilman Chi Osse introduced a bill that would mandate annual reports

on rat mitigation from the city's Department of Health and Mental Hygiene.

(PCT Online, June 15, 2022)

<https://www.pctonline.com/article/nyc-rodents-flourish-covid-19/>

Find us on Twitter at @OkstatePestEd

CEU Meetings

Please note that many of these meetings are now being done virtual. Please contact the meeting host directly if you have any questions.

Date: September 28, 2022

Title: ENSYSTEX 2022 CEU Workshop

Location: Hilton Garden Inn· Oklahoma City OK

Contact: Don Stetler (281) 217-2965

<https://ceuworkshop.com/>

CEU's:	Category(s):
4	7A
2	7B
1	8

ODAFF Approved Online CEU Course Links

Online Pest Control Courses

<https://www.onlinepestcontrolcourses.com/>

PestED.com

<https://www.pested.com/>

Certified Training Institute

<https://www.certifiedtraininginstitute.com/>

WSU URBAN IPM AND PESTICIDE SAFETY EDUCATION PROGRAM

<https://pep.wsu.edu/rct/recertonline/>

CEU University

<http://www.ceuschool.org/>

Technical Learning College

<http://www.abctlc.com/>

All Star Pro Training

www.allstarce.com

Wood Destroying Organism Inspection Course

www.nachi.org/wdocourse.htm

CTN Educational Services Inc

http://ctnedu.com/oklahoma_applicator_enroll.html

Pest Network

<http://www.pestnetwork.com/>

Veseris

<http://www.pestweb.com/>

AG CEU Online

<https://agceuonline.com/courses/state/37>

Target Specialty Products Online Training

<https://www.target-specialty.com/training/online-training>

For more information and an updated list of CEU meetings, click on this link:

<http://www.kellysolutions.com/OK/applicators/courses/searchCourseTitle.asp>

ODAFF Test Information

Testing will be done at testing centers in multiple locations around the state by PSI Services LLC.

For more information and instructions, please go to <https://bit.ly/3sF4y0x>.

Reservation must be made in advance at www.psiexams.com/ or call **855-579-4643**

PSI locations.

Oklahoma City 3800 N Classen Blvd, Ste C-20, Oklahoma City, OK 73118

Tulsa 2816 East 51st Street, Suite 101, Tulsa, OK 74105

McAlester 21 East Carl Albert Parkway (US Hwy 270), McAlester, Oklahoma 74501

Woodward 1915 Oklahoma Ave, Suite 3, Woodward, OK 73801

Lawton Great Plains Technology Center, 4500 West Lee Blvd Building 300- RM 308, Lawton, OK 73505

Enid Autry Technology Center, 1201 W. Willow Rd, Enid, OK 73703

Ponca City Pioneer Technology Center, 2101 N Ash, Ponca City, OK 74601

Norman Moore Norman Technology Center, 4701 12th Ave NW, Norman, Oklahoma, 73070

South Penn - Moore Norman Technology Center 13301 S. Pennsylvania, Oklahoma City, OK 73170

If you have questions on pesticide certification. Please email or call:

Kevin Shelton
405-744-1060 kevin.shelton@okstate.edu or

Charles Luper
405-744-5808 charles.luper@okstate.edu

**Pesticide Safety
Education Program**