Q: By what authority does the District operate?

A: The law defines a special district as “any agency of the state for the local performance of governmental or proprietary functions within limited boundaries” (Government Code §16271 [d]). In other words, a special district is a separate local government that delivers public services to a specific area. The Orange County Mosquito and Vector Control District was formed according to guidelines set forth by the Mosquito Abatement Act of 1915 and the California Health and Safety Code. In 2002 Senate Bill 1588 amended the code, and is known as the Mosquito Abatement and Vector Control District Law. The District remains in compliance with and operates under the authority provided for in the Mosquito Abatement and Vector Control District Law.

Q: Who or what regulates pesticide applications made by OCMVCD?

A: The district complies with all federal, state, and local regulation and enforcement agencies. These include OC Agriculture Commissioner, cooperative agreements with the California Department of Public Health, Federal Insecticide Fungicide and Rodenticide Act (FIFRA), National Pollutant Discharge Elimination System (NPDES), and the California Environmental Quality Act (CEQA). A Programmatic Environmental Impact Report (PEIR) was commissioned by the district in 2012 to study any negative environmental impacts resulting from vector control activities in Orange County. The EPA provides their extensive review process of public health and environmental risks on their website. The human health toxicology is found here: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/guidance-human-health-risk-assessments-pesticides and the environmental impacts are outlined here: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/ecological-guidance-pesticide-risk-assessments

The PEIR can be found here: http://www.ocvcd.org/documents/FinalCombinedEIR_CCover.pdf

Q. What is the District’s primary form of mosquito control?

A: We practice Integrated Vector Management (IVM) relying on biorational larvicides, with public health pesticides reserved for situations where other methods would be ineffective to protect public health. The IVM Plan outlines surveillance and control measures for vectors in Orange County. The purpose of the IVM Plan is to provide guidelines to the District's staff and information to stakeholders regarding the various responses made to prevent and control disease vectors as well as introduced diseases and vectors in Orange County. The complete Integrated Vector Management and Response Plan can be found here: Integrated Vector Management and Response Plan.

Q. What is the Centers for Disease Control’s (CDC) position regarding the use of chemical mosquito control?

A: Chemical control measures are one part of a comprehensive and integrated mosquito management program. An integrated program is the most effective way to prevent and control
mosquito-borne disease. An integrated mosquito management program should include several components: surveillance (monitoring levels of mosquito activity, and where virus transmission is occurring), (2) reduction of mosquito breeding sites, (3) community outreach and public education, and (4) the ability to use chemical and biological methods to control both mosquito larvae and adult mosquitoes. **CDC’s website** provides detailed guidance about the use of control measures, including suggestions for a phased response and the actions that are possible at different levels of virus activity.

**Q. What will trigger adult mosquito control application?**

**A.** The District's aggressive campaign against mosquito larvae is intended to minimize the need to use public health pesticides targeting adult mosquitoes. If West Nile virus is detected in the community, the District's initial response will be to intensify its efforts to reduce mosquito breeding sites and increase its levels of larviciding in those areas in which West Nile virus has been found. Reducing the population of adult mosquitoes with public health pesticides (adulticides) that are registered by the US Environmental Protection Agency (US EPA) will be done if necessary to prevent human illness or to suppress a heavy nuisance infestation of mosquitoes. The decision to use adult mosquito control application either by truck-mounted, handheld, or aircraft application equipment will be based on surveillance information or the documentation of West Nile virus activity at a level that indicates a threat to human health. Adulticiding will be concentrated in areas most at risk for disease occurrence and will be conducted by certified and licensed applicators. More information on West Nile virus triggers for larvacide and adulticide applications can be found here: [http://www.ocvcd.org/documents/OCMVCD_Emergency_FINAL.pdf](http://www.ocvcd.org/documents/OCMVCD_Emergency_FINAL.pdf)

**Q: Does Duet pose a health risk to humans?**

**A:** When applied as indicated on the label for adult mosquito control, Duet does not endanger human health.

Prior to registering a product, the EPA evaluates products thoroughly to be sure there is a “reasonable certainty of no harm” to humans, animals and the environment from their use. Duet and its ingredients have passed rigorous tests required by the EPA and has been approved for use in ground and aerial application in outdoor residential and recreational areas and other similar areas. The full FAQ for Duet can be found here: [http://www.ocvcd.org/documents/DuetQ&A2015.pdf](http://www.ocvcd.org/documents/DuetQ&A2015.pdf)

**Q: How does Duet affect non-target insects?**

**A:** Because of the manner in which Duet is applied and the time of day it is applied, it should not affect beneficial insects, like bees and butterflies. Duet is applied in small droplets, which break down quickly in the environment. Since the product must hit a mosquito while it is in flight to have an effect, it is sprayed at night when mosquitoes are actively flying and when other insects, such as bees and butterflies, are not active.

However, Duet is an insecticide and may be toxic upon direct exposure to bees active outside the hive. Beekeepers can protect their bees by sheltering the hives during the spraying operations.