2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Agriculture Workgroup
Date: 01/14/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
1	DE	E	Nutrient Management	Reevaluate the values assigned to NMPs. We believe they are significantly undervalued in the model 1. DE requires that all NMPs be written by certified planners. 2. The idea that producers would ignore their NMPS and waste an expensive input like fertilizer is baseless. Would like a better understanding of values assigned for NMP for agriculture. In addition, on-year NMPs should be given a much higher model value than three-year NMPs	1	Group 1:1	2011	2011
2	DE	N	Structural BMP (i.e. waste storage)	It appears that all structural BMPs may not be separately valued in the model. Each structural BMP should be credited separately not as part of the NMP.	1	Group 1:6	2011	2011
3	DE	I	Cropland Irrigation Management	Cropland under irrigation management is used to decrease climatic variability and maximize crop yields. The potential nutrient reduction benefit occurs not from the increased average yield (20-25%) of irrigated versus non-irrigated cropland, but from the greater consistency of crop yields over time matched to nutrient applications. Delaware contents that irrigated acres are undervalued in the model - in that irrigation has a currently undervalued positive effect on nutrient use, and a resultant undervalued positive effect in limiting nutrient runoff and transport to surface water systems	2	Group 2:2	2011	2012

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Agriculture Workgroup
Date: 01/14/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
4	DE	E	Concrete End Pads (Heavy Use Pads)	Stabilization to protect an area on a farm which is being utilized frequently and intensively by livestock or farm equipment specifically for areas adjacent to the entrance of a poultry house or poultry waste storage structure. Applied to where there is a need for properly designed artificial or vegetative cover in order to prevent the delivery of animal waste, sediment and nutrients to surface and surface water sources. Delaware has made significant investments in this BMP; strongly encouraging producers to install them. We are unclear about how they are credited in the current model.	3	Group 3:1	2012	2012
5	DE	E	Nutrient Management	Delaware would like a better understanding of how organic and inorganic nutrients are assigned credit in the model whether on planned or unplanned acres.	4	Model	2011	2011
6	DE	E	P Nutrient Management	Delaware encourages a scientifically based and politically neutral conversation about "P" and transport potential, as well as how to craft a no "P" application policy based on relevant factors not just a "P" soil value in a broader context than just the model.	5	Group 1:1	2011	2011
7	DE	N	USDA/EPA	Resolve the conflicts/inconsistencies between the USDA-CEAP and EPA models.	3	Model	2011	2011
8	DE	E	Base Model Assumptions	Delaware requests if the underling agricultural values assigned in the model been updated. For example, feed efficiencies have improved thus decreases manure output per bird. Nutrient use efficiencies for agronomic crops have also improved.	3	Model	2011	2011

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Agriculture Workgroup
Date: 01/14/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
9	DE	E	Decision/Precision Agriculture	A management system that is information and technology based, is site specific and uses one or more of the following sources of data: soils, crops, nutrients, pests, moisture, or yield for optimum profitability, sustainability, and protection of the environment. Delaware requests a more thorough explanation of these practices and how they are assigned credit in the model.	5	Group 1:3	2011	2011
10	MD	E	Commodity Cover Crops	Maryland requests the re-evaluation of commodity cover crops,	1	Group 1:2	2011	2011
11	MD	N	Non-Cost-Shared BMPs	Maryland requests an EPA approved track and reporting methodology, and effectiveness values for non-cost-shared agricultural practices	2	Group 2:4	2012	2012
12	MD	I	Liquid Manure Injection (Incorporation)	The subsurface application of liquid manure from cattle and swine to reduce nutrient losses for both surface runoff and ammonia emissions. This proposed practice is indicative of low disturbance soil injection systems.	3	Group 2:1	2011	2012
13	MD	I	Poultry Manure Injection/ (Incorporation)	The subsurface application of dry manure from poultry to reduce nutrient losses for both surface runoff and ammonia emissions. This proposed practice is indicative of low disturbance soil injection systems.	4	Group 3:4	2012	2012
14	MD	N	Heavy Use Area Poultry Pads	Stabilization to protect an area on a farm which is being utilized frequently and intensively by livestock or farm equipment specifically for areas adjacent to the entrance of a poultry house or poultry waste storage structure. Applied to where there is a need for properly designed artificial or vegetative cover in order to prevent the delivery of animal waste, sediment and nutrients to surface and surface water sources.	5	Group 3:1	2012	2012

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Agriculture Workgroup
Date: 01/14/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
15	MD	I	Vegetative Environmental Buffers	A strategic dense planting of combinations of trees and shrubs around poultry houses to address environmental issues by filtration of dust, odor, feathers and noise emitted by air exhaust from ventilation systems.	6	Group 3:3	2012	2012
16	MD	I	Cropland Drainage Phsophorus-sorbing Materials	The application of "Phosphorus-sorbing" materials to absorb available dissolved phosphorus from agricultural runoff conveyed to drainage ditches.	7	Group 3:6	2012	2012
17	MD	N	Agricultural Stormwater Management	The control of agricultural stormwater runoff from crop fields, roads and farm structures through a series of stormwater management structures and systems to be infiltrated into the soil profile for regenerative conveyance. Structures may include, but are not limited to, wetlands, catch basins, earthen berms, filter cloths, rip rip, filter strips, etc.	8	Group 3:2	2012	2012
18	MD	I	Cropland Irrigation Management	Cropland under irrigation management is used to decrease climatic variability and maximize crop yields. The potential nutrient reduction benefit occurs not from the increased average yield (20-25%) of irrigated versus non-irrigated cropland, but from the greater consistency of crop yields over time matched to nutrient applications. Delaware contents that irrigated acres are undervalued in the model - in that irrigation has a currently undervalued positive effect on nutrient use, and a resultant undervalued positive effect in limiting nutrient runoff and transport to surface water systems	13	Group 2:2	2011	2012

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Agriculture Workgroup
Date: 01/14/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
19	MD	E	Continuous No-Till (CNT)	CNT is a crop planting and management practice in which soil disturbance by plows, disks or other tillage equipment is eliminated. CNT involves no-till methods on all crops in a multi-crop, multi-year rotation. An acre reported under CNT will not be eligible for additional reductions from the implementation of other practices such as cover crops or nutrient management planning. The system must be maintained for a minimum of five years.	9	Group 1:5	2011	2011
20	MD	E	Precision/Decision Agriculture	Use of technologies beyond nutrient management such as variable rate technology for fertilizer application based on spatial variation in soil types within fields or of other production factors influencing yield within field areas or use of site-specific diagnostic tests to fine tune future applications using spatial data.	10	Group 1:3	2011	2011
21	MD	N	Poultry Litter Treatment	The utilization of chemical treatments on poultry litter to immobilize manure nutrients.	11	Model	2011	2011
22	MD	N	Base Model Assumptions	Maryland requests if the underling agronomic values assigned in the model have been updated. For example, nutrient use efficiencies for agronomic crops have improved and yields have increased over time.	12	Model	2011	2011
23	NY	I	Passive Hay Production	The passive agricultural production and harvesting of hay without the application of organic or inorganic nutrients, with the exception available natural soil mineralization and atmospheric nitrogen deposition. Hayland currently included in the "hay with nutrients" modeling land use category.	1	Group 1:1	2011	2011

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Agriculture Workgroup
Date: 01/14/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
24	NY	N	Interim Crop Nutrient Application	New York requests a review of the base assumptions utilized in the Bay models of nutrient applications on agricultural lands.	1	Group 1:1	2011	2011
25	NY	I	Liquid Manure Injection (Incorporation)	The subsurface application of liquid manure from cattle and swine to reduce nutrient losses for both surface runoff and ammonia emissions. This proposed practice is indicative of low disturbance soil injection systems.	2	Group 2:1	2011	2012
26	PA	I	Enhanced Manure Digesters	Enhanced Manure Digester	1	Group 1:4	2011	2011
27	PA	N	New Manure Treatment Technologies	Manure Treatment Technologies	2	Group 1:4	2011	2011
28	PA	I	Direct Injection of Manure	Manure Injection	3	Group 2:1	2011	2012
29	PA	N	Double Cover Crop Plantings	Enhanced Cover Crops	4	Group 1:2	2011	2011
30	PA	E	Manure Composting	Manure Composting: new reduction efficiency values	5	Group 1:4	2011	2011
31	PA	I	Wind Breaks/Plantings at Animal Operation for Nutrient Reductions	Windbreaks (VEBs)	6	Group 3:3	2012	2012

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Agriculture Workgroup
Date: 01/14/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
32	VA	E	Continuous No-Till (CNT)	CNT is a crop planting and management practice in which soil disturbance by plows, disks or other tillage equipment is eliminated. CNT involves no-till methods on all crops in a multi-crop, multi-year rotation. An acre reported under CNT will not be eligible for additional reductions from the implementation of other practices such as cover crops or nutrient management planning. The system must be maintained for a minimum of five years.	1	Model/ 1:5	2011	2011
33	VA	I	Precision/Decision Agriculture	Use of technologies beyond nutrient management such as variable rate technology for fertilizer application based on spatial variation in soil types within fields or of other production factors influencing yield within field areas or use of site-specific diagnostic tests to fine tune future applications using spatial data.	1	Group 1:3	2011	2011
34	VA	I	Container Nursery and Greenhouse Runoff / Leachate Recovery & Reuse	Collect runoff and leachate using a system of lined return ditches or similar collection methods to lined holding ponds to retain all excess irrigation water runoff or leachate and capturing the first 0.5 to 1.0 inches of stormwater runoff. Collected water will be reused in the nursery or greenhouse operation or applied at proper rates and times to other vegetation capable of trapping nutrients.	2	Group 2:3	2011	2012
35	WV	E	Nutrient Management	The implementation of a nutrient management system on agricultural cropland.	1	Group 1:1	2011	2011
36	WV	E	Cover Crop (Low Till)	West Virginia requests re-evaluate Phosphorus and Sediment effectiveness value reductions for both traditional and commodity cover crops in conservation tillage systems.	2	Group 1:2	2011	2011

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Agriculture Workgroup
Date: 01/14/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
37	WV	N	Litter Load Out Pad	Stabilization to protect an area on a farm which is being utilized frequently and intensively by livestock or farm equipment specifically for areas adjacent to the entrance of a poultry house or poultry waste storage structure. Applied to where there is a need for properly designed artificial or vegetative cover in order to prevent the delivery of animal waste, sediment and nutrients to surface and surface water sources.	3	Group 3:1	2012	2012
38	WV	N	Water Control Structures (AFO "production area")	The implementation of agricultural stormwater management practices for production areas associated with AFOs.	4	Group 3:2	2012	2012
39	WV	N	Sink-Hole Grassed Buffers	The implementation of grass buffers for sink-holes associated with agricultural land uses in karst geology regions for reducing nutrient and sediment losses to subsurface water sources.	5	Group 3:5	2012	2012

* BMP Status: E=Existing, I=Interim, N=New

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Forestry Workgroup
Date: 01/13/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
1		N	Targeted Riparian Forest Buffer	A targeted buffer BMP is proposed as a practice targeted on a more localized scale that refines the previously-used regional physiographic features. These places should be a priority for forest restoration and conservation. A targeted riparian forest buffer is an area planted with trees, or otherwise allowed to grow into a forest, that is adjacent to a waterway and in a location that increases the likelihood that pollutant loads will be intercepted and removed. Methods for identifying whether an area qualifies as a targeted BMP include GIS assessment (reference the Matrix by Okay and Feldt) and on-the-ground verification.			2/2/2011	2/14/2011
2			Combination Forest Buffer-Wetland Swale	Riparian forest buffers are most effective when water flows through at a shallow uniform depth. Even after the extensive BMP reviews in 2006, questions remained about effectiveness of the riparian forest buffer in instances of flow bypass and concentrated flow (Speiran et al.1998). This proposal has the potential to eliminate that concern. The proposed BMP design would be a 35-100 ft forest buffer streamside, bordered by a wetland swale between the upland field/land use and parallel to the forest buffer. Sample wetland swale designs are available from stormwater manuals published by Center for Watershed Protection, Minnesota BMP manual and the NRCS Engineering Design Manual and Delaware Stormwater BMP Manual.			2/2/2011	2/14/2011

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Forestry Workgroup
Date: 01/13/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
3			In-Stream Processing				2015?	2015?
4			Forest Management for Water Quality				2015?	2015?

* BMP Status: E=Existing, I=Interim, N=New

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Urban/Suburban Stormwater Workgroup
Date: 01/13/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description (Taken or derived from state WIPs.)	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
	DC	I	Runoff Reduction	This BMP credits efforts to increase the retention of stormwater on site or reduce the volume of stormwater entering the edge of stream. DC used a 1.2 inch retention standard. This is modeled as a conversion of impervious urban acres to urban acres that achieve a known volume reduction. Each jurisdiction has its own average and this was used to achieve a specified benefit. A similar practice with an implicit model reduction is known as impervious surface reduction.				
	DE	E	Stream Restoration	While this practice is being considered for inclusion in the next version of the Chesapeake Bay Model, there are additional benefits besides the pollutant reduction credits being proposed. Stabilizing impacted streams, restoring natural morphology to channelized systems and installing water control structures on existing drainage ditches all have the potential to greatly improve overall watershed health and function. This will also help meet some of the restoration goals discussed in Section 10 of the Delaware Watershed Implementation Plan. Delaware's goals for this practice are to develop standards and specifications for this practice to facilitate implementation, work with EPA to determine benefits and to maintain 200 feet of restoration on a low density pervious site in the Seaford area.				

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Urban/Suburban Stormwater Workgroup
Date: 01/13/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description (Taken or derived from state WIPs.)	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
	DE	E	Runoff Reduction: Vegetated Roofs and Rainwater Harvesting	While vegetated roofs are relatively uncommon in Delaware at this point, this practice is expected to become more popular as LEED certification becomes more prevalent. For rainwater harvesting, rain barrels can be effective at the individual lot scale, while larger installations using cisterns can augment irrigation of landscaped areas. For both of these practices, Delaware intends to develop standards and specifications for this practice to facilitate implementation and work with EPA to determine benefits.				
	DE	E	Impervious Disconnection	Directing stormwater runoff onto turf or wooded areas can significantly reduce annual runoff volumes compared to a connected system of curbed streets and stormdrains. Delaware's goal is to develop standards and specifications for this practice to facilitate implementation and work with EPA to determine benefits.				
	DE	N	Soil Amendments	Research is beginning to show that this can be an effective practice for improving the hydrologic condition for poor and/or compacted soils. Delaware's goal is to develop standards and specifications for this practice to facilitate implementation and work with EPA to determine benefits.				

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Urban/Suburban Stormwater Workgroup
Date: 01/13/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description (Taken or derived from state WIPs.)	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
	DE	N	Spill Prevention and Response	All industrial sites and sites that are covered under an individual permit and under the General Permit Program are required to adhere to strict BMPs relating to storage and spill prevention. These requirement are outlined in their mandated Storm Water Pollution Prevention Plan (SWPPP), individual for each site. Delaware's goal is to have a BMP manual strictly for industrial stormwater sites to be available at the time of the revised industrial stormwater regulations. (CBPO - More detail needed)				
	DE	N	MS4 Educational BMPs	All MS4 permits contain educational BMPs for stormwater. Thought not yet included in Scenario builder, Delaware maintain suchs BMPs per the Federally mandated requirements. (CBPO - More detail needed)				
	DE	?	Source Controls	Street sweeping, urban "housekeeping" and similar source control practices are shown to have pollutant reduction benefits based on literature review. However, they are currently not well accounted for in the Chesapeake Bay P5 model. Delaware will develop standards and specifications for this practice to facilitate implementation and work with EPA to determine benefits. (CBPO - More detail needed)				
	MD	I	BMP by Era					

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Urban/Suburban Stormwater Workgroup
Date: 01/13/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description (Taken or derived from state WIPs.)	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
	MD	N	Regenerative Stormwater Conveyance	The Chesapeake Bay Program does not have an approved reduction estimate for this practice; however, the Bay Program's Phase 4.3 model stream restoration reduction efficiency provides a reasonable placeholder value. Researchers are monitoring two sites to evaluate effectiveness.				
	MD	E	Stream restoration					
	MD	N	Outfall stabilization					
	MD	E	Urban forest buffers					
	MD	E	Wetlands restoration					
	MD	N	Pet/animal waste					
	MD	N	Regenerative outfalls					
	MD	E	Removal of Impervious Surfaces					
	MD	E	Impervious Surface Disconnects					
	MD	E	Downspout disconnects					
	MD	E	Runoff Reduction: Rain Barrels and Rain Gardens					
	MD	E	Tree planting					
	MD	E	Urban Nutrient Management					
	MD	N	Trash removal					
	MD	N	Redevelopment and Land Use Policies					
	MD	N	Education					
	MD	E	Street sweeping					

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Urban/Suburban Stormwater Workgroup
Date: 01/13/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description (Taken or derived from state WIPs.)	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
	MD	N	Disconnection of Illicit Discharges					
	MD	E	Inlet Cleaning/ Vacuuming					
	MD	N	Floodplain Restoration					
	MD	N	Sub-soiling					
	MD	N	Meadow creation					
	MD	?	Lawn fertilizer reduction					
	MD	E	Urban growth reduction					
	MD	E	Land conservation					
	NY	I	Runoff Reduction	This BMP credits efforts to increase the retention of stormwater on site or reduce the volume of stormwater entering the edge of stream. NY's WIP included a 50% volume reduction of stormwater on some urban acres. This is modeled as a conversion of impervious urban acres to urban acres that achieve a known volume reduction. Each jurisdiction has its own average and this was used to achieve a specified benefit. A similar practice with an implicit model reduction is known as impervious surface reduction.				
	PA	E	Urban Tree Planting	Urban tree planting/canopy establishment.				
	PA	E	Stream Restoration	Stream and flood plain restoration.				
	VA	N	MS4 Educational BMPs	MS4 permits require education and outreach programs regarding fertilizer use, pet wastes, storm drain stenciling, etc. that are not accounted for in Scenario Builder. (CBPO - More detail needed)				

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Urban/Suburban Stormwater Workgroup
Date: 01/13/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description (Taken or derived from state WIPs.)	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
	VA	N	Illicit Discharge Elimination	Illicit discharge identification and elimination programs are not accounted for in the model.				
	VA	N	Outfall Screening	Storm sewer outfall screening is not accounted for in the model.				

* BMP Status: E=Existing, I=Interim, N=New

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Waterwater Treatment Workgrou
Date: 01/18/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
1	DE		PSPN1	Performance Standard Nitrogen level 1 (PSN1) means where total nitrogen levels achieve either: an average annual concentration of 5 mg/l (parts per million (ppm)) total nitrogen in effluent sampled at the end-of-pipe of the pretreatment unit; or a 90% reduction in the effluent total nitrogen concentration when compared to the influent total nitrogen concentration; or an average annual concentration of 5 mg/l beneath any permitted wastewater spray irrigation field as verified by monitoring in-field lysimeters, providing that the design percolate concentration does not exceed 5 mg/l on an average annual basis. Discharge limitations are to be expressed as a mass, based on average design flows (221 gallons per day per unit for residential systems).				

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Waterwater Treatment Workgrou
Date: 01/18/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
1	DE		PSPN2	Performance Standard Nitrogen level 2 (PSN2) means where total nitrogen levels achieve either: an average annual concentration of 10 mg/l (parts per million (ppm)) total nitrogen in effluent sampled at the end-of-pipe of the pretreatment unit; or an 80% reduction in effluent total nitrogen concentration when compared to the influent total nitrogen concentration; or an average annual concentration of 10 mg/l beneath any permitted wastewater spray irrigation field Delaware's Phase I Chesapeake Watershed Implementation Plan – 29 November 2010 62 as verified by monitoring in-field lysimeters, providing that the design percolate concentration does not exceed 10 mg/l on an average annual basis. Discharge limitations are to be expressed as a mass, based on average design flows (221 gallons per day per unit for residential systems).				
1	DE		PSPN3	Performance Standard Nitrogen level 3 (PSN3) means where total nitrogen levels achieve either: an average annual concentration of 20 mg/l (parts per million (ppm)) total nitrogen in effluent sampled at the end-of-pipe of the pretreatment unit; or a 50% reduction in effluent total nitrogen concentration when compared to the influent total nitrogen concentration.				

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Waterwater Treatment Workgrou
Date: 01/18/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
1	DE		PSP1	Performance Standard Phosphorus level 1 (PSP1) means where total phosphorus levels achieve either: an average annual concentration of 3.9 mg/l (parts per million (ppm)) total phosphorus in effluent sampled at the end-of-pipe of the pretreatment unit; or a 75% reduction in effluent total phosphorous concentration when compared to the influent total phosphorus; or an average annual concentration of 3.9 mg/l beneath any permitted wastewater spray irrigation field as verified by monitoring in-field lysimeters, providing that the design percolate concentration does not exceed 3.9 mg/l on an annual average basis. Discharge limitations are to be expressed as a mass, based on average design flows (221 gallons per day per unit for residential systems).				
1	DE		PSP2	Performance Standard Phosphorus level 2 (PSP2) means where total phosphorus levels achieve either: an average annual concentration of 7.85 mg/l (parts per million (ppm)) total phosphorus in effluent sampled at the end-of-pipe of the pretreatment unit; or a 50% reduction in effluent total phosphorus concentration when compared to the influent total phosphorus concentration. Discharge limitations are to be expressed as a mass, based on average design flows (221 gallons per day per unit for residential systems).				
11	MD							
20	NY							

2011 Priority CBP BMPs for Re-evaluation or Development
CBP Water Quality Goal Implementation Team (WQGIT)

Workgroup: Waterwater Treatment Workgrou
Date: 01/18/11

Item No.	CBP State	BMP Status	BMP Identification	BMP Description	Priority State	Priority Workgroup	Review Workgroup	Review WQGIT
28	VA		BMP1	The first BMP will allow for a 25% reduction in N with shallow placed dispersal systems utilizing gravity flow.				
28	VA		BMP2	The second BMP will allow for 50% removal of N with secondary treated effluent to a shallow placed, pressure dosed dispersal system.				
28	VA		BMP3	The third BMP will couple a denitrification system(rated at 50% N removal) and a shallow placed, pressure dosed dispersal system for a 75% N removal rating.				
31	WV		Septic Repair/Replacement	WV requests credit in the CBW Model for repaired/replaced septic systems				

* BMP Status: E=Existing, I=Interim, N=New