DATE: April 19, 2017

TO: Airport Commission

FROM: Hazel Johns, Airport Director

SUBJECT: 2016 Integrated Pest Management Annual Report

RECOMMENDATION:


DISCUSSION:

Background

The City of Santa Barbara adopted an Integrated Pest Management (IPM) strategy in January 2004 to reduce the amount and toxicity of pesticides used by the City and, where feasible, to eliminate pesticide use in public areas using alternative methods. This report highlights the Airport portions of the attached Draft 2016 IPM Annual Report.

In February 2006, the City Council approved the Pesticide Hazard and Exposure Reduction (PHAER) Zone model. In that model, areas of the Airport were mapped based on potential human and environmental pesticide hazard and exposure risk, as green, yellow or special circumstance (red) zones. Accordingly pest control products were evaluated on a range of human and environmental toxicity measures and rated as green, yellow or special circumstance (red). On a continuum, green products have low human and environmental toxicity, while there is high concern over the human and/or environmental toxicity traits associated with special circumstance (red) products. Zones are designated by their potential for pesticide contamination of humans and sensitive habitat. Green zones are areas of high potential for exposure, while red zones are areas of low potential for exposure. The model informs an applicator of the appropriate type of products that are appropriate to use in a specific area of the City.

Airport Department Pesticide Use

Airport pesticide applications concentrated on three types of pests in 2016: mosquitoes, weeds, and termites.
Exemptions

The Airport Department treated one building for termites with a red material, sulfuryl fluoride (Zythor), and applied Weevil-cide, an Aluminum Phoshide based fumigant to control gophers on the airfield.

Mosquitoes

During much of 2016 the Goleta Slough mouth was closed, leading to standing water in the Goleta Slough. The standing water created habitat on Airport property for mosquitoes requiring treatment. However in 2016, the closed Slough mouth, combined with severe drought conditions, lead to diminishing water levels in the slough throughout the year and significantly reduced mosquito production, leading to less need for on-going treatment.

In 2016 the Airport relied primarily on Altosid, a Methoprene based yellow extended release larvicide, and Vectobac, a green BTI based material, to control mosquito sources in the Goleta Slough. The Mosquito and Vector Management District (MVMD) of Santa Barbara County monitors mosquito populations and performs control activities for the Airport to prevent transmission of West Nile Virus and other diseases.

In 2016 the Mosquito and Vector Management District applied 566.4 lbs of Altosid and 282.91 lbs of Vectobac G on the Airport’s behalf, to control mosquito sources in and around the Goleta Slough.

Weeds

In addition to the manual weed control program at the Airport, staff used the yellow products Roundup ProMax and Surflan to maintain the airfield as needed for safe aircraft operations and to preserve infrastructure. During the 2016 FAA Part 139 airport inspection, vegetation blocking airfield lights and signs was noted. Additional manual control efforts, combined with additional applications of herbicides were needed to eliminate weeds from obscuring airfield lights and signs.

A small amount of yellow materials were also used, consistent with PHAER designations, on the Hollister Avenue traffic islands.

For 2016, Airport applied the following herbicides:
- 114.59 gallons of Roundup Promax (yellow liquid)
- 62 gallons of Surflan A.S. (yellow liquid)

Termites

As outlined above in the exemptions section of this report, the Airport Department used a contractor to apply 50 lbs of the red material Sulfuryl Fluoride (Zythor). This product was used while tenting for drywood termites, during the renovation of Airport Building 122.
Alternatives Used

Alternative efforts in 2016 focused on weed control, rodent control, and bee swarm/hive relocation. Weed control efforts consisted of mechanical control efforts including hand weeding and weed eating. Airport has an on-going mechanical control program for rats and mice at the Airline Terminal that eliminates many of these pests before they enter the building. Additionally, Airport staff use mechanical control methods to reduce the population of gophers outside of the airfield fence in landscaped areas. A beekeeper collects and relocates hives and swarms of bees that are found on the Airport. A total of 1,129 hours of alternative efforts were documented in 2016.

Citywide IPM Effort Totals

To minimize direct and indirect human health and safety hazards posed by pests at the Airport, the Department is again a major user of pesticides in the city. Airport Department used 52% of all green tier pesticides and virtually all of the yellow and red tier pesticides applied by the city in 2016.

2017 Strategy Changes

For 2017 the Airport Department will continue to use pesticides primarily to control airfield weeds and mosquitoes. Airport authorized MVMD to use Natular, a green tier mosquito control product for spring 2017.

Airport will likely seek to apply red materials to control rodents on the airfield to reduce the risk of aircraft striking animals that may be attracted to the airfield searching for prey.

Also the Airport may seek approval to treat additional facilities for drywood termites. Treatment will involve tenting using red materials to eradicate the pests.

PREPARED BY: Airport Facilities Maintenance

April 12, 2017 Memorandum to City Council