

Case Study: USDA Food Safety and Inspection Service (FSIS) Green Team Composting Initiative

USDA agencies have established regional and local Green Teams. The primary objective of Green Teams is to promote energy efficiency, water conservation, sustainable buildings and waste reduction at the regional and local levels. Green Teams are dedicated groups of employees, regardless of discipline or organizational level, which facilitate the practical implementation of sustainable operations principles within their organizations. To ensure Agency compliance with applicable environmental laws and regulations, and sustainability requirements and responsibilities, FSIS established the Greening Initiative Committee (GIC). Under the Greening Initiative Committee, Green Teams from each FSIS Agency Program Office commit staff time and resources to implement conservation measures at their individual worksites. This case study highlights an initiative implemented by one of FSIS's green team towards improving sustainability and reducing waste at their site.

Composting at the Western Laboratory

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Have you ever wondered what happens to all the meat that is collected for testing? Tens of thousands of pounds of ground beef, ready-to-eat (RTE) products, muscle, liver and kidneys are collected and sent to the three field service laboratories each year. Well, wonder no more! Today you will learn all about an exciting project that changed the disposal of meat

samples. First, some background information to get us started. Several pounds of meat are collected and only a small portion is prepped for chemical or microbiological testing. The remainder of the sample (both chemistry and microbiology) is stored in the freezer as the reserve in case further testing is required. Once a sample is tested and found to be negative, the reserves are disposed of in the normal trash on a regular basis.

As part of Office of Public Health Science contribution to the USDA's and EPA's U.S. Food Waste Challenge the Western Laboratory (WL), situated in the very environmentally-conscious San Francisco Bay Area, began a pilot program for composting negative meat samples with an initial goal of composting approximately



Samples ready to be prepped for composting
Photo courtesy of Daysena Pelham



Prepping samples for compost
Photo courtesy of Daysena Pelham

5,000 lbs. of meat per year. The U.S. Food Waste Challenge, launched on June 3, 2013, has the goal of raising awareness about food waste and provide resources that help organizations and individuals:

- Reduce food waste by improving product development, storage, shopping/ordering, marketing, labeling, and cooking methods.
- Recover food waste by connecting potential food donors to hunger relief organizations like food banks and pantries.
- Recycle food waste to feed animals or to create compost, bioenergy and natural fertilizers.

Given the eco-friendliness of the Bay Area, finding a company that would collect meat for compost wasn't hard. A couple of phone calls, about \$100/month and the WL found itself the proud lessee of a one-yard compost bin. Next up was deciding what samples to compost. Chemistry, microbiology, or both? WL decided to start with the negative chemistry samples since WL received fewer chemistry samples than microbiology samples. WL also decided to start with the smaller sample load since this was a pilot project and no one was really sure how it was going to work. WL had the compost bin and samples to compost: on to the fun part-prepping the samples for composting! There is only one word to describe the composting process: MESSY! There are actually several more words-smelly, tedious, time-consuming...you get the idea. All of the samples are stored in several layers of plastic bags and all the plastic has to be removed before the samples can be composted. The process of removing the plastic can cause blood to splatter all over the place, making cleanup a challenge. Once all the plastic has been removed, the meat samples are placed in compostable bags, which presented another problem. By their nature, compostable bags are flimsy things. How else could it break down in



Prepping samples for compost
Photo courtesy of Cathy Pentz



Approximately 1000 lbs. of meat ready for disposal.

a compost pile? To compensate for the flimsy bags WL double-bagged the samples. In the beginning, cleaning up after the composting was an ordeal (well, it's still an ordeal, just a little less of an ordeal). There is blood and melted ice from the samples on the counters and on the floors. After much trial and error (and a lot of mopping the floor and scrubbing the counters), WL found that putting cardboard on the floors around the counters and covering the counters with some absorbent paper alleviated a lot of the mess. Once WL had a workable process for composting negative chemistry samples, negative microbiology samples (composed of ground beef samples, RTE products and large RTE reserves) were added to the composting program. Once all the samples have been prepped for



WL employees prepping samples for compost
Photos courtesy of Cathy Pentz and Daysena Pelham

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Pelham

compost they are stored in the freezer until the day of the compost pickup, when the EH&S officer or other volunteer gets a great upper-body workout transferring all the samples to the compost bin.

Since the program started in May of 2013, WL has composted over 21,000 lbs. of meat! And all the work done at the WL has laid the groundwork for the other field service laboratories (in St. Louis, MI and Athens, GA) to start their own composting program.

Employees pictured include Oymon Leong (M), Bryce Merrill (M), Dave Martin (QAM), Norm Pabros (M), Virginia Galan (M), Cora Scott (M), Melanie Adams (M), Hongnhung Nguyen (C), Greg Johnson (SR), Terrence Gee (M), Maria Duenas (M), Cora Scott (M), Megan Kennedy (EH&S) and Hue Quach (SR)

M = Microbiology

C = Chemistry

QAM= Quality Assurance Manager

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