



# Technical Bulletin

Setting the Standard for Food Safety and Pest Management Solutions

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## Non-Conforming Product



It happens; product is identified as not meeting specification, whether for quality reasons (appearance, flavor, etc.) or regulatory (undeclared allergens, foreign material contamination, CCP deviations), now what? The best course of action is to place all suspect product on hold, tag it as "Do not use" and inspect, analyze, investigate and disposition. When placing product on hold, it is always best to record the hold in a log that includes reason for hold, product, lot, date, time, etc. This information can be used for reconciliation and investigation into potential consumer/customer complaints.

Dispositioning product properly is the most important aspect of a non-conforming product program. "When in doubt, throw it out" is always a good rule of thumb to reduce the risk of allowing suspect product from reaching the end consumer. Cost is always a factor, sometimes it is best to throw the product away rather than reprocess it, which leads to an increased use of resources. Whatever is decided, you must properly record all aspects. Example, if you hold 68 cases of product and use a sampling method such as top, middle, bottom, of a pallet, you may end up discarding 12 cases that were used for analysis so you must properly reconcile the hold: "56 cases released, 12 cases destroyed". This is a "pitfall" for many organizations, it raises a red flag when a pallet of product is held for high salt content and a pallet is released with no samples recorded as taken.

Submitted by: Rich Gibson, ACE, CHA

## The Black Soldier Fly



Source: <http://entnemdept.ufl.edu>

**Class:** Insecta **Order:** Diptera **Family:** Stratiomyidae **Genus:** Hermetia **Species:** H. illucens

The Black Soldier Fly is a sleek looking fly that many confuse with a wasp. However, like most flies, the black soldier flies only have two wings (wasps have four) and does not possess a stinger. Although the loud buzzing they create when flying is enough to concern many people, adult soldier flies pose no danger.

The black soldier fly is often associated with the outdoors and livestock, usually around decaying organic matter such as animal waste or plant material. Since black soldier fly larvae consume decaying matter, they have been used to reduce animal manure in commercial swine and poultry facilities. Although they are not known as a disease vector, adult soldier flies are a potential mechanical vector of various pathogens.

The family Stratiomyidae comprises 260 known species in North America. In the southeastern U.S., the black soldier fly is abundant during late spring and early fall, and has three generations per year in Georgia. While common in the continental United States, this fly is found throughout the Western Hemisphere.

The adult flies' measure about 16 mm (5/8 inch) long. These medium-sized flies have a predominantly black body, with metallic reflections ranging from blue to green on the thorax and sometimes with a reddish end of the abdomen. The legs are black with whitish tarsi. The wings are membranous; in the resting time, they are folded horizontally on the abdomen and overlapped.

The larvae and adults are considered neither pests nor vectors. Instead, black soldier fly larvae are essential decomposers in breaking down organic substrates and returning nutrients to the soil. The larvae have voracious appetites and can be used for composting household food scraps and agricultural waste products. Removal of attractants such as decomposing organic matter is the only real control needed.

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## It's in the Wheels



In the recent past, a client received a "Presumptive Positive" for *Listeria* Species when completing their quarterly environmental monitoring swabs. The presumptive positive originated in the processing area known as the kitchen. The client decided to skip the extra step of confirming species, for two reasons, cost and fear. The QA Manager admitted he was afraid of what the confirmation would imply if the sample was confirmed as *Listeria Monocytogenes* (LM). Reaction to the presumptive positive was swift and appropriate. The area was deep cleaned, the floors, walls, drains and stationary equipment were sanitized and

additional samples were taken from all zones in the kitchen.

A few days later the laboratory report showed all samples from the floors in the area were again, presumptive positive. This time the species was confirmed as LM. Production was halted while additional cleaning and testing was completed. Since the positive results were limited to samples collected from the floor there were no concerns of food contact surfaces being affected. As an added precaution, the totes used for work in process (WIP), dumpsters, rolling trash cans and forklifts were all cleaned in a wash room adjacent to the kitchen.

Samples were taken again from the kitchen floors and, once again, were reported as positive. The team decided to have a brainstorming session and included several team members who were not involved in the initial sampling or cleaning. It was a great decision in doing so.

A night shift production employee who would stock the kitchen with the raw materials needed for the day shift asked a simple question: "Did you test the wheels from the WIP Trolley?" The WIP Trolley is a stainless-steel cart with stainless steel wheels coated in rubber. The cart moves from the kitchen to receiving to the cooler to the warehouse and back into the kitchen and, due to all of the movement it does, was missed during the last round of cleaning. To ensure nothing was missed this time, a "scout team" walked the facility and grabbed all carts, etc. again and brought into the wash room.

All items were cleaned and sanitized and the room itself was cleaned from top to bottom. After everything was dried and tested the team began production while awaiting the results of the laboratory analysis. A total of 50 sample swabs were taken and sent to the lab and all were negative.

Weekly samples were taken from all areas and zones of the mid-sized facility and analyzed. After 6 weeks of negative results the environmental monitoring program was scaled back, Sanitation Standard Operating Procedures (SSOPs) were updated and an emphasis placed on cleaning tasks that specifically addressed wheels of cart, etc. In the end, the whole process made the organization better.

### Take Away Tips:

- Everything is a potential source
- Brainstorming is an effective method for determining root cause
- Bring in the outsiders to assist
- If you're going to do it, overdo it

**Submitted by: Rich Gibson, ACE, CHA**