

# Targeted Environmental Solutions for Virginia's Dairy Farms

## FACT SHEET 1

### Introduction to the Precision Phosphorus Feeding Incentive Program

Research reports with large numbers of high producing cows and across multiple lactations have revealed the desirability of feeding phosphorus at lower levels than has been reported from a survey of Virginia dairy herds. The 2001 National Research Council (NRC) supports a lower supplementation rate. A voluntary incentive program is being conducted by the Department of Dairy Science at Virginia Tech and is described in this article. All Grade A permitted herds received an introductory survey in October asking about the interest in participating. We will provide results of the survey in future Virginia Dairyman articles as well as in extension newsletters. Selected herds indicating interest in the incentive program will be contacted and signed up over the next couple of months and we anticipate starting the program in January 2006.

#### Reasons a dairy might participate:

1. Prepare your farm for pending rule changes. Beginning fall of 2005, EQIP funded farms must have a phosphorus based nutrient management plan and on January 1, 2007 all VPA permitted farms must have a phosphorus based plan.
2. Even if Number 1 does not apply to you or you are already at recommended levels of supplemental phosphorus, this project will document the dairy industries willingness to reduce nutrient output and benchmark your herd's level of supplementation.
3. You get free feed testing for phosphorus and major nutrients.
4. Free ration consultation is available to you and your nutritionist if requested.
5. If goals for phosphorus intake are reached a payment will be made to you.

#### Expectations of the dairy farm:

1. The herd owner/manager will meet with project personnel at the beginning of the project and discuss expectations. Information on feeds fed and amounts, milk production, number of cows, fat test, and breed will be collected.
2. Total mixed rations and other feeds, up to 3 feeds per farm per sampling period, will be sampled according to established protocol and sent by the owner/manager every other month to Cumberland Valley Analytical Services. Postage will be paid by the project. Any change in feeds fed or amounts as well as milk production and cow numbers should be reported at this time.
3. Once a year, project personnel will be allowed to make a check visit and obtain test sample and herd information for verification.
4. Payments will be made at the end of the first and second year but feed sample collection and analysis will continue for a third year to document long term impact.

### **Reporting Procedures and calculation of payments:**

1. All data collected will be confidential and individual results will only be available to the farm and project personnel. Summaries may be made with some data but only with averages from 5 or more farms.
2. Cumberland Valley Analytical Services will report results of the lab analysis, calculated intake of phosphorus, required phosphorus amount, and intake as a percent of required.
3. At the end of the first and second year a standard deviation from the six yearly measurements will be calculated and any unusual sample (one that is above or below the average  $\pm$  the standard deviation) will be discarded.
4. If the check test does not match previous results another check sample will be collected by project personnel. If further tests reveal differences it will be at the discretion of project personnel to determine payment eligibility.
5. There will be two-tier compensation with herds feeding phosphorus at less than 105% of 2001 NRC requirements receiving \$12 per cow per year and herds feeding between 105 and 115% of requirements receiving \$6 per cow per year. In some situations a farm might qualify for one year but not the other. Herds above 115% excess will receive no direct payment but will receive the free feed testing and ration consultation.
6. Maximum payment per farm will be \$4,800 for one year or \$9,600 for the two year period.

### **Other information related to the project:**

This project is an educational effort to foster awareness of an issue important in Virginia and other states. It is for herds overfeeding phosphorus as well as those that have already modified their feeding practices. Educational materials will be prepared periodically dealing with related issues and assistance will be available to the farm or herd nutritionist as requested. There may be situations where it is not cost effective to get within the required ranges for payment. It is up to the individual farm and their consultants to determine what is economically feasible.

We will enroll up to 300 herds. Factors such as geographical location and complexity of the feeding program may be considerations for enrollment.

For further information contact Charlie Stallings at 540-231-3066 or [cstallin@vt.edu](mailto:cstallin@vt.edu). Information on the project will be maintained at the Dairy Science Extension web site address: [www.vtdairy.dasc.vt.edu](http://www.vtdairy.dasc.vt.edu).