



Environmental BMPs Essential in Ensuring Dairy's Future

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Editor's Note: This is a special feature from the Center for Dairy Excellence exclusively for the Farmshine newspaper.

Pennsylvania's dairy farm families face many challenges in ensuring the future of their businesses. But the biggest may be the mounting pressure to demonstrate environmental compliance.

While farmers have long been touted as the original environmental stewards, regulation changes proposed to ensure restoration of the Chesapeake Bay watershed will place increasing scrutiny on the best management practices dairy farms have in place to protect the environment.

Pennsylvania has until Nov. 29 to revise its Watershed Implementation Plan (WIP) submitted to the EPA to demonstrate how it will reduce nitrogen, phosphorus and sediment runoff coming from Pennsylvania into the Chesapeake Bay.

The state's first attempt at its WIP was rejected by the EPA for not meeting the grade in the area of phosphorus and sediment.

If this next draft does not meet EPA's expectations, the federal agency will put in place a "backstop" Total Maximum Daily Load (TMDL) requirement for the state. This will lead to more restrictions on how farms and municipalities within the watershed comply with environmental regulations.

So what can dairy farmers do to help Pennsylvania meet EPA's expectations? Demonstrate your commitment to environmental stewardship by making sure you have all of the environmental best management practices in place on your dairy.

According to Doug Goodlander, director of nutrient and odor management act programs with the State Conservation Commission, all dairy farms, regardless of size, have requirements when it comes to environmental compliance.

Goodlander led one of four breakouts at the Pennsylvania Dairy Profitability Forum, hosted by the center earlier this month, to look at the role of dairy farms in the environment.

In his breakout, Goodlander explained that changing requirements and the intensity on restoring the Chesapeake Bay will place a new emphasis on ensuring environmental compliance from all animal operations.

As Goodlander explained,

Pennsylvania's Clean Stream Laws require every dairy farm to have a conservation plan and a manure management plan in place. However, many farms, especially smaller dairies, do not have current versions of either plan in place.

In many cases, these farms are already using environmental BMPs like cover cropping and no-till. But their efforts are not documented. It's essential that all farms get their plans and BMPs in order to demonstrate compliance. In this week's *Center page*, two dairy farm families share how they have adopted environmental BMPs that have benefited both the environment and their dairies.

For more information about environmental BMPs, contact your local conservation district.

What are your environmental BMPs?

What are the BMPs you have in place on your dairy? If you're uncertain, ask yourself these basic questions:

- Do you have a manure management plan in place and is your conservation plan current?
- Are animals excluded from sensitive areas such as streams through buffers and fencing?
- Do you have adequate manure storage to minimize hauling in unfavorable weather conditions?
- What are you doing to prevent barnyard run-off and soil erosion from polluting local streams?

For help in implementing environmental BMPs, contact your local conservation district.

JEFF AND JESSLYN BALMER *Stoney Path Farm* **Lititz, Lancaster County**

Jeff Balmer and his wife Jesslyn milk 50 cows in Lititz. The farm includes 110 acres and borders Warwick Township, with the township's major water source found in a well divided off the Balmer's farm around 20 years ago.

What environmental BMPs are in place? "We put in a manure tank that can hold 6 to 8 months of manure, and we collect all barnyard rain runoff in a holding tank," Balmer said. "Prior to installing those tanks, we only had two weeks worth of manure storage on the farm."

"We put in a waterway in our cropland, and we turned our fields to follow the contour of the land," he said. "We plant cover crops and we do nitrogen tests before, during and at the end of the growing season to evaluate if we applied manure properly."

How have they benefited your farm? "By being able to haul only in the spring and fall, it has allowed for better neighbor relations. It also gets the nutrients applied more timely to when they are used



The Balmer Family

by the crops, cutting down on fertilizer costs.

"Using our manure management plan has helped us determine scheduled application rates for each field, and we have been able to hold back soil erosion by using cover crops."

Why it is important? "For me, it is very important with the water source for Warwick Township bordering my property. The well is located where all water exits our farm. If there is a heavy rain, we must know nothing is getting away."

MILTON AND ERNEST ROTZ *Cedar Pine Farm* **Chambersburg, Franklin Co.**

Milton Rotz and his father Ernest farm 500 acres and have a 250-cow dairy. Cedar Crest uses cover cropping and no-till farming practices to protect their soils.

What environmental BMPs are in place? "We recently poured concrete to provide a 'heavy use protection area' to keep both cows and heifers off the pasture when it is too wet. We put gutters on the roofs to divert clean water away from the barnyards.

"We installed a 12 foot by 140 foot manure pit on the dairy to provide six months of storage," he said. "We also have a smaller pit in the heifer area to keep manure contained with no way to go anywhere."

How have they benefited your farm? "The manure pit helps us better utilize the nitrogen in the manure as fertilizer," Milton said. "When I plant corn, I am able to cover all of my ground with the manure, and the convenience is unbelievable - you're not trying to haul manure when it's freezing outside."

"I use my manure management plan as a guideline



Milton Rotz

to help me keep track of where I hauled the manure and what fields need more fertilizer," he said. "I also use less bedding in our barns because the 'heavy use protection' areas keep cows from carrying mud from the pastures to the bedding area."

Why is it important? "The protection area helps keep buffer areas clean and green, and it keeps cows from stomping all of the grass down and creating mud," said Milton. "The manure storage keeps manure from running away with snow and rain, and it all keeps our creeks cleaner."