

# Resource Improvement Practice Submission Document

AgWG

6/19/14

# History-Executive Order 12508

- In January of 2009, President Obama issued Executive Order (EO) 12508 on the Chesapeake Bay.
- May 12, 2010, the EO Strategy was released by the Federal Leadership Committee for the Chesapeake Bay.
- One of the issues in the Strategy was for USDA to assist states to **get a full accounting of conservation practices both cost and non-cost shared practices (sometimes called voluntary practices) that have been implemented in the Bay Region.**
- USDA was to take the lead and in December 2010 a contract was awarded to the **National Association of Conservation Districts (NACD) to: “Establish a reliable system to collect, verify and report data on the implementation of non-cost shared agricultural conservation practices in the Chesapeake Bay area to the Bay Program Model.”**

# State Action from NACD Effort

- Bay states reviewed options AND decided to each develop their own system for verification.
- To date some states collect and report Non-cost shared BMPs meeting NRCS standards.
- MD was the only state to move forward establishing a process to verify non-cost shared practices meeting NRCS standards and functional equivalent's (FE) data. Virginia conducted a pilot in 6 District, but did not move forward to implementation based on pilot results.
- In 2010, MDA developed a verification manual for 14 FE BMP's based on work in the USDA Upper Chester River Showcase Watershed.
- MDA completed two updates to their manual in 2011 and 2013 and tested in selected Districts.

# Why is it important to document Resource Improvement Practices?

- ◆ Watershed organizations, Environmental organizations, Conservation Organizations and NGOs are all helping Farmers and Agricultural Landowners to meet WIP goal and protect water quality by installing BMPs:
  - ✓ Shenandoah RC&D Council- Stream exclusion fencing with narrow width tree plantings
  - ✓ Nanticoke Watershed Alliance- 10' Buffers on Drainage Ditches
  - ✓ Chester River Association- Switch grass plantings for field buffers
  - ✓ Mid-Shore River Keeper Conservancy- Water Control Structures on Field Ditches
- ◆ Farmers and Agricultural landowners install lots of BMP's outside of state cost share programs or cannot accept a government subsidy:
  - ✓ Plain Sect Farmers, Mennonite Farmers
  - ✓ Chesapeake Farms-Queen Anne's County
  - ✓ Tudor Farms-Dorchester County
- ◆ State Regulations (MDA) require farmers to install practices that provide water quality protection objectives and need to be verified for compliance but are not required to meet NRCS spec:
  - ✓ Stream Exclusion (fencing)
  - ✓ 10' and 35' buffers for fertilizer and manure application
- ◆ Chesapeake Bay Jurisdiction's needed a mechanism to document and verify practices that meet a Chesapeake Bay Program definition and receive the appropriate credit for the Watershed Improvement Plans.

# **Recommendations from July 2013 AgWG Meeting:**

- In July, MDA requested that the AgWG start the process to approve a methodology to accept Non-Cost shared FE practices in NEIEN.
- The AWG told MDA to move forward with two assumptions:
  - All approved FE practices will receive the same effectiveness ratings as the federal or state cost shared practices. Buffers would be reported by width.
  - Depending on FE Criteria, FE's may need to have shorter lifespans for certification and re-certification.

# **AWG/MDA Actions To Date**

- **August 2013-**

- ✓ MDA Review of Verification Worksheets by a District Professional Engineer and Certified Professional Agronomist/Crop Advisor. Created a new format for worksheets showing NRCS practice design criteria and FE design criteria.
- ✓ MDA approved new worksheets for testing.
- ✓ Update to AgWG

# **AWG/MDA Actions**

- **September 2013-**

- ✓ Proposed Worksheets were reviewed by MD District personnel in Caroline, Howard, and Washington Soil Conservation Districts. Clarifying changes were made and approved by MDA.
- ✓ Update to AgWG
- ✓ MDA received guidance from WQGIT to complete the process for AWG approval.

# AWG/MDA Actions

- **October 2013-**

- ✓ Presentation to the WTWG meeting on MDA FE BMP process and design criteria.
- ✓ Prepare MDA NEIEN Appendix with CBP Staff
- ✓ Prepare AgWG MDA Submission Document; Reviewed by CBP Staff

- **November 2013-**

- ✓ Presentation to AgWG 11/7/13- AWG decided to form a FE Technical Review Team--Formation Request sent to States.
- ✓ MDA Presentation to WQGIT 11/12/13

- **December 2013- January 2014-**

- ✓ Technical Review Team members selected from States
- ✓ First Conference Call of Review Team for Team Orientation - 1/29/14



# Technical Review Panel Meeting - March 21 Actions

- Set Expectations for Review Panel's Targeted Accomplishments
- Team decided to remove NRCS Standards from FE Verification Documentation Sheets
- Changed name from Functional Equivalents to Resource Improvement Practices (RI)
- Changed the Name of Design Criteria to Visual Indicators (VI) following Storm Water Sector's guidance for Homeowner BMP's.
- Worked through practices and made specific changes such as: Removed Liquid waste from Waste Storage Structure; Narrow Buffers renamed Nutrient Exclusion Areas, etc.
- Completed review of 12 RI practices.

## Example of RI Final Visual Indicators Decisions from FE Design Criteria

<b>RI Practice:</b> <b>313RI Waste Storage Structure</b> <b>RI Date: 3-14</b>		<b>MDA Specification:</b> <b>313FE Waste Storage Structure</b> <b>MDAFE Spec Date: 11-13</b>	
Life span: 5 years		FE Life span: 5 years	
Visual Indicators		Criteria Test:	
RI		FE	
1	Does facility operate without polluting waters?	1	Does facility operate without polluting waters?
2	Facility is located $\geq 100'$ from wells, unless there is a Health Dept. waiver or per state, county or local regulation	2	Facility is located $\geq 100'$ from wells, unless there is a Health Dept waiver.
3	Facility is 100 feet from top of bank of any stream or per state, county our local regulation.	3	Facility is outside 100-yr floodplain, or is permitted by MDE/ACOE
4	Volume per sizing sheet for NRCS Spec or describe management methodology used by farmer *	4	Volume per sizing sheet for NRCS Spec or describe management methodology used by farmer *
5	Offsite runoff is excluded or accounted for in storage	5	Offsite runoff is excluded or accounted for in storage
6	Delete	6	Facility provides $\geq 1'$ freeboard for non-roofed liquid storage + 25-yr event
7	Delete	7	Karst (limestone) area has liner + 2' fine grain material, or GCL over 2' fine grain material, Watertight concrete over 2' fine grain material
8	Delete	8	Platform or ramp is provided, for emptying ( $\geq 4:1$ for liquids, $\geq 10:1$ for solids)
9	No safety concerns present.	9	Facility is safe, with fences, signs & structures to prevent falling, explosion, poisoning or asphyxiation.

# Technical Review Panel Meeting-

## May 8 Actions

- Completed Review of remaining RI's and created VI's
- Put Back the word Buffer in Tree and Grass Buffer RIs that are +35' (10'-34' are still Nutrient Exclusion Areas)
- Split Pasture and Hayland Planting into two RIs: Conversion to Pasture and Conversion to Hayland
- Removed Concentrated Area Protection (not a CBP BMP)
- Removed Wetland Development since it would be hard to determine a RI. Can be sent back to Wetland workgroup for input if moves forward.

# Actions since May 8

- **AWG released Draft Verification Guidance**- 5/9/14- Sent AWG Guidance to Panel
- Discussed creating a **Jurisdictional Neutral Document** with MDA and CBP leadership. Decided to Change RI Guidance Document to be Jurisdictional Neutral (not MDA): 5-14-14
- Provided Panel with MDA Non-Cost Shared Manual RI 2.0 with changes from May 8 meeting and RI Guidance Document 1.2 (Neutral): 5-19-14
- **Provided input to AWG Chairs on RI definition and AWG Matrix Methods** that are appropriate for Verification of RI: 5-21-14 and 6-6-14
- **Participated in AWG calls on AWG Verification Guidance**- Discussed Certifying entity for who can collect and submit RI's
- Sent Panel Version 1.3 of RI Guidance Document and Version 1.0 of RI AWG Submission Report: 5-27-14
- **Panel Teleconference Call**: 5-29-14 to review Jurisdictional Neutral Document
- **Changed numbers of RI practices to RI-1 to RI-18 additional team input finalized.**
- Had **two teleconference with Mark Dubin and Matt Johnson to finalize RI definitions so that they match CBP definitions.** Total 19 final RI's.
- **Completed Tables for NEIEN Appendix with CBP for AgWG Submission Document.**
- Submitted to AgWG for posting for June 19<sup>th</sup> meeting.

# Final 19 Resource Improvement Practices

RI Code	RI BMP Name	Additional Practice Information
RI-1	Waste Storage Structure	
RI-2	Animal Compost Structure	
RI-3	Alternative Crop/Switchgrass	
RI-4a	Watercourse Access Control-Narrow Grass	10'-34' Exclusion Area, Natural Grass or planted
RI-4b	Watercourse Access Control-Narrow Trees	10'-34' Exclusion Area, Native Trees or planted
RI-5	Watercourse Access Control--Grass	35'+ Width Exclusion Area, Natural Grass or planted
RI-6	Watercourse Exclusion-Trees	35'+ Width Exclusion Area, Native Trees or planted
RI-7	Grass Nutrient Exclusion Area on Watercourse	10'-34' Width Buffer
RI-8	Grass Buffer on Watercourse	35'+ Width Buffer
RI-9	Forest Nutrient Exclusion Area on Watercourse	10'-34' Width Buffer
RI-10	Forest Buffer on Watercourse	35'+ Width Buffer
RI-11	Vegetative Environmental Buffer for Poultry-Grass	Warm Season Grass
RI-12	Vegetative Environmental Buffer for Poultry-Trees	Trees
RI-13	Conversion to Pasture	
RI-14	Conversion to Hayland	
RI-15	Rotational Grazing	
RI-16	Barnyard Clean Water Diversion	
	<del>Concentrated Area Protection</del>	
RI-17	Water Control Structure	
RI-18	Watering Trough	
	<del>Wetland Development</del>	

# Next Steps

- Presentation of Panel Recommendations at June 19 AWG Meeting
- AgWG partnership given until July 8 to provide comments to Panel Chair-Bob Ensor.
- Panel Teleconference July 10 to review comments and amend documents if necessary.
- Provide Final Documents for posting to AgWG for Approval at July 24 AgWG Meeting
- Provide AgWG final Document for Approval by WTWG (Watershed Technical Workgroup) and WQGIT (Water Quality Goal Implementation Team).
- Upon Approval-Final Documents provided to States to use and propose in their Jurisdictional Verification Protocols.
- NEIEN practice codes turned on for Jurisdictions to Report once state NEIEN tables provided to CBP.

# Benefits of reporting Non-Cost Shared and Resource Improvement Practices:

- **Land Coverage:** By reporting Non-cost shared BMP's and RI's, States are more accurately defining land covered with BMP's for the Chesapeake Bay Model, therefore helping to better explain monitoring calibration data.
- **Future WIP Practice Implementation:** By reporting RI's States will be able to more accurately determine where new practices may or may not be established to meet WIP goals.
- **Future Funding for WIP Practice Implementation:** By reporting RI's States will be able to use this information to more accurately estimate the total cost-sharing data that is needed to meet WIP goals.
- **Societal Benefits:** By reporting non-cost shared and RI's States will provide "credit" for all the conservation actions farmers are doing to protect the environment and the Chesapeake.

# Submission Document Review