

ACA Best Practices for Emergency Pest or Disease Treatment Programs

May 2021

Purpose

This ACA Best Practices document describes ways to address treatment programs for emergency pest or disease from other governmental agencies that impact organic farmers. In the past, certifiers and the National Organic Program (NOP) have responded differently to spray applications for pests and disease treatment programs. This best practice was created to support consistency in how these applications are handled by certified operations and certifying agents in the future. This is an important issue to address now because these applications are expected to continue into the future. We should work collaboratively with the authorities responsible for pest and disease treatment to maintain the integrity of organic production and ensure human health and safety.

Background

The National Organic Program (NOP) and certifiers follow 7 CFR 205.672 when asked questions about Federal or State emergency pest or disease treatment programs. This regulatory section addresses both the status of certification (operation-level) in the event of such a program; and addresses the status of the organic commodity/product based on whether there has been contact with a prohibited substance (product level evaluation).

There are many factors (criteria) considered in assessing the impact of such a treatment program on both the organic operation and the crop/livestock, and applying that assessment to make farm-level decisions on the status of the operation and the product:

- **Structure of the Treatment Program:** Different States have different structures for their treatment programs. For example, some are administered at the State level; other States may administer them at a county level. A large-scale national event (such as Hurricane Harvey in 2017) may involve a Federal response, which engages agencies like the Centers for Disease Control (CDC), for treatment method selection and impact assessments, or the Department of Defense (for operating high-altitude treatment aircraft). The USDA organic regulations only govern State or Federal level programs. Some States have delegated authorities for these treatment events to the County level. If the county is making the decisions about the treatment event, and/or is administering it, the control is no longer with the State, and it is therefore not considered to be governed by the State.
- **Area Impacted:** A key question related to treatment programs relates to whether an application actually occurred. Many treatment programs are targeted towards areas

where people live - in urban and suburban areas, not over farms. Determining where the application occurred is important to understanding the impact to organic farms. The NOP is able to provide both State officials and certifiers with county-level listings of certified organic operations to determine whether farms are actually present in the counties where sprays are being conducted.

- **Nature of Treatment:** In evaluating a potential impact to an organic farm, it is critical to understand both the treatment itself and the application method. Understanding the treatment involves considering the chemical itself: the nature of the substance, the amount used, and the treatment target (e.g., air column, water surfaces, crop/animals). (An air column treatment is a treatment where the substance fully volatilizes and breaks down before it can reach the ground. These are generally high-altitude sprays.) Understanding the application method involves knowing how the treatment is being applied (e.g., backpack sprayer, low-flying aircraft/crop duster height, or high-flying aircraft) and by whom (e.g., Federal or State agents versus county contractors).
- **Official Assessment of Impact from State or Federal Agency:** A key question is whether a State or Federal Agency provides official documentation assessing the impact of a treatment program on agricultural land based on the substance used and treatment method. These records are vital in understanding how the treatment program should be viewed when evaluating the impact of a public health treatment event on agricultural environments.

Using these factors, certifiers and the NOP can ask key questions:

1. What is the risk that an application occurred?
2. Per the regulations, did the treatment cause the harvested crop, or plant part to be harvested, to have contact with a prohibited substance, or were any livestock treated with a prohibited substance?

If there was no contact or treatment, there was no application of a prohibited substance. If there is a risk that an application occurred, then the certifier needs to determine whether that product is eligible for sale as organic, based on local conditions and informed by the criteria above.

The NOP frequently receives questions from State officials about the impact of pest or disease treatment programs on organic farms. The NOP evaluates these State-level questions on a case-by-case basis to determine whether a broad letter of determination is appropriate. In most cases, NOP has not issued a specific determination, because local decision-making by certifiers has been most appropriate given the discrete treatment area or targeted method of application.

In 2017, Naled was aerially applied to control mosquitoes after hurricane Harvey in Texas. The insecticide is a prohibited substance as defined in 7 CFR §205.105 (NOP Regulations). However, the USDA did not consider that “specific type of treatment being used to be an application that would impact the organic status of certified organic crops and livestock” because the application would not result in a detectable presence on the ground, plants, or

animals ([letter from Bruce Summers Administrator USDA September 11, 2017](#)). Thus, the NOP decided that any currently certified organic producer whose land fell in the treated areas would not lose their organic certification as a result of the pesticide application which is in line with §205.672. Also, any crops, livestock, and livestock products produced in those areas at the time of application could be sold, labeled, or represented as organic which potentially conflicts with §205.672(a). In July 2018, the Centers for Disease Control and Prevention aerielly applied Naled to treat mosquitos in Aransas County, Texas, due to heavy rains and Zika outbreaks. The USDA took the same position as in 2017 and stated that this would not impact certification of land nor crops ([letter from Bruce Summers Administrator USDA July 8, 2018](#)).

AMS communication after treatment events in Texas in 2017 and 2018 received wide attention by certifiers because this was the first time USDA issued a specific determination that the specific treatment program did not result in an application that would impact organic farms. Those decisions were based on the following set of very rare circumstances that align with the factors discussed above:

- The treatment programs were joint Federal-State program, with active engagement by the CDC and in 2017, the Department of Defense (DoD).
- The treatment involved the use of high-elevation aircraft, with substances and treatment protocols that treated the air column, not water or land. As noted above, an air column treatment is a treatment where the substance fully volatilizes and breaks down before it can reach the ground.
- The CDC provided information to USDA concerning the treatment program and its assessed impact for those specific events indicating that crops and livestock were unlikely to impacted.

In 2020, Naled was sprayed in Northern Indiana in response to control mosquitos carrying Eastern Equine Encephalitis (EEE). The USDA and National Organic Program did not issue a guidance statement regarding this spray application.

Certifiers may encourage certain steps for operators to prevent emergency pest or disease treatments from affecting their organic crops or livestock. If spray application of a prohibited substance, mandated by a government authority, for disease and pest treatment is unavoidable, certifiers may conduct risk assessments and do residue testing to determine if products can still be sold, labeled, or represented as organic.

Standards and Regulations

NOP Preamble:

Emergency Pest or Disease Treatment Programs

When a prohibited substance is applied to an organic production or handling operation due to a Federal or State emergency pest or disease treatment program and the organic handling or production operation otherwise meets the requirements of this final rule, the certification status of the operation shall not be affected as a result of the application of the prohibited substance, except that: (1) any harvested crop or plant part to be harvested that has contact with a

prohibited substance applied as the result of a Federal or State emergency pest or disease treatment program cannot be sold, labeled, or represented as "100 percent organic," "organic," or "made with..." and (2) any livestock that are treated with a prohibited substance applied as the result of a Federal or State emergency pest or disease treatment program or product derived from such treated livestock cannot be sold, labeled, or represented as "100 percent organic," "organic," or "made with..." However, milk or milk products may be labeled or sold as organically produced beginning 12 months following the last date that the dairy animal was treated with the prohibited substance. Additionally, the offspring of gestating mammalian breeder stock treated with a prohibited substance may be considered organic if the breeder stock was not in the last third of gestation on the date that the breeder stock was treated with the prohibited substance.

§205.400 General requirements for certification.

A person seeking to receive or maintain organic certification under the regulations in this part must:

- (a) Comply with the Act and applicable organic production and handling regulations of this part;*
- (b) Establish, implement, and update annually an organic production or handling system plan that is submitted to an accredited certifying agent as provided for in §205.200;*
- (c) Permit on-site inspections with complete access to the production or handling operation, including non certified production and handling areas, structures, and offices by the certifying agent as provided for in §205.403;*
- (d) Maintain all records applicable to the organic operation for not less than 5 years beyond their creation and allow authorized representatives of the Secretary, the applicable State organic program's governing State official, and the certifying agent access to such records during normal business hours for review and copying to determine compliance with the Act and the regulations in this part, as provided for in §205.103;*
- (e) Submit the applicable fees charged by the certifying agent; and*
- (f) Immediately notify the certifying agent concerning any:
 - (1) Application, including drift, of a prohibited substance to any field, production unit, site, facility, livestock, or product that is part of an operation; and*
 - (2) Change in a certified operation or any portion of a certified operation that may affect its compliance with the Act and the regulations in this part.**

§205.671 Exclusion from organic sale.

When residue testing detects prohibited substances at levels that are greater than 5 percent of the Environmental Protection Agency's tolerance for the specific residue detected or unavoidable residual environmental contamination, the agricultural product must not be sold, labeled, or represented as organically produced. The Administrator, the applicable State organic program's governing State official, or the certifying agent may conduct an investigation of the certified operation to determine the cause of the prohibited substance.

§205.672 Emergency pest or disease treatment.

When a prohibited substance is applied to a certified operation due to a Federal or State emergency pest or disease treatment program and the certified operation otherwise meets the requirements of this part, the certification status of the operation shall not be affected as a result of the application of the prohibited substance: Provided, That:

- (a) Any harvested crop or plant part to be harvested that has contact with a prohibited substance applied as the result of a Federal or State emergency pest or disease treatment program cannot be sold, labeled, or represented as organically produced;*

Preventative Steps

Organic certification is a process-based certification, and operations must assess and evaluate conditions and risks specific to their operation and region and demonstrate how they will comply with the regulation, including protecting organic integrity. All operations who may be subject to local or regional pest control or other health related control measures that may impact compliance with the National Organic Program must provide a plan for known risks to protect organic integrity §205.201(a)(5) and (a)(6). The following steps are considered best practices for prevention, and may be taken in order to protect the certified operation when there is application of a prohibited substance for disease and pest treatment programs mandated by governmental agencies:

For Operators:

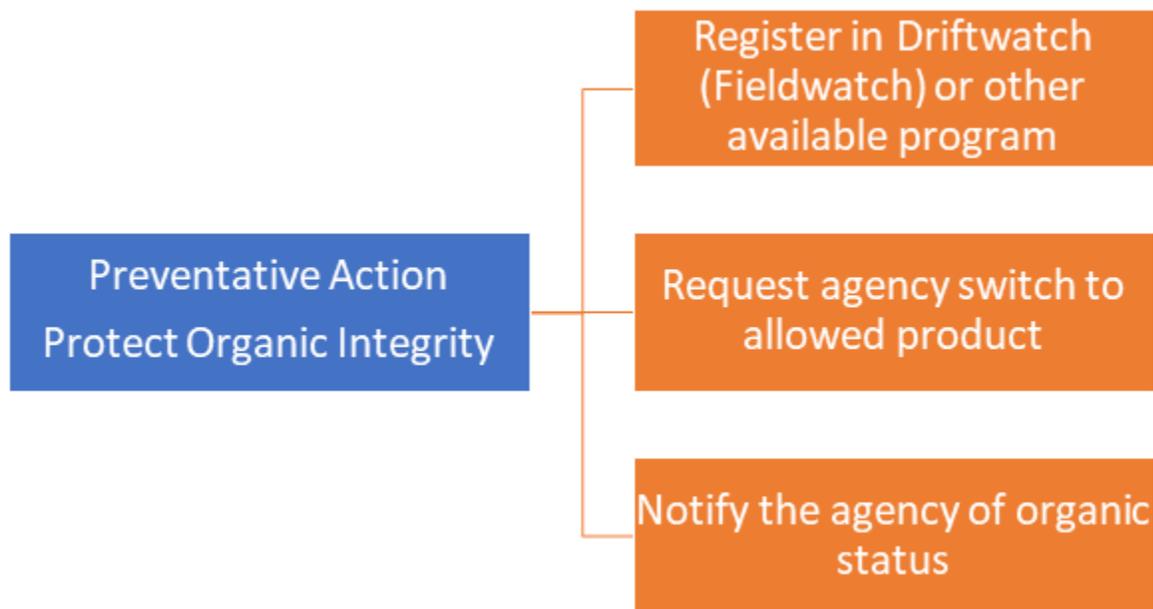
1. Submit a comprehensive plan for organic integrity in a compliant Organic System Plan (OSP), agreed to by the operation and certifying agent. Identification of associated drift and overspray risks should be addressed in this plan. §205.400(b)
2. Request the government spray authority to switch products to an organic-acceptable alternative - by way of the community stakeholder (certified entity) Notification from the farmer to the agency.
 - a. Certifiers may require the farmer to demonstrate preventative measures, including notification to applicable departments responsible for spray application of their organic status.

For Certifiers:

1. Educate operations about their rights and responsibilities relating to a drift or application event, including notification of their Certifying Agent of instances that may impact compliance (ex. Drift, mosquito abatement, etc.) §205.400(f)(1-2)
 - a. Organic farmers should keep in touch with State/County public health offices and their certifiers – some treatment programs are both able and willing to adjust treatment scopes to avoid organic farms in the area, but this takes active communication from farmers and certifiers.
2. Encourage farmers to register with the spray authority directly, or with DriftWatch®, or related programs where available.
 - a. This DriftWatch® registry tool is meant to help pesticide applicators and specialty crop growers communicate more effectively to promote awareness and

stewardship activities to help prevent and manage drift effects. DriftWatch® was designed by staff from the Purdue University Agricultural and Biological Engineering and Agricultural Communications departments with input and support from Purdue University Cooperative Extension Specialists. It is operated by FieldWatch®, Inc, a non-profit company created by Purdue in collaboration with interested agricultural stakeholder groups, in 2012 and is now independent of Purdue.

- b. FieldWatch® works with the USDA to encourage operations to join this registry. It is available in 22 states: Indiana, Illinois, Wisconsin, Michigan, Minnesota, Nebraska, Colorado, Montana, Missouri, Delaware, Kansas, New Mexico, North Carolina, Iowa, Arkansas, Ohio, South Dakota, Tennessee, Virginia, California, Maryland, Pennsylvania, and also in Saskatchewan. (Check their website for up-to-date information as their reach is expanding into other states.)
 - c. Operations cannot be mandated by the certifier to join DriftWatch®; however, the organic system plan may ask whether a producer is registered, or educational materials may be provided for contact to these types of organizations. Certifiers may also offer to register/map a registrant/farmer's land for them if they wish and authorize.
3. Some States and Counties use DriftWatch® to identify the presence of specialty producers, including organic farms, in the treatment area. Organic farms can register with the service as a potential added protective step. Request the government authority to switch products to an organic-acceptable alternative- by the certifying agent as an education/ outreach tool.
- a. In advance of application periods (summer/ wet seasons), certifiers are encouraged to identify and communicate the challenges faced by organic operations in the application path. If notice of application is received with ample time, the certifier may request ahead of time that the state or federal program responsible for the application consider switching products to an organic-acceptable alternative. It is important to note that applicator authorities for public health are broad, and a collaborative approach will be more effective than a directive approach. These entities may not be aware of the economic impact to certified operations. Certifiers may direct responsible authorities to [OMRI](#) or [WSDA](#) to find compliant products to switch to or the certifier may choose to evaluate any products internally for compliance as a courtesy.
 - i. The pest control agency may be unwilling to switch products due to cost, efficacy issues, or because of insufficient time to purchase and receive product before application. Therefore, advanced planning and education is critical to success.
 - ii. Depending on the region/county and agency responsible for the application, notification may or may not occur- and may not be required by law.
 - b. For specific State treatment programs, if the counties involved are known and provided to the NOP, the NOP can generate county-level maps to assess scope.



Assessment and Compliance Enforcement

Certifiers must have adequate evidence of application of a prohibited substance to organic crops/products to affect their ability to be sold/labeled/represented as organic. Evidence can include residue testing, physical observations, inspection report statements, and operator statements. For example, if an operation is not registered on DriftWatch® and did not observe/report drift or direct application and a residue test is negative or below level of quantification, then this would not affect certifiability based on lack of evidence. If spray application of a prohibited substance mandated by a government authority for disease and pest treatment is unavoidable, then the following steps may be taken:

1. Conduct Risk Assessment-
 - a. Evaluate if preventive measures in the annual certification cycle include measures specific to operation's unique challenges and region.
 - b. Evaluate if sampling and analysis is appropriate, and what actions will be taken with positive residue results. Considerations include the following.
 - i. Flag operations to collect samples, if applicable. *Note that the selected operation for sampling will be listed on a public record for residue results §205.504(b)(5).
 - ii. Prioritize those operations for sampling where risk is highest (Inadequate OSP, prevention plan, unwillingness to take measures to prevent application where available)
 - iii. Operations that report drift or direct application on their farmland.
 - iv. Randomly select operations in the spray zone. Challenges exist with defaulting to random testing, especially when a broad region is impacted, and may be inconsistently enforced or applied across certified entities.

- v. Consider the chemical, its half-life, and likelihood of contaminating the shipped commodity (hull or coating removed, edible portion unlikely to be impacted, etc.). Also consider the persistence of the chemical in the environment and when to take the sample.
2. Residue Testing-
- a. Collect samples for residue testing specific to the chemical sprayed.
 - i. Refer to [NOP 2613](#) for specific instructions on responding to positive residue results.
 - 1. Per §205.672, if contact with the crop or plant part to be harvested cannot be substantiated with evidence, then the product may be sold as organic.
 - 2. Anything above NOP Standards regarding EPA tolerances would not affect the certification of their land per §205.290, but the product may not be sold as organic per §205.671.
 - ii. If test results are negative, send a copy of results to operations and file according to Standard Operating Procedures.
3. Conduct outreach to applicable agency or submit complaints:
- a. If an operation is negatively impacted by the application of a prohibited substance for disease and pest treatment programs, they may submit complaints to the agency responsible for the application to encourage preventative action in the future.

Flow Chart for Emergency Pest or Disease Treatment Applications

The flowchart below was created from NOP 2613 specifically for Emergency Pest or Disease Treatment Programs. If testing was performed and residues are present, certifiers must assess that residues are present *due to the emergency spraying for pest and disease treatment programs by the applicable government organization(s); otherwise, this flow chart is not applicable*. All test results need to be retained by the certifier and available for the public. Certifiers must notify their client of the results.



*LOQ- Level of Quantification

*Report to FDA or EPA- if by intentional/direct application, report to the EPA; if by non-intentional/direct application, report to the FDA

Conclusion

Prevention is a key component in protecting organic integrity when it comes to Emergency Pest and Disease Treatment Programs. Developing a cooperative relationship with the agencies responsible for such programs is the best approach because state or local public health authorities have overarching jurisdiction to protect the public against disease. The law does not necessarily require these authorities to notify the public about applications and these entities

may not be aware of the economic impact to certified operations. Preventative steps include registration in a spray prevention program, such as Driftwatch®, notifying the responsible agency of organic status, and/or requesting that the agency switch products to an organic acceptable alternative. If preventative steps are not possible then certifiers must assess the operation for compliance. This may be done through residue testing. Although NOP 2613 does not mention §205.672 specifically, it does provide guidance on assessing positive residue results, which is necessary to determine whether contact occurred per §205.672(a). If an operation is negatively impacted by the application of a prohibited substance for disease and pest treatment programs, they may choose to submit complaints to the agency responsible for the application to encourage preventative action in the future.

About ACA Best Practices

ACA Best Practices describe actions certifiers should take to verify operator compliance, as well as producer activities that can easily be approved by certifiers. The ACA strives to ensure that all Best Practices are consistent with the Organic Foods Production Act (OFPA) and the USDA Organic Regulations. These Best Practices are not legally binding, but if a producer presents plans that fall outside of these Best Practices, then the Organic System Plan (OSP) should provide a rationale for alternative methods and an explanation for how their system fulfills the applicable portion(s) of the related regulations. Certifiers will evaluate whether the differences can be justified. Similarly, if certifiers take an approach that is different from what is presented here, they should be able to articulate how the differing approach is justified according to the OFPA and the USDA Organic Regulations. The ACA recommends all accredited certifiers adopt ACA Best Practices for consistent implementation of the USDA Organic Regulations. ACA Best Practices are reviewed periodically to ensure they are accurate and up to date. Concerns with this or any ACA Best Practice or guidance document should be submitted to the ACA Coordinator.

Resources

[Aerial Spraying | Mosquitoes | CDC](#)

[NOP Preamble Full Version.pdf \(usda.gov\)](#)

[USDA Letter dated September 11, 2017](#)

[USDA Letter dated July 3, 2018](#)

[DriftWatch - Home](#)

[FieldWatch – Communication. Cooperation. Collaboration](#)

[Code of Federal Regulations \(govinfo.gov\)](#)

[NOP 2613 Instruction on Responding to Results from Pesticide Residue Testing \(usda.gov\)](#)

[Legal Authority for Mosquito Control and Pesticide Use in the United States \(nih.gov\)](#)

[Joint Statement on Mosquito Control in the United States | Mosquito Control | US EPA](#)

Material Review Organizations:

[Input Material Registration | Washington State Department of Agriculture](#)

[Welcome to the Organic Materials Review Institute | Organic Materials Review Institute \(omri.org\)](#)