



Biosolids Regulatory Amendments: VPA and VPDES

Christina M. Wood
Biosolids Guidance and Regulation Coordinator
christina.wood@deq.virginia.gov

WaterJAM 2013 - Biosolids Workshop
Richmond Convention Center
September 9, 2013



Existing Permit Requirements

- VPA & VPDES Permits remain in effect as written until modified
- VDH-BUR Permits follow the amended regulations immediately
- For land included in a VPA Permit and a BUR – the VPA Permit must be followed.

Amendments: Biosolids Regulations Effective Immediately: VPA, VPDES, BUR

- Extended Setbacks:
 - A doctor's note is required for DEQ to grant an extended setback to a citizen
 - If permittee makes a voluntary agreement with citizen, provide a copy of agreement to DEQ

Amendments: Biosolids Regulations Effective Immediately: VPA, VPDES, BUR

- Extended Setbacks *cont.*:
 - Use DEQ form letter
 - DEQ must receive at least 48 hrs before land application commences on that field.
 - DEQ will notify permittee at least 24 hrs before land application commences on that field.

Amendments: Biosolids Regulations Effective Immediately: VPA, VPDES, BUR

- Use new Permit Application Forms
- Landowner Agreements
 - Must use Form D Part D-VI Rev 9/14/12
 - ❖ Permit application – new or reissuance
 - ❖ Modification to add land
 - ❖ Change of land ownership

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Certified Land Applier will maintain a log book
 - Location
 - Arrival & Departure Times
 - Name of Any Visitor to Site
 - Complaints Received
 - Unusual Conditions

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Certified Land Applicators
 - Must be on site at all times.
 - Amendments clarified: If while onsite it becomes necessary to leave the site, the certified land applicator must be able to return within 30 minutes.

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Financial Assurance
 - Increased to \$2 mil
 - New Forms
 - For BUR: Submit demonstration of financial responsibility by November 30 , 2013

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Sources of Biosolids
 - Only “Approved Sources” may be Land Applied
 - Sources will be identified in the Biosolids Management Plan

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- NMP
 - Must be on site
 - Submit to DCR (Central Office), Farmer & Locality within 30 days after commencing land application
 - DEQ may receive a copy upon request
 - For sites where soil P levels are high, NMP must be approved by DCR prior to application

9VAC25-32-410 Table 1: Soil Phosphorus Levels Requiring NMP Approval

REGION	SOIL TEST P (ppm) (Mehlich I - VPI & SU Test)*
Eastern Shore and Lower Coastal Plain	135
Middle and Upper Coastal Plain and Piedmont	136
Ridge and Valley	162
*If results are from another laboratory, DCR approved conversion factors must be used.	

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Odor Control Plans:
 - How will Land Applier address malodor
 - How will Generators address malodor
 - Submit within 90 days



What is Malodor?

Malodor is an unusually strong or offensive odor associated with biosolids or sewage sludge as distinguished from odors commonly associated with biosolids or sewage sludge.



Land Applier Odor Control Plan

- Methods used to identify and abate malodorous biosolids in the field prior to land application; and
- Methods used to abate malodorous biosolids if land applied.
- Procedures for informing the generator of odor issues and complaints;

Generator Odor Control Plan

- Methods used to minimize odor in producing biosolids;
- Methods used to identify malodorous biosolids before delivery to the land applier;
- Methods used to identify and abate malodorous biosolids if delivered to the field, prior to land app.;
- Methods used to abate malodor from biosolids if land applied; and
- Generator's contact information for reporting odor issues and complaints

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Sign Posting
 - 5 business days prior to delivery to the site.
 - Maintain for 5 days after land application is complete
 - Do Not remove for 30 days after land application

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Sign Posting *cont.*
- All signs must be visible & legible from **right-of-way in both directions of travel**
 - ❖ Double sided or 2 signs – in most situations
 - ❖ Perpendicular to the travel path

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Sign Posting *cont.*
 - At intersection of public right-of-way and main site access road or driveway – on the main road
 - On each road bedside the field to be land applied

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

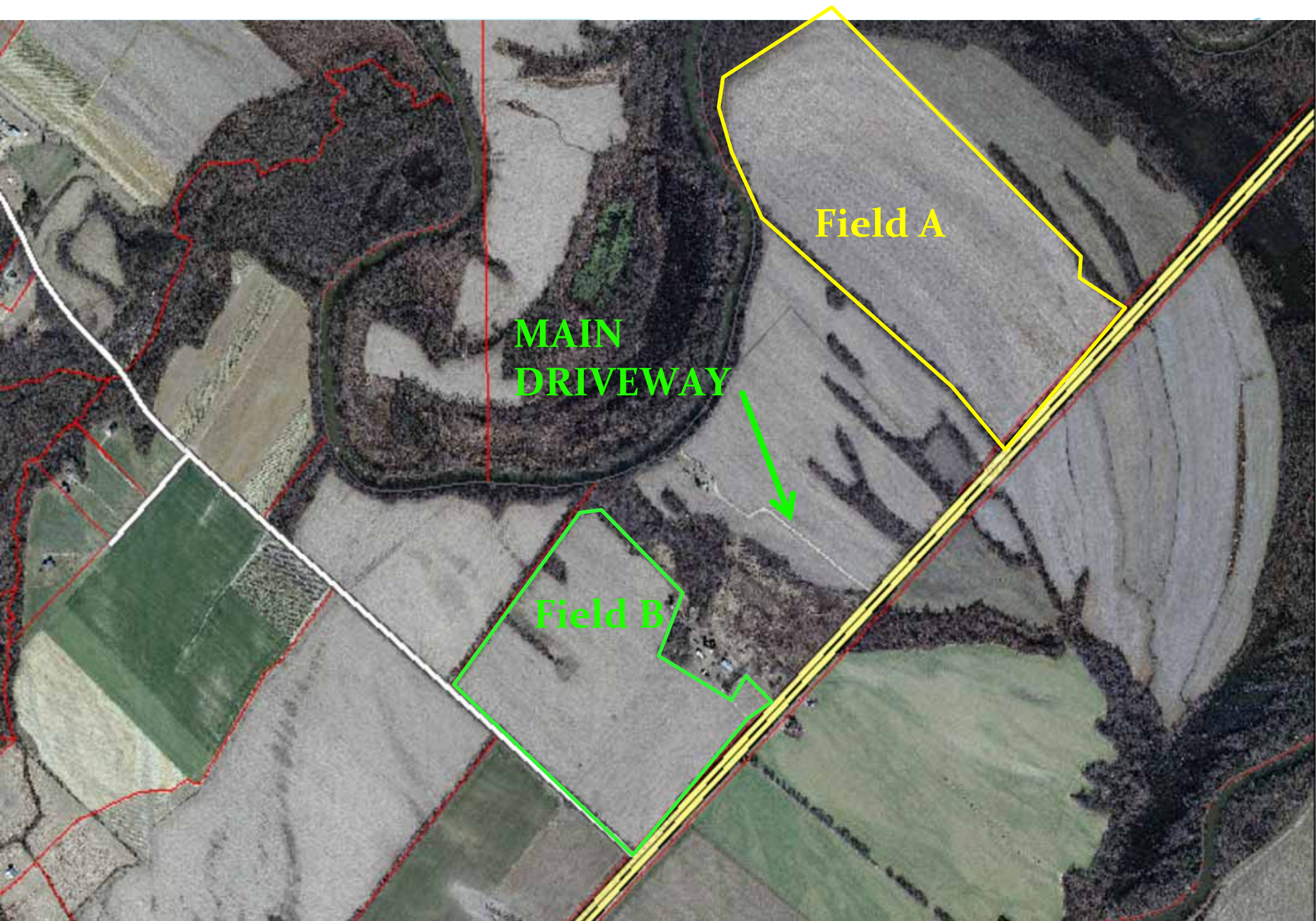
- Sign must include:
 - Biosolids are being land applied
 - Permittee name
 - Phone number of designated individual to respond to inquiries and complaints
 - DEQ Regional Office phone number

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

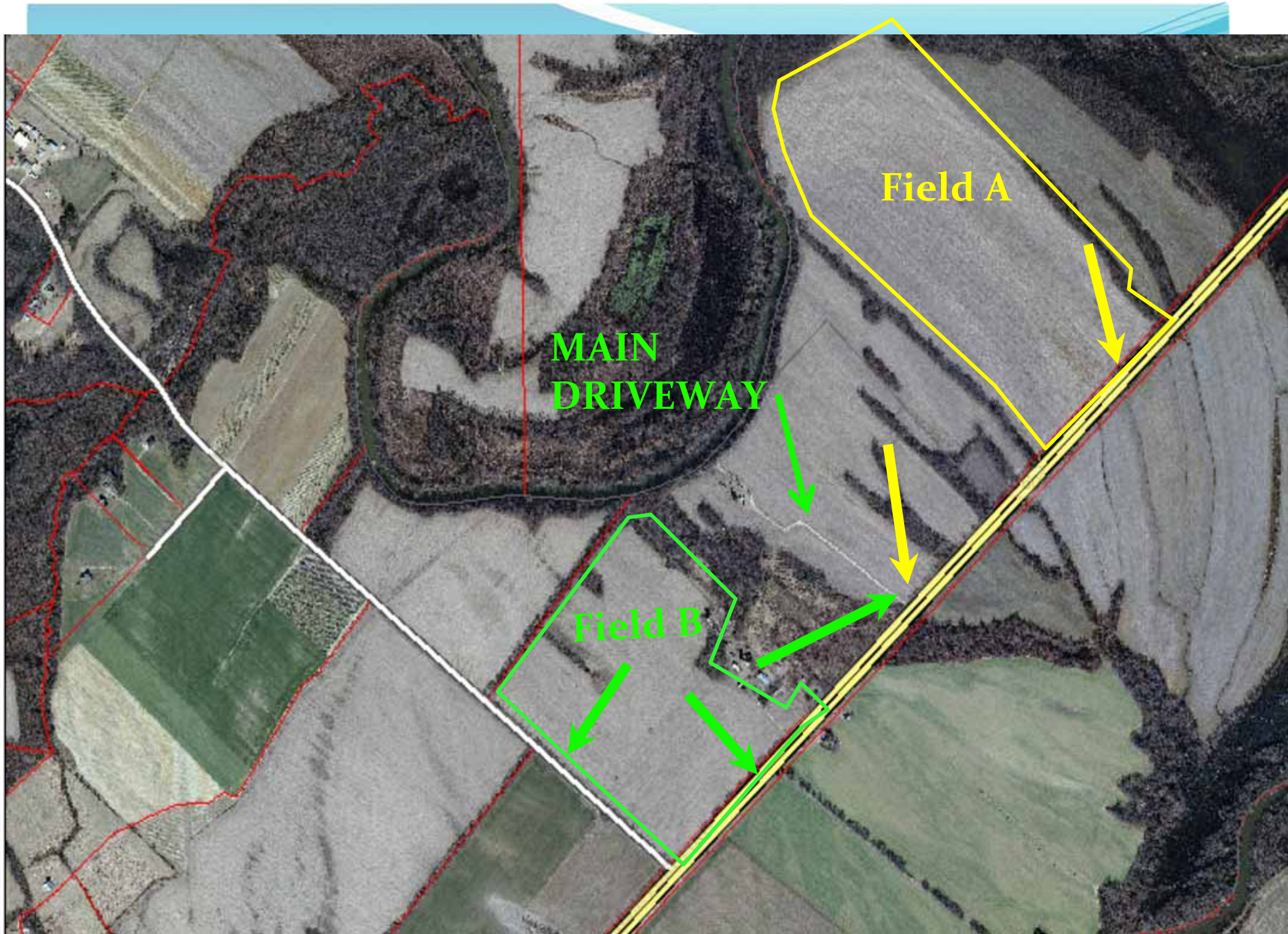
- Notification of sign posting:
Written notification to DEQ and the local government not more than 24 hours of posting sign, must include:
 - Permittee, representative and phone number
 - Contact name/title & phone number if different
 - Location – tax map no. & DEQ Control No.
 - Proposed Begin & End Dates
 - Generator – contact info.



Field A

MAIN
DRIVEWAY

Field B



Field A

MAIN
DRIVEWAY

Field B

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- 24 Hour Notification
 - Not more than 24 hrs **prior** to land application activity, including delivery & staging
 - Written notification to DEQ & Local Government
 - ❖ E-mail
 - ❖ Fax

What is Staging?

Staging is the placement of biosolids on a permitted land application field, within the land application area, in preparation for commencing land application or during an ongoing application, at the field or an adjacent permitted field. Staging is not considered storage and shall not take the place of storage.

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Submit a Staging Plan **Prior** to Overnight Staging
- Land apply within 7 days*
 - The day 1st delivery occurs is day 1 of the count

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

* Exceptions to overnight staging:

All biosolids delivered must be land applied by the end of the business day when at a site:

- In area of Karst topography
- In frequently flooded areas (USDA)
- With on-site storage

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Stage
 - No more than can be applied to the field
 - Within the application area – not in setback
 - To prevent run-off to surface waters

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Overnight Staging
 - At least 400' from occupied dwelling
 - At least 200' from property line
 - Daily inspection by certified land applier
 - Correct erosion, slumping, movement of pile
 - Address odor or ponding

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Staged biosolids not spread by Day 7:
 - Notify DEQ within 24 hours of determining they will not be spread, but no later than C.O.B. of Day 7
 - Cover biosolids
 - Spread or remove from field as soon as conditions allow access to field

What is On-Site Storage?

On-site storage is the short-term storage of biosolids on a constructed surface within a site approved for land application at a location preapproved by the department. These stored biosolids shall be applied only to sites under the operational control of the same owner or operator of the site where the on-site storage is located. Requirements for on-site storage include the following

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- On-Site Storage
 - All biosolids land applied by end of day 45
 - ❖ The day 1st delivery occurs is day 1 of the count
 - Constructed surface
 - Pre-approved by DEQ

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- On-Site Storage *cont.*
 - For use only on fields under control of owner/operator of site where on-site storage is located
 - No more than can be applied to the sites under control of owner/ operator of on-site storage

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- On-Site Storage *cont.*
 - Certified Land Applier to notify DEQ within same working day when on-site storage is implemented
 - Malodors verified by DEQ; corrected within 48 hours or biosolids removed
 - BMPs to prevent contact with storm water run on and runoff

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- On-Site Storage *cont.*
 - Certified Land Applier to inspect:
 - ❖ At least every 7 days
 - ❖ After each precipitation event ≥ 0.1 "
 - ❖ Document inspections
 - ❖ Correct erosion, slumping, movement of pile with 24 hrs
 - ❖ Eliminate ponding

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

VDH Variances:

- Storage pads in use under variances must comply with construction requirements of amended regulation by September 1, 2014, or be closed out.
 - Submit Plans and Specs
 - Closure Plan

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- If soil pH is < 5.5 S.U., must add lime at agronomic rate recommended in NMP prior to or concurrently with biosolids, or use lime stabilized biosolids
- If soil potassium is < 38 ppm must add potash at agronomic rate recommended in NMP prior to or concurrently with biosolids

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Pasture and hay, grazed or clipped to approximately 6” before application
- Application on slope > 15%:
 - Identified in Biosolids Management Plan
 - Approved by DEQ

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Notice to landowner or operator
 - If molybdenum ≥ 40 mg/kg, notice of potential copper deficiency in grazing animals



What is an Odor Sensitive Receptor?

"Odor sensitive receptor" means, in the context of land application of biosolids, any health care facility, such as hospitals, convalescent homes, etc. or a building or outdoor facility regularly used to host or serve large groups of people such as schools, dormitories, or athletic and other recreational facilities.

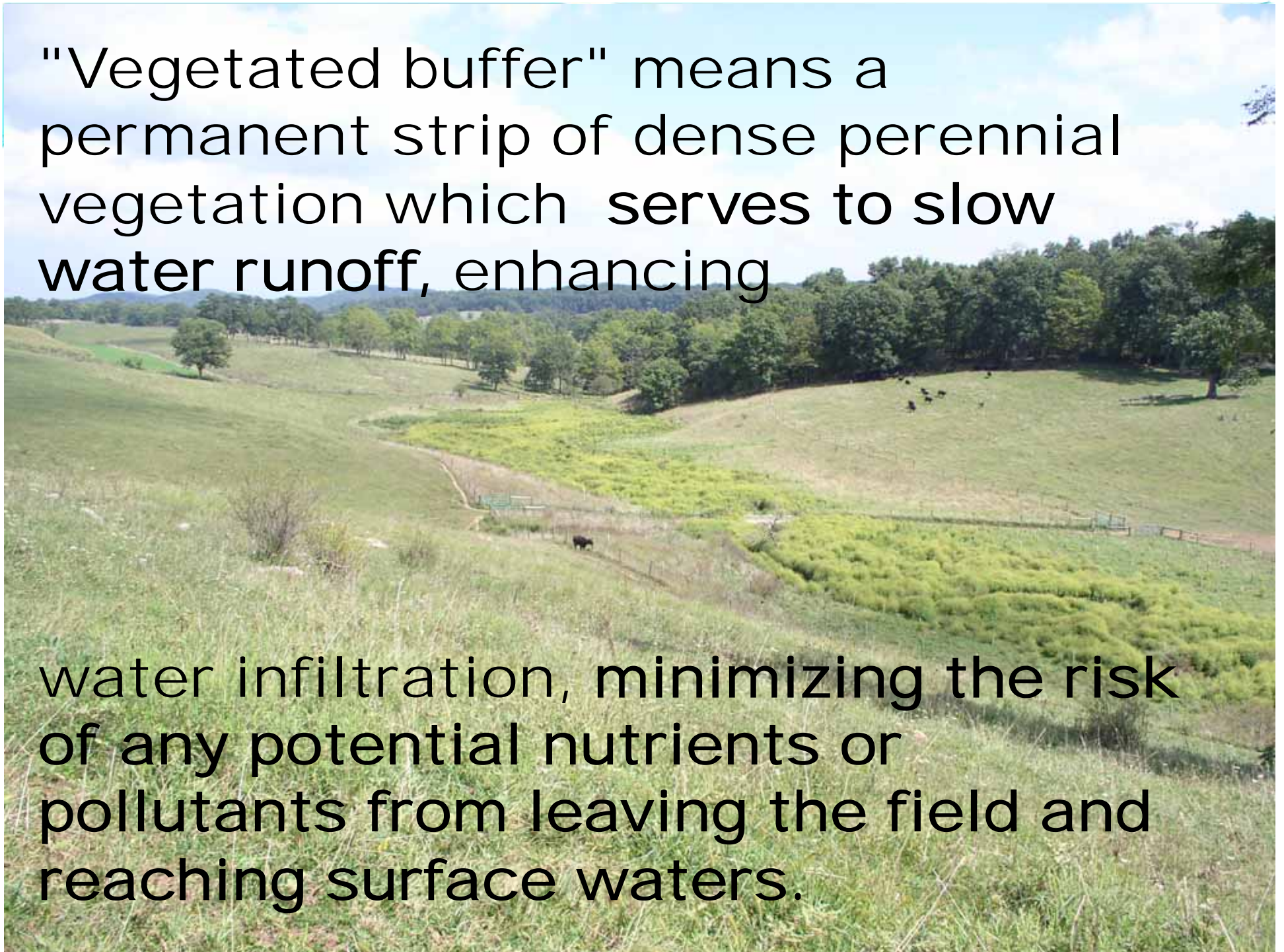


What is a Publicly Accessible Site?

- Publicly accessible sites:
 - open to the general public and routinely accommodate pedestrians
 - include, but not limited to, schools, churches, hospitals, parks, nature trails, businesses open to the public and sidewalks
 - Temporary structures, public roads or similar thoroughfares are not considered publicly accessible

"Vegetated buffer" means a permanent strip of dense perennial vegetation which serves to slow water runoff, enhancing

water infiltration, minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.



MINIMUM SETBACK DISTANCE REQUIREMENTS

Adjacent Feature	Setback Distance
Occupied dwelling	200
Odor sensitive receptors (without injection or same day incorporation)	400
Odor sensitive receptors (with injection or same day incorporation)	200
Property lines	100
Property lines of publicly accessible sites	200

MINIMUM SETBACK DISTANCE REQUIREMENTS ⁽¹⁾

Adjacent Feature	Setback Distance
Water supply wells or springs	100
Public water supply reservoirs	400
All segments of streams and tributaries designated as a Public Water Supply under the Board's Water Quality Standards	100
Surface waters without a vegetated buffer	100
Surface waters with a 35-foot vegetated buffer	35

MINIMUM SETBACK DISTANCE REQUIREMENTS ⁽¹⁾

Adjacent Feature	Setback Distance
Agricultural drainage ditches	10
All improved roadways	10
Rock outcrops	25
Open sinkholes	100
Limestone rock outcrops and closed sinkholes	50

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Setback from occupied dwelling may be reduced or waived upon written consent of landowner **and** occupant
- Setback from property line may be reduced or waived upon written consent of landowner

Amendments: Biosolids Regulations

Effective Immediately: BUR

Upon Reissuance/Modification: VPA & VPDES

- Landowner Agreements
 - Must use Form D Part D-VI Rev 9/14/12
 - ❖ Permit application – new or reissuance
 - ❖ Modification to add land
 - ❖ Change of landownership
 - If LOA on file is on any other form, permittee must notify landowner within 60 days to submit new signed form.

QUESTIONS?