



City of Santa Barbara
Airport Department

Memorandum

DATE: October 10, 2019
TO: IPM Advisory Committee
FROM: Jeffrey McKee, Airport Facilities Manager
SUBJECT: Airport IPM Exemption Request - Fumitoxin

The Airport Department is requesting an exemption from the IPM strategy for application of Fumitoxin on the airfield. Because Fumitoxin has been identified as a hazard category I, signal word "Danger," product by EPA an exemption is required for use of this Tier I product.

The Airport may use Fumitoxin to eradicate gophers should they reach the threshold where they are damaging runway safety areas and attracting predators. The exemption would allow the Airport to maintain the airfield, which is inside a fenced "Restricted Access" area, to standards that protect passengers in the event that an aircraft leaves a runway or taxiway during an emergency. Additionally eradication of these pests reduces the number of predators (birds and land animals) that will be attracted to these areas, whereby reducing the threat of collision between animal and aircraft.

Describe the management goals and objectives for this site:

The Airport airfield is a restricted access area that must be maintained in accordance with FAR Part 139 requirements. Safety areas are required to be compacted and maintained in a cleared and graded state to prevent aircraft damage and potential injury to aircraft passengers in the event of an aircraft leaving the landing surface and traveling over the safety area during an emergency. The proliferation of gophers in the safety areas has reduced compaction and lead to an uneven, and potentially hazardous surface.

Gopher populations also attract predators that may pose a collision hazard for aircraft using the facility.

The goals are to eliminate pest populations so that these areas can be maintained in accordance with applicable regulations and to reduce the likelihood of collisions between aircraft and animal by reducing the attraction for predators.

Describe the pest problem.

Airfield areas are heavily populated with gophers that are damaging Airport safety area surfaces and creating operational safety issues.

The presence of large populations of gophers also invites predators like coyotes and raptors to Airport infield areas. The expanded population of predators attracted by this food source increases the likelihood of dangerous collisions between wildlife and aircraft.

What is the damage threshold for this pest at this site?

Airport safety area concerns are the dirt mounds that are created by the pest on the airfield and the potential undermining of this area. It is mandated by the FAA that safety areas be maintained as a smooth and stable surface capable of supporting the passage of aircraft and rescue equipment during emergencies without undue damage.

The second concern is that rodents, as a prey item, attract predators to the Airport. By minimizing prey opportunities, the Airport helps to minimize the population of predators at the Airport, which helps to minimize the risk of aircraft collisions with wildlife.

Our goal would be to completely eradicate the pests and establish and maintain a comprehensive maintenance program to maintain a pest free safety area in the treated areas.

What monitoring of the pest and potential predators (where applicable) has been conducted and what control methods have been previously used at the site?

Unfortunately from an IPM perspective, FAR Part 139 requires the Airport to implement a Wildlife Mitigation Plan to reduce the potential for incidents where aircraft strike or ingest wildlife into engines. Both types of encounter can lead to catastrophic results. Because of this requirement, the Airport is required to minimize the presence of predatory species that may have helped naturally limit gopher populations.

Alternative control methods that may include applications of other pesticides or mechanical trapping involve increased presence of staff or contractors in areas directly adjacent to active runways. An increased presence subjects both applicators and Airport runway users to additional risk. In the interest of safety for both parties, it is imperative to minimize all access to these areas.

One additional natural control mechanism that occurs periodically at the Airport is flood. Because much of the Airport is flood prone, flooding events substantially reduce pest populations. It is also important not to rely on flood as a control mechanism because large gopher populations that are destroyed by flood create an additional aircraft hazard by attracting large numbers of scavengers.

Describe how the product would be applied including frequency, concentration, and method of application.

The product will be applied according to label directions. The product is inserted into active gopher runs, and then covered and activated by soil moisture. Additional applicator safety measures are also practiced as directed by the product label.

What non-target impacts do you anticipate?

With the use of fumitoxin few non-target impacts are anticipated when the product is applied in active gopher runs. There is no risk of secondary kill with Fumitoxin.

How does the use of this product help achieve the site management goals and objectives? Note if this is curative or preventative.

This is an on-going curative effort.

How will the effectiveness of this product be monitored? Include your expected results and indicators of success.

The Airport currently performs safety inspections at least twice within each twenty-four hour period per FAA requirements. The purpose of these inspections is to make note of any deficiencies or maintenance items that need to be addressed. During these inspections the effectiveness of this process will be monitored. Airport maintenance staff also monitor gopher populations on the airfield.

Describe the site conditions. Please note if this is a restricted access area, within 20 feet from a creek or body of water, subject to runoff or in a designated "Pesticide Free Zone."

All Airport airfield areas are located within the restricted access boundary adjacent to active aircraft movement areas. The area is fenced using chain link topped with barbed wire. No direct human contact is anticipated.

Since the product converts from solid to a gas in the presence of moisture, no runoff to adjacent water bodies is expected.

Describe the alternatives considered and detail why they were eliminated. Include an analysis of why this is the most environmentally prudent option and why a less-hazardous chemical, non-chemical option, or taking no action is not feasible.

The Airport has considered less toxic alternatives, however these alternatives are typically less effective, require multiple visits to the site, may involve a risk of secondary kill and would subject applicators and runway users to the additional risks associated with their presence.

Use of fumitoxin is a quick, one time application with no secondary kill. Dangers leading the product to be labeled with an EPA category 1 label are primarily dangers to the applicator associated with improper application.

In the past we have used both Diphacinone and Strychnine. Diphacinone involves multiple applications, with limited effectiveness and the risk of secondary kill. The use of Strychnine involves one application but is a much more toxic substance with a significant potential for a secondary kill. Airport also has a Preventative Maintenance Program which employs mechanical traps on Airport Properties outside of the Airport Operations Area as a means to limit re-infestation of the airfield. The use of mechanical steel traps inside the airfield is not feasible.