

Conservation & You

A publication of the
Southeast Pennsylvania
Association of Conservation Districts

Bucks
Chester
Delaware
Montgomery



Winter 2010

Winter Manure Application – A Complicated Equation

Winter manure application is a difficult issue for both the agricultural community and non-agricultural community. Many people outside of the agriculture community believe winter manure application should not be allowed at all. The reality is that most farmers would prefer to never have to apply manure in the winter. Another reality is that field conditions for manure application are not always suitable when the manure has to be applied. As well, not all farms that produce manure have storages. This year southeast PA saw its second wettest growing season on record, leaving many farmers with continually saturated fields. This, in turn, delayed harvests and the manure applications that generally follow the fall harvest. In many areas conditions were not suitable for harvest until the ground was frozen – most farmers don't want to cause soil compaction and rutting from using equipment in a saturated field. Having mentioned some of the variables that affect a farmer's production, there are also a few constants: some farmers will continue to apply manure in the winter and the non agriculture community will continue to question the integrity of this practice, leading to more time spent addressing these issues by local and state government. To further complicate this equation, manure is often seen and smelled much longer when it is winter applied, wearing on the minds of the concerned. So what's the solution?

To better understand winter manure application we must first understand what winter is. Winter, as defined in Act 38 – Nutrient Management Rules and Regulations, is: December 15 - February 28 **or** when the ground is frozen at least 4 inches deep **or** the ground is snow covered. When these conditions exist the soil is not able to infiltrate at its given ability, causing the potential for contaminated runoff. Just as important to realize is that biological activity generally does not occur under these conditions, negating the breakdown and uptake of the manure and its nutrients. Act 38 regulations further state that fields receiving winter manure applications must have at least 25% crop residue or an established cover crop present. As well, there are application setbacks that are required under these regulations; much too lengthy to include in this article. Some will say "But these rules only apply to those farms that are Concentrated Animal Operations (CAOs) or volunteer in the program." And that is correct!

(continued on p.2)

Post Construction Storm Water Management Workshop for NPDES Construction Permits

The Southeast Association of Conservation Districts presents a spring training workshop for Plan Designers, E.I.T.'s, new Engineers, and Municipal Officials. The training will be held at the Penn State Great Valley Conference Center, Warren V. Musser Auditorium in Chester County, on **March 26, 2010, 8:30 a.m. – 4 p.m.** **Registration deadline is March 19, 2010.**

Topics to be discussed include;

- Infiltration BMP's
 - Loading Ratios
 - Infiltration in Floodplains
 - Pretreatment for Infiltration
 - Failures – what to do next?
- Volume Credits
 - What to do when you can't infiltrate
 - Non-Structural BMP Volume credits
 - Volume Credits for Green Roofs; evapo-transpiration, etc.
- Level Spreaders
 - The Good, the Bad, and the Ugly of Level Spreaders
 - Specific Guidance
- PCSM Plans
 - Common Mistakes
 - Standard Notes
 - Presenting information to expedite the review – a look at WS 5A

The workshop is a joint effort of the Bucks, Chester, Delaware and Montgomery County Conservation Districts. Registrations will be accepted on a first come/first served basis. Please visit your local Conservation District website or office for the registration form. The cost of this workshop is \$85/person, which includes a continental breakfast and lunch.

Pennsylvania Wetlands Replacement Project

On November 13, 2009 staff from Natural Lands Trust (NLT) finished planting over 1700 trees and shrubs consuming 110 man-hours in a newly restored 2.5 acre wetland on their Paunacussing Preserve in Buckingham Township, Pa. This planting effort is essentially the last piece in almost five years of watershed and permitting coordination between Natural Lands Trust (NLT), DEP's Pennsylvania Wetlands Replacement Project (PWRP), Bucks County Conservation District, and Army Corps of Engineers' (ACOE) Philadelphia District.

Planning for the project began in early 2005 when NLT approached PWRP for assistance in restoring the pond area at their Paunacussing Preserve to a more natural condition. The pond embankment, constructed several decades ago, backed up seven springs considered the headwaters of the Paunacussing Creek and provided optimal conditions for warming the water before continuing downstream. NLT had a goal to develop a project that would restore forested wetlands to provide better habitat, better water quality, and an educational opportunity, all while removing a deteriorating structure that would have required precious conservation dollars to maintain and/or replace. As NLT and PWRP staff worked together to develop a plan, they coordinated with the Bucks County Conservation District and ACOE Philadelphia District for further watershed and permitting needs. The coordination between these four entities allowed an enhanced watershed, as well as meeting restoration goals for NLT and wetland goals in an area difficult to find restoration projects for PWRP. NLT provided invaluable coordination assistance, additional funding and staffing time, allowing this project to reach its fullest potential, beyond what NLT or PWRP could have done individually. Both NLT and PWRP will continue to monitor this wetland as it matures.

*Shelby E. Reisinger, Water Pollution Biologist
PA Department of Environmental Protection*

Winter Manure *(continued from front page)*

But, DEP also provides guidance for winter manure application, through the Field Application of Manure handbook. When both the regulations of Act 38 and the guidance provided from DEP are considered, the problem becomes closer to being solved. Both provide information that is designed to prevent potential pollution from occurring. All of this information, to be understood properly, needs to be explained in detail. This can be achieved with the assistance from your County Conservation District, and I would encourage local officials that are presented with these issues to do just that.

In summary, it is important to understand that winter manure application is an acceptable and necessary practice in Pennsylvania and will likely continue to be if it is done properly. We, the conservation district staff, have the mission of protecting our natural resources for all of our citizens and encourage our respective farmers to do the same. In these ever-changing times it is more critical than ever that, as conservationists, we encourage agriculture producers to be pro active in solving this and similar issues that affect the perception of the agriculture community. One tool that should be utilized in the solution of this difficult equation is the Winter Manure Application Matrix. This tool can be found on the Pennsylvania Nutrient Management Program website http://panutrientmgmt.cas.psu.edu/main_technical_manual.htm. Supplement 10 is the matrix.

Manure, like many things, can be an asset if properly managed. If mismanaged, it can easily become a liability. I would suggest that any farmer that applies manure in winter have all the information available to them regarding the rules and recommendations of manure handling and application. I have personally come across several farmers in the past year that were unaware of the manure handling and application requirements. Ignorance is said to be bliss, but knowledge is still king. Do the farmers of your community a service the next time you see them applying manure; empower them with information – that is part of the solution!

*Gus Meyer
Montgomery County CD*

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DEP & Conservation Districts Take on Boot Camp

In September 2009, DEP held a statewide erosion and sediment control boot camp training primarily for those erosion and sediment control technicians with less than three years experience. State College, PA is usually the town of choice when it comes to statewide gatherings due to its central location in the state. However, this event took place about 100 miles southeast of State College at Fort Indiantown Gap, PA. For those of you who are not history buffs Fort Indiantown Gap has been in operation since 1931 beginning as a training facility for the PA National Guard and is still used today as a training facility for military services. The "boot camp" aspect of our training was not marching around in our steel-toed boots, hard hats and safety vests, but was limited to eating our meals cafeteria style alongside the service men and women and resorting in the barracks from 1931 (or pretty close to that time).

The purpose of this gathering was to bring consistent training to the newer employees of conservation districts as well as DEP employees. Due to an increasing need for inspections in the Marcellus Shale Region, oil and gas inspectors were also in attendance. A lot of inconsistencies were raised during a Question & Answer session regarding administrative items such as major and minor permit modifications and permit renewals. Further guidance regarding permit renewals was distributed a few weeks later at the Annual Chapter 102/NPDES/105 Meeting at State College, PA. A group field inspection training was conducted at a nearby NPDES permitted site, which brought to light further differences on how districts operate and enforce the NPDES Permit. After returning from this inspection we all strongly agreed that more time should be placed on conducting field inspections for future trainings. It was also proposed that regional training be held in place of statewide training not only for time and cost savings but also primarily due to the diverse issues that are faced in different parts of the state.

While not every issue was resolved by the time we left Fort Indiantown Gap or State College it got the gears rolling on what areas of the program need clarification and additional training. While it may be difficult at times to prepare permit packages or deal with certain project issues because conservation district and DEP offices operate a little differently, efforts are being put forth to bring statewide consistency to the Erosion and Sediment Control Program (even going as far as residing in military barracks!).

*Michelle Ferri
Delaware County C.D.*

Land Use Policy Changes

On August 19, 2009, DEP's Office of Community Revitalization and Local Government Support finalized their Land Use Policy. It was published in the PA Bulletin on August 22, 2009. This policy changed the way many of DEP's Permits handle the Land Use Information questions, as well as the questions themselves. The policy only applies if there is a county comprehensive plan, a municipal comprehensive plan, municipal zoning, AND the permit is in Appendix A of the policy. The PAG-02 permits ARE in Appendix A, so this policy will apply to both General and Individual NPDES Permits in municipalities where the other conditions apply.

For the complete policy, on the web direct your favorite browser to <http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-76213/012-0200-001%20Final.pdf>. For how this policy affects NPDES Permit applications, please continue reading.

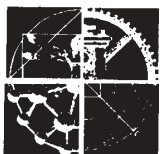
Simply put, if you have zoning approval, that approval may be used in lieu of the Act 67, 68, and 127 municipal notification letters for permit submittals. Otherwise, the policy states that "A Municipal Land Use Letter from the host municipality and a County Land Use Letter from the county planning agency should be included in the authorization application at the time of submittal..." This in essence states that the applicants should have responses from the county and the municipality prior to submitting the NOI to the districts. If the responses to the municipal notifications call out a conflict, a land use review will commence.

"If the Land Use response letters are NOT included in the authorization package, the applicant should demonstrate that they attempted to obtain the letters. A copy of the correspondence sent by the applicant via certified mail to the municipality...and the county... should be included in the authorization application". The policy further states that the applicant should allow 30 days for the response letters, and should not submit the authorization application until after the 30 days has elapsed.

What this policy means to both districts and applicants is that permit applications should not be considered administratively complete until either the response letters are received and submitted, or the 30 days have passed from the time of the municipal notification letters were received. However, each conservation district may use some discretion interpreting this policy. To avoid time delays and resubmission fees, please contact your local conservation district to learn their policy before submitting an application for an NPDES permit.

*Jeffrey McKenna
Montgomery County CD*

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“TreeVitalizing” Watersheds

In addition to administering, on behalf of the County, the federal government’s National Pollutant Discharge Elimination System (NPDES) program and Pennsylvania’s Chapter 102 Erosion and Sediment Control program, Southeast PA County Conservation Districts also work proactively and through broad-based partnerships to administer other watershed protection related programs. These programs include but are not limited to the “Tree Vitalize Watersheds” partnership.

The TreeVitalize Watersheds partnership is a public/private collaboration coordinated by the Pennsylvania Horticultural Society (PHS). The program is an initiative to support projects that restore tree canopy cover in the five county region of Southeastern Pennsylvania, including Delaware, Bucks, Chester, Montgomery and Philadelphia Counties.

Through this program, County Conservation Districts work with key project partners to identify high-priority riparian forest buffer restoration opportunities, conduct technical assistance and educational outreach activities, develop riparian (streamside) forest buffer restoration plans, secure landowner agreements, and develop and implement riparian forest buffer operation & maintenance plans. Managed regionally by PHS, the program is funded by the Pennsylvania Department of Environmental Protection and corporate sponsor Aqua PA.

During 2009 alone, Delaware, Bucks, Chester and Montgomery County Conservation Districts worked through this program to successfully establish approximately 37.5 acres of native riparian forest buffers throughout Southeast PA. These improvements were accomplished through unique partnerships consisting primarily of staff and volunteers from numerous state agencies, county departments, municipalities, watershed associations/organizations, school districts, academic institutions, homeowners associations and church groups. In addition to Southeast PA County Conservation District involvement, the Stroud Water Research Center and Fairmount Park Commission (15.3 acres) and are also making similar strides through the TreeVitalize Watersheds program.



Volunteers learn proper planting techniques as part of the TreeVitalize Watershed project at Swarthmore College.

Implementation of these projects is expected to result in increased protection of our public drinking water supplies and improved municipal and resident awareness regarding the value of riparian forest buffers in reducing non-point source pollution, improving water quality and enhancing aquatic and wildlife habitats. The Conservation District is also providing technical assistance to these project partners, who are currently conducting regular and ongoing maintenance activities essential to the long-term success of these projects.

For more information regarding the TreeVitalize Watersheds program in *your* county, please contact your County Conservation District Watershed Specialist.

*Brian J. Vadino
Delaware County CD*



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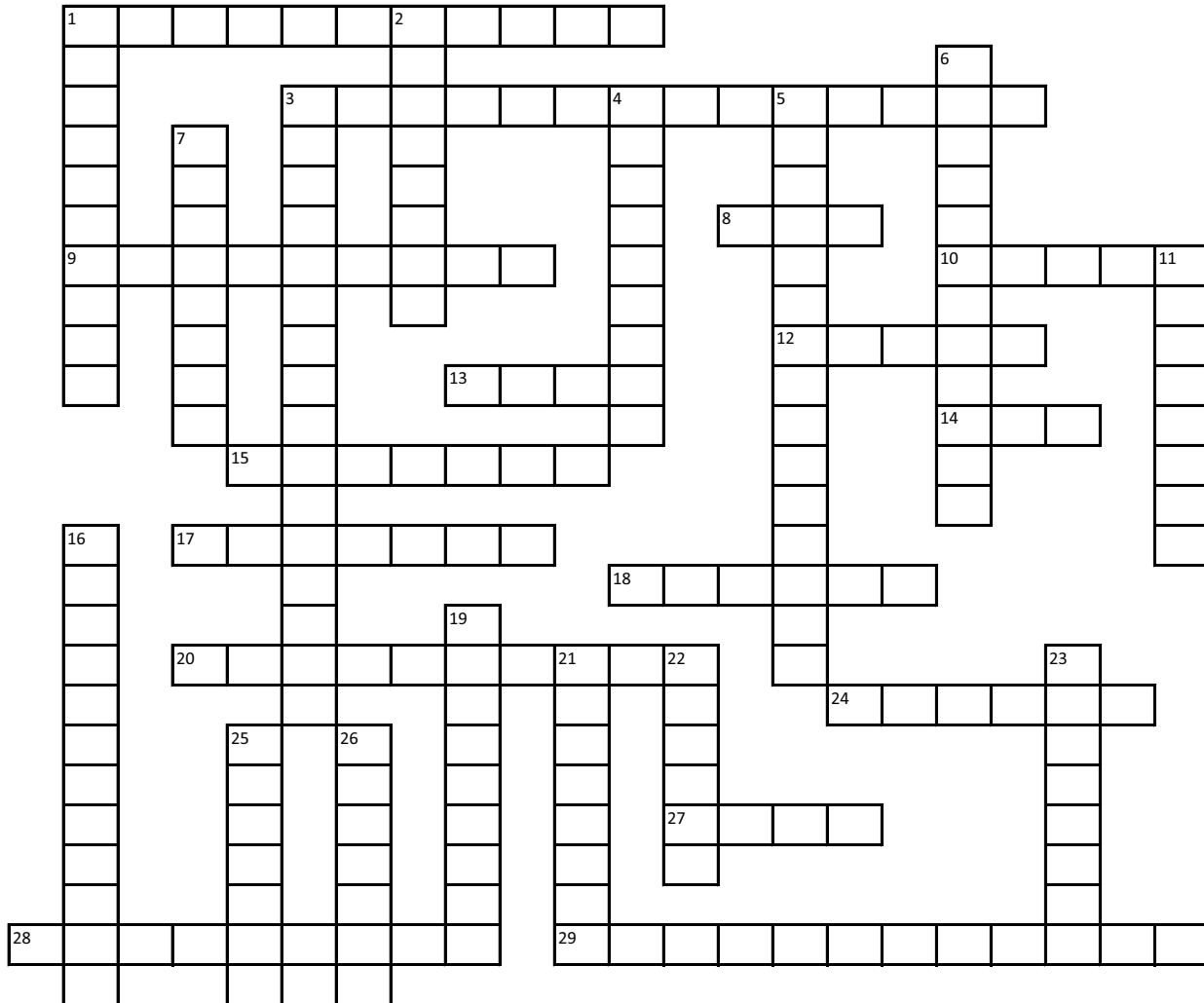
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1. Type of permit
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4. Half foot min. for channel
5. Needed for Special Protection Waters
6. Waters of the _____
7. Type of pavement
11. Soil transported by surface water
16. E&S BMP with < 5 acres drainage
19. E&S Review of calcs and BMP's
21. Social or _____ Justification
22. Allow ___ days for Act 167 responses
23. Contractors follow this
25. Water conveyance
26. Small settling basin BMP

Across

1. Land use ___ questions
3. Chapter 93
8. Not required for General
9. PNDI
10. Permit under section 402 of Federal Clean Water Act
12. Type of roof
13. Water flow control at outlet
14. Delineation line on E&S Plan
15. Worksheets 11 - 13 if not meeting this requirement
17. Temperature Impact
18. Wire cage
20. Best ___ Practices
24. Concrete block or rip rap protection
27. 3/acre - mulch
28. Call before you dig
29. This or land use coefficients

(answers on p.7)

Waterline Crossing for Heavy Construction

The waterline crossing depicted below was installed for brief period at a site in Nockamixon Township, Bucks County, PA. The work site was a new bridge installation by the Pennsylvania Department of Transportation. Due to tight work quarters, a twelve-inch pump diverted clean water from the stream around the work area. This allowed crews to install bridge abutments in a dry stream bed and reduced the amount of sediment discharged into the stream. The pump ran for 24 hours, 7 days a week, and construction traffic was not impeded using the water line crossing baffle system.



To address the issue of energy dissipation, R-7 riprap was installed in the stream bed at the outlet of this large diameter pipe. This system appears to have been very effective.

*Eric Wightman
Bucks County CD*

Montgomery County Conservation District Revised Fee for Service Schedule Effective April 1, 2010

At the regularly scheduled public Board of Directors meeting of the Montgomery County Conservation District conducted on December 8, 2009, the district board approved revisions to the district fee for service in the Erosion & Sediment Control program effective April 1, 2010.

The revised district application form is available on the district web site at www.montgomeryconservation.org.

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DISTURBEDACRES	FEEFORSERVICE
GENERALPERMIT	\$500
0.1 to 1.0	\$455
INDIVIDUALPERMIT	\$500
1+ to 5.0	\$975
5+ to 10.0	\$1,560
10+ to 15.0	\$2,600
15+ to 20.0	\$2,990
20+	\$2,990 plus \$65/acre over 20

Single Residential Lot: A fee of \$200 will be charged for a single residential lot with minimal earth disturbance, low hazard on less than 3% slope.

Agriculture Construction: The above fee schedule will apply for agricultural earth disturbance other than agricultural "plowing or tilling." The NPDES permit requirement may also apply depending on acres to be disturbed.

Chapter 105 or other Water Quality Permit – A fee of \$95 will be charged for an adequacy review of the Erosion and Sediment Control plan for a Chapter 105 Permit unless the application is part of a larger plan of earth disturbance being reviewed by the Conservation District.

The Montgomery County Conservation District Board of Directors has approved revising the Adjustment of fees section of the district application to include municipal projects.

Fees will be waived only for plan review applications filed under the name of a Government Agency of the United States, or the Commonwealth of Pennsylvania. This exemption does not apply to school districts, municipalities, or special purpose authorities, or to any private, or non-profit organization.

*Richard Kadwill
Montgomery County CD*

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