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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Point and  
Non Point Source Management



# **Trading for Compliance**

## **Pennsylvania Nutrient Trading Program**

Chesapeake Bay Trading and Offset  
Workgroup

February 19, 2014

# OVERVIEW

- Verification & Registration of Point Source Credits
- How Point Sources Purchase Credits for Compliance Purposes
- Compliance Year 2013 Statistics

## HOW PA VERIFIES POINT SOURCE CREDITS

- DEP calculates yearly TN and TP loading (lbs.) using the monthly totals from the monthly supplemental DMR's.
- DEP then calculates the difference between the assigned facility cap load and the yearly loading (lbs.)
- If positive, DEP adjusts the number down using an attenuation factor that we call delivery factor.
- The final number is then adjusted by another 10% that DEP uses as a reserve.

## HOW POINT SOURCES PURCHASE CREDITS

- Facilities enter into a contract with an entity or entities that have DEP verified credits.
- DEP reviews the contract and if approved assigns a registration number that is tied directly to each verified credit.
- The purchasing facility inputs the registration number(s) and the number and type of credits into a Monthly TN/TP Budget Form and submits the form with monthly DMR and supplemental DMR to DEP.

# HOW POINT SOURCES PURCHASE CREDITS (cont.)

- At the end of the compliance year, before the end of true-up, facility's with cap loads enter the following into DEP's annual nutrient summary form:
  - monthly loads (lbs.) of TN and TP from the supplemental DMR form for the compliance year.
  - all sales of credits, bought or sold.
- DEP regional staff review the facility's submittals with the help of the trading program staff, and all registration of credits, bought or sold, throughout the year to determine compliance.



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## CHESAPEAKE BAY SUPPLEMENTAL REPORT NUTRIENT MONITORING

Facility Name: \_\_\_\_\_  
Municipality: \_\_\_\_\_ County: \_\_\_\_\_  
Watershed: \_\_\_\_\_

Month: 10 (Select number) Year: 2011  
NPDES Permit No.: \_\_\_\_\_ Outfall: \_\_\_\_\_  
Renewal application due **180 days** prior to expiration.  
This permit will expire on: \_\_\_\_\_

DAY	FLOW MGD	Total P				NH <sub>3</sub> -N				TKN				NO <sub>2</sub> +NO <sub>3</sub> as N				Total N			
		Q	mg/l	Q	lbs/day	Q	mg/l	Q	lbs/day	Q	mg/l	Q	lbs/day	Q	mg/l	Q	lbs/day	Q	mg/l	Q	lbs/day
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2																					
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29																					
30																					
31																					
Avg																					
Monthly Total Loads (lbs):																					

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

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## CHESAPEAKE BAY SUPPLEMENTAL REPORT MONTHLY NITROGEN BUDGET

Facility Name: \_\_\_\_\_  
 Municipality: \_\_\_\_\_ County: \_\_\_\_\_  
 Watershed: \_\_\_\_\_  
 Total N Credits Purchased During Month: \_\_\_\_\_ lbs  
 Total N (TN) Delivery Ratio: \_\_\_\_\_

Month: \_\_\_\_\_ Year: \_\_\_\_\_  
 NPDES Permit No.: \_\_\_\_\_ Outfall: \_\_\_\_\_  
 Renewal application due **180 days** prior to expiration.  
 This permit will expire on: \_\_\_\_\_

Total Nitrogen - Pounds				
Registry Number	Contract Effective Date	Credits Applied / TN Delivery Ratio for Facility (lbs)*	Credits Sold / TN Delivery Ratio for Facility (lbs)	DEP Approval Date
<b>Monthly Total (lbs):</b>				

Total Nitrogen - Offsets		
Source	Amount (lbs)	DEP Approval Date
<b>Monthly Total (lbs):</b>		

\* Indicate the credits that you wish to apply this month toward compliance with annual load limitations

Monthly Total Nitrogen Load (lbs):

(Actual Load Discharged)

Monthly Net Nitrogen Load (lbs):

(Actual Load + (Credits Sold / TN Delivery Ratio) - (Credits Applied / TN Delivery Ratio) - Offsets)

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Prepared By: \_\_\_\_\_  
 Title: \_\_\_\_\_

License No.: \_\_\_\_\_  
 Date: \_\_\_\_\_



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## CHESAPEAKE BAY SUPPLEMENTAL REPORT ANNUAL NUTRIENT SUMMARY

Facility Name: \_\_\_\_\_  
 Municipality: \_\_\_\_\_  
 Watershed: \_\_\_\_\_  
 Total N Credits Purchased During Year: \_\_\_\_\_ lbs  
 Total P Credits Purchased During Year: \_\_\_\_\_ lbs

For Compliance Year: **10/1/** \_\_\_\_\_ to **9/30/** \_\_\_\_\_  
 NPDES Permit No.: \_\_\_\_\_ Outfall: \_\_\_\_\_  
 Renewal application due **180 days** prior to expiration.  
 This permit will expire on: \_\_\_\_\_  
 Delivery Ratios: Total N: \_\_\_\_\_ Total P: \_\_\_\_\_

From monthly  
supplemental  
DMR's

From monthly  
budget forms

MONTH	Monthly Total Mass Loads (lbs)		Credits Sold / Delivery Ratios (lbs)		Credits Applied / Delivery Ratios (lbs)		Offsets (lbs)		Monthly Net Mass Loads (lbs)	
	Total N	Total P	Total N	Total P	Total N	Total P	Total N	Total P	Total N	Total P
October										
November										
December										
January										
February										
March										
April										
May										
June										
July										
August										
September										
Totals:										
Truing Period Calculations:	Annual Total Mass Loads (lbs)		Credits Sold / Delivery Ratios (lbs)		Credits Purchased / Delivery Ratios (lbs)				Annual Net Mass Loads (lbs)	
	Truing Period Adjustments (Oct 1 - Nov 28)									

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 Title: \_\_\_\_\_

License No.: \_\_\_\_\_  
 Date: \_\_\_\_\_



# POINT SOURCE PA TRADING STATISTICS

- One verified non compliant facility in Compliance Year 2013
- **41** Facilities generated verifiable credits.
  - **1,490,819 Total Nitrogen Credits**
  - **94,259 Total Phosphorous Credits**
- **45** Facilities purchased credits
  - **802,959 Total Nitrogen Credits**
  - **84,725 Total Phosphorous Credits**



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