



The Food Safety Modernization Act (FSMA) and Implications for Dealing with Nuisance or Pest Birds



Most humans appreciate the beauty and elegance that birds represent in the natural world, but they can become a hazard to humans when they endanger or contaminate our food supply. In these circumstances, the Food and Drug Administration (FDA) have rightfully moved to protect human health and safety. In 2011, President Obama signed into law the Food Safety and Modernization Act or FSMA, the first major overhaul of our nation's food safety practices since 1938. In the years following, FDA has issued seven regulations to implement the FSMA. In general, the FSMA now requires preventive actions (versus purely reactive) to protect food from becoming contaminated, including, for example, preventing pest infestation, including birds. FSMA covers the entire food supply chain from "Field to Fork."



Two of the implementing regulations, Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food (CGMP & PCHF) and Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Animal Food (CGMP & PCAF), applies to food facilities, e.g. manufacturers, processors, packers, and holders of food. This regulation requires food facilities to identify and utilize preemptive (proactive) measures to prevent known or suspected hazards from contaminating the food chain.





For example, if Birds are regularly entering a food production area from the loading dock to roost, nest, eat or fly in the proximity of food destined for humans or other animals (e.g. pets or livestock), clear actions to establish and maintain control of the birds must be undertaken by the facility. Historically, this has been a very challenging problem to address. Traditional methods of bird control are expensive, ineffective, inhumane or, often, all of the above. There are new and more effective approaches emerging to control pest bird infestations that are threats to food processors and the US Food Supply Chain.

CGMP & Preventive Controls regulations for human and animal food

In summary, the CGMP & Preventive Controls regulations for human and animal food requires the following steps for compliance:

- 1 Hazard analysis** – identify and evaluate reasonably foreseeable hazard(s) for each type of food
- 2 Preventive controls** – identify preventive controls that mitigate the hazard(s)
- 3 Monitoring** – all preventive controls tracked for effectiveness
- 4 Corrective action** – procedures needed to address situations where preventive controls are not properly implemented.
- 5 Verification** – activities conducted to confirm that preventive controls are effective in mitigating any hazard(s)

It should be emphasized, that these controls apply not only to facilities dealing with foods for human consumption but also those dealing with foods for animal consumption (like pets or livestock).

Inspections and the FDA

To be in compliance with the CGMP & Preventive Controls regulations, when the FDA inspector arrives at a facility, employees must show proof they have been trained in food handling and safety. No animals should be in the area (not even pets), but more importantly, no pests of any kind should be detectable. Obviously, visible birds or bird droppings in the facility could jeopardize the positive outcomes of inspection.



The Entire Supply Chain from “Field to Fork” or “Ocean to Fork” also Includes Sanitary Transportation

Sanitary transportation is covered under its own regulation, which is distinct from the CGMP & PCHF/PCAF regulations discussed earlier in the paper. Appropriate measures include adequately cleaning vehicles between shipments and maintenance of proper load temperatures.

Large intermodal shipping facilities are prime targets for pest birds because of the volume of “food” these facilities process. A common, but ineffective, control method for pest birds in these facilities is to use netting to provide a barrier through which the birds are not able to travel. Unfortunately, the same cannot be said for bird droppings, if the birds have access to the area above the netting. Bird netting is also prone to deterioration over time resulting in small holes and gaps which birds can easily slip through and if they cannot, birds are often trapped and die in these nets. Unfortunately, netting is most often an ineffective control for the prevention of bird droppings landing on fruits, vegetables and grains waiting to be shipped.





The Damage Birds Can Cause in Food Processing Facilities

Birds are opportunistic by nature. They look for warm places to nest near plentiful food sources. Food distribution, manufacturing and packaging facilities provide the perfect avian habitat. These facilities offer a warm, dry environment with numerous choices of location for building a nest. Most often birds choose hidden locations, not easily detected by humans, until their droppings show up on the floor or worse yet on the food product itself.

This is a serious health hazard as bird droppings contain many pathogens which can cause serious and sometimes fatal illnesses. In addition, bird droppings are corrosive to many metals and damage or destroy equipment driving up downtime and maintenance expenses.

Under the FSMA, if an FDA inspector spots nesting birds in the food production area of a facility, they can mandate a recall, detain food product and/or suspend operations of the facility until the infestation is addressed. Needless to say, if made public, the food processor's brand (e.g. reputation with consumers) can suffer irreparable harm causing significant loss of market share. Customers will certainly shy away from products produced by a manufacturing facility found to have birds and their droppings in and around food products. And of course, no one wants to go back to a restaurant where they were sickened by tainted food.

The Effective, Affordable and Humane Approach to Pest Bird Control for Food Facilities

According to the FSMA, the food supply chain (from “Field to Fork”), serving both people and animals (pets, livestock, etc.), must be proactive and preventive to mitigate hazards that contaminate our food. BirdBuffer has created a unique solution that was informed by over a decade of experience and centers around the patented dry vaporization technology. This new approach, will not harm birds or humans and has been developed to enable Food Facilities to gain control of their pest birds.

BirdBuffer is safe, humane and effective:

BirdBuffer, when used in conjunction with our control fluid, will effectively and humanely keep birds away from critical areas within your operation. The MA Fluid product is made from food grade materials and the active ingredient (Methyl Anthranilate, found in Concord Grape skins) is FDA approved as GRAS (generally recognized as safe). This active ingredient is used in many food products consumed by humans including grape flavored candies and grape-flavored drinks, which makes it safe for use in Food Processor operations. This product is effective because MA is commonly known to irritate a nerve found in the respiratory system of all birds (the trigeminal nerve). It causes a “pepper-spray-like” effect on birds, they simply decide to move to a place where the MA is not present. This effect is only found in birds and has no effect on other species (most notably humans and more broadly mammals).

BirdBuffer is flexible and affordable:

Bird Buffer is an extremely flexible solution, creating an invisible barrier or “bird-free zone” around the most critical areas in your facility. Whether birds are infesting a production area, a packaging line, a loading dock or a transportation hub, BirdBuffer is highly effective in resolving this issue.

Compliance with the FDAs updated FSMA Regulations: An Example Involving Pest Birds

- The Health and Safety Manager at “ABC Soup Company” has been given the responsibility by the company’s CEO to ensure they are in compliance with the new FSMA regulations. They know that their next inspection is most likely, just around the corner and, of course, the CEO expects ABC Soup Company to pass with “flying colors.”

- Step one, is for the team to undertake a hazards analysis. Fortunately, because the facility does not see rodents or cockroaches because of their effective controls means that the rodents/cockroaches are in fact hazards that are being controlled. However, they discover Sparrows (and some Sparrow droppings) in and around the facility which they correctly determine is a hazard that will require proactive / pre-emptive countermeasures.
- Step two: As the team begins to assess the control measures, they realize that they have already attempted to exclude birds from the facility by covering their truck loading bay openings with strip curtains. They've also installed netting and spikes around building overhangs to try to prevent birds from roosting and nesting in or outside the building. Despite the significant cost of these countermeasures, unfortunately, they are proving to be ineffective. After a quick Google search on the internet, the H&S Manager learns about a solution produced from Concord Grape skins that is proven to deter birds and keep them out of certain areas. Intrigued and knowing she needs to find pre-emptive countermeasures that will actually work, she reaches out to BirdBuffer.
- After further observation and analysis, it is found that the loading dock, despite the strip curtains, is where the sparrows are gaining entry to the plant. Working with the team at BirdBuffer, they install a BirdBuffer unit using EcoBird 4.0 Fluid near the dock openings pointing away from the facility. Birds found in the facility are allowed (encouraged) to exit through the loading dock bay doors by temporarily opening the strip curtains. The team thoroughly cleans and disinfects any areas inside the facility where birds and their droppings have been found. Any nests found are also removed. This holistic approach creates a bird-free buffer zone now focused on the known areas where the birds have been gaining entrance to the facility.
- Of course, the ABC Soup Company and the H&S Manager must observe (monitor) the BirdBuffer equipment to ensure it is effective in preventing the sparrows from entering into the facility. They observe that effective bird control is maintained as long as the BirdBuffer units remain on and filled with fluid. The patented "dry vaporization" technology breaks up the fluid into tiny particles less than 20 microns (much smaller than the diameter of a human hair) and are residue free with each machine only using one gallon of fluid per month.

- As they have always done, the company ensures that, in the unlikely event bird droppings contaminate the food production area, production is immediately stopped and all contaminated food product is properly disposed of (corrective action). Since installing the BirdBuffer units they have not had any such incidents.
- Knowing that ABC's vendors fall under the same regulatory format and realizing that the reputational risk to ABC Soup Company is identical regardless of from where the contamination originates, the H&S Manager decides to reach out to their suppliers to share with them the experience they've had with BirdBuffer and encourage them to evaluate whether the solution would be applicable in their facilities.

Tell us about your bird problem

About BirdBuffer



BirdBuffer is focused on solving the public health, safety and damage to critical facilities, caused by pest birds. Without it, our customers face economic loss, serious health & safety risks and facility damage. We help facility managers, health and safety professionals and maintenance teams, eliminate these issues. BirdBuffer's products include a patented technology which delivers tiny particles of MA to an area of up to one acre per machine, and provides the most efficient, safe and humane option for eliminating bird problems.

Please contact us for a free consultation about how BirdBuffer can solve your pest bird problem long-term.

BirdBuffer

info@birdbuffer.com
(425) 697-4274
www.BirdBuffer.com

BIRD BUFFER[®]
Invisible Protection. Visible Results.[®]