

# Overview: Purchasing / Selling Nutrient Credits Through PENNVEST's Nutrient Credit Clearinghouse

Presentation by PENNVEST & CCX

# Summary

- PENNVEST will serve as an intermediary in PA's nutrient credit market by purchasing credits from sellers and selling them to credit buyers
- PENNVEST will be able to enter into these contracts starting in first quarter 2010
- PENNVEST can accommodate different types of contracts depending on needs of participants
- Contracts will contain *force majeure* clauses in event of regulatory changes
- PENNVEST will require participants to satisfy eligibility requirements in order to reduce its exposure to contract non-performance

# Clearinghouse Summary

- Benefits to buyers of purchasing credits through PENNVEST:
  - Adhere to governmental procurement requirements
  - Reduce search costs
  - Reduce negotiation costs
  - Reduce potential of sell-side default risk due to PENNVEST's large portfolio of sellers
  - Reduce burden of enforcing contracts
- Benefits to credit sellers: focus buy-side interest, reduce contracting and search costs, makes undertaking credit-generating projects more viable
- Participants free to execute transactions bilaterally and use or not use PENNVEST services

# Types of PENNVEST Market Services

- Forward auctions for multiyear delivery for “strips” of certified credits to be generated in future years
- Spot auctions at end of compliance year (Oct – Nov) for verified credits
- “Clearing” of bilateral trades: PENNVEST serving as an intermediary between PS with identified credit project (e.g., geographically local project)
- New growth escrow for developers that need to offset new or expanded discharges

# Summary Chart of Market Events

	<u>Long-term Forward Contracting</u>	<u>"Spot" Sales At End of Year</u>	<u>Bilateral Clearing Services for Contracts</u>	<u>New Growth Escrow for Developers Needing NPDES Permit</u>
Objective	Designed to satisfy long-term point source compliance needs	Designed to allow point sources and uncontracted nonpoint projects ability to buy/sell to assure compliance	Allow point sources to purchase credits from identified projects (e.g., geographically local projects)	Provide developers a simple process to obtain a "letter-of-intent" and contract to purchase credits
Type of Contract	Forward	Spot	Forward	Call Option
Determination of Price, Quantity, and Premium	Determined through competitive auction	Determined through competitive auction	Bilaterally negotiated between credit buyer and seller	Price and option purchase premium set by negotiation; developers can choose from price-premium combinations
Schedule of Market Events	Specified schedule based on interest (e.g., quarterly)	Annually near/at end of compliance year	PENNVEST to offer clearing as requested on case-by-case basis	As requested on case-by-case basis
Delivery Schedule	Delivery for multiple, successive years ("strips"); duration determined prior to auction	Immediate delivery of verified credits	Bilaterally negotiated, subject to restrictions PENNVEST may impose	If option exercised, delivery for strip of credits for length of permit

# Proposed Auction Structure

- Structure:
  - sealed-bid, single-round, uniform price
- Procedure:
  - Participants submit bids and offers
  - Administrator aggregates bids / offers and calculates market-clearing credit price and credit quantity
  - Administrator may solicit non-binding commitments to participate to indicate the quantity of credits available on the auction
- Benefits of structure: simplicity, have worked well in practice
  - Unsuccessful participants may participate in an auction in the future
  - Public release of price information provides information for future auctions, compliance strategies, and investment decisions

# Steps Involved to Participate

- Understand rules and commitments they define
- Execute PENNVEST Enrollment Letter and provide required documentation
- Enter into contract with PENNVEST through defined market event
- Credit Sellers
  - Receive verification from DEP for certified projects
  - Transfer legal title of credits to PENNVEST at agreed schedule
  - Receive payment from PENNVEST at agreed schedule
- Credit Buyers
  - Buyers submit payments to PENNVEST at agreed schedule
  - PENNVEST transfers legal title of credits to Buyer at agreed schedule
  - Buyer reports credit registration number on Discharge Monitoring Report

# Buyer Eligibility Requirements for Forward Contracts

- PENNVEST will always accept 100% up-front payment in lieu of other listed alternatives for any type of organization
- Sewage Treatment Plant Operators
  - Authorities - pledge of taxing authority of underlying municipality
  - Municipalities – pledge of tax revenues
  - All (includes privately owned) - revenue pledge (if credit-worthy) - First lien on revenues, or shared first or second lien
  - Other alternatives outlined below
- Others
  - Letter of Credit
  - Bonding
  - Other forms of financial guarantee may be considered
  - Developers – evidence of conformance with sound land use planning

# Seller Eligibility Requirements for Forward Contracts

- DEP certification that project is valid
- Legal title / credit ownership
- Copy of approved verification plan
- Contract durability for aggregated projects: underlying contract between aggregator and project owner for credit generation must be at least as many years as aggregator's commitment to sell credits to PENNVEST
- Evidence of implementation for capital-intensive projects
- Performance commitments (next slide)

# Sell-Side Performance Commitments for Forward Auctions

- If an “intentional” default occurs, sellers must make PENNVEST whole, through actions that can include (but are not limited to)
  - Replace and deliver to PENNVEST an equivalent credit quantity and type
  - Provide funds to compensate PENNVEST for any and all additional costs incurred by acquiring replacement credits
    - e.g., if initial forward contract was for \$6/lb, seller defaulted and PENNVEST forced to buy them at \$8/lb, then original seller responsible for \$2/lb
- Sewage treatment plant operators: same collateral requirements for sell-side as buy-side
- Private entities: PENNVEST may require lien on the entity’s assets, including land, capital, and future revenues from credit (and other product) sales

# Mechanisms Available to PENNVEST To Assure Credit Supply Should Seller Default Occur

- 10% DEP reserve pool
- PENNVEST internal reserve pool from credits from projects it funds
- Existing uncontracted supply, some of which is from already implemented projects
- Consider purchasing “call option” contracts from other supply sources to ensure adequate access to supply

# Process for Developers

- Step 1: Sellers inform PENNVEST of prices and premiums they would accept to sell “call option” to developers
- Step 2: Developers establish eligibility, identify price and premium willing to pay, and submit partial up-front payment to PENNVEST
- Step 3: PENNVEST transfers “premium” to credit seller to reserve credits
- Step 4: PENNVEST gives developer Letter of Intent they can submit to DEP in planning module submission
- Step 5: If DEP approves planning module, developer notifies PENNVEST to establish forward contract contingent on receiving NPDES permit
- Step 6: Developer submits evidence to DEP of nutrient contract established in NPDES permit application

# Clearinghouse Structure

- Advisory committee consisting of stakeholders to offer input
- CCX to administer auctions
- PENNVEST to provide
  - Webpage with clearinghouse information
  - Rulebook outlining terms, requirements, and conditions for entering into contract
  - 1 page enrollment letter for participants acknowledging clearinghouse structure and to abide by its rulebook
  - Simple bid and offer forms
  - Letter of Intent for developers
  - Other standard forms and documents needed by participants (e.g., transfer of funds, transfer of credits, eligibility accepted, contract terms)

# Next Steps

- Early Feb: Results from stakeholder survey to gauge interest will be compiled and reviewed
- Mid Feb: Procedures and documents will be finalized
- Mid to late Feb: DEP and PENNVEST will make official announcement of PENNVEST's role
  - Webpage will be created where relevant procedures and documents will be accessible to participants
- Late Feb / early March: PENNVEST will be available to enter into nutrient credit contracts
  - CCX will serve as administrator of auctions