



Water Quality Trading Advisory Committee Perdue Farms

December 12, 2016

Perdue AgriRecycle, Seaford AgriSoil and Nutrient Trading Potential

- **Perdue AgriRecycle**
- **Seaford AgriSoil**
- **Nutrient Trading Potential**



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Perdue AgriRecycle Facility Seaford, Delaware



Perdue AgriRecycle Facility

Seaford, Delaware

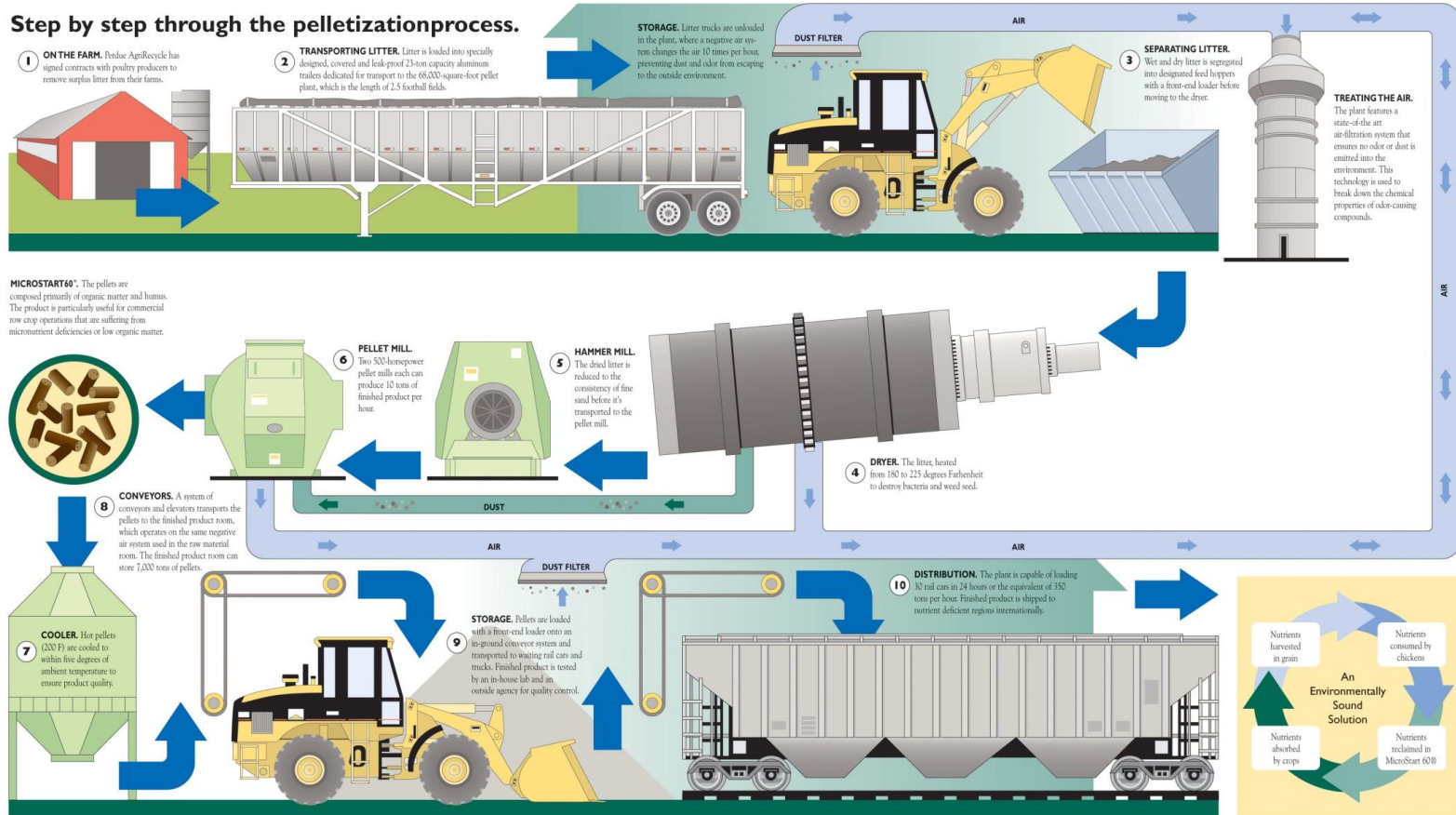


- Opened in July 2001
- Approximately 1 million tons processed to date
- Approximately 50% of the material shipped outside of Chesapeake Basin



Perdue AgriRecycle Facility Seaford, Delaware

Step by step through the pelletization process.



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Perdue AgriRecycle Facility Seaford, DE

- **Perdue has spent over \$60 million on constructing and operating the facility**
- **Facility has never been profitable**
- **Approximately 66 million pounds of Nitrogen and Potassium and 44 million pounds of Phosphorus have been moved through the facility**



Perdue AgriRecycle Facility Seaford, DE

- **72% of the material was shipped outside the Chesapeake Basin in 2015**
- **It is permitted for 80,000 tons of poultry litter**
- **Perdue typically runs approximately 40,000 tons through the facility annually**



Perdue AgriRecycle Facility Seaford, DE



- **MicroSTART60 organic fertilizer has a nutrient analysis of 3-2-3 NPK and MicroSTART60 Prilled Plus has a nutrient analysis of 7-1-1 NPK.**
- **Perdue AgriBusiness' products are compliant with USDA National Organic Program (NOP) for use in organic crop production.**
- **All of Perdue AgriBusiness' products are listed by the Organic Materials Review Institute (OMRI).**



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Seaford AgriSoil Facility

Seaford, DE



Seaford AgriSoil Facility

Seaford, DE

- **Opened December 5, 2016**
- **\$12 million construction cost**
- **Large receiving/mixing building, windrow bunkers, covers for compost, and large curing area**
- **Constructed adjacent to Perdue AgriRecycle**



Seaford AgriSoil Facility

Seaford, DE

- **Diffuse Air Floatation (DAF) material from Georgetown and Milford Plants (16,000 tons 1st year) – Previously Land Applied**
- **Hatchery Waste from hatcheries on Delmarva**
- **Poultry litter from Delmarva (5,000 tons 1st year) – Previously Land Applied**
- **Perdue AgriRecycle Scrubber Water (24,000 tons 1st year) – Previously Land Applied**



Seaford AgriSoil Facility

Seaford, DE

- **Material is mixed and composted**
- **Placed under cover and negative air pressure pulled through the pile**
- **Biofilter on receiving/mixing building**
- **Final compost will be sold to landscaping companies, bagged and sold in retail, and used as soil amendment**



Seaford AgriSoil Facility

Seaford, DE

- **DNREC will expand permit based on successful operation and sale of compost**
- **Potential to add approximately 40,000 tons of poultry litter and DAF material in the future**
- **Can further reduce land application of nutrients**



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Nutrient Trading Potential

- **PAR - 40,000 tons of Poultry Litter**
 - **1,200 tons of N and 800 tons of P**
 - **Over 50% moved out of Chesapeake**
- **Seaford AgriSoil currently will take 45,000 tons of land applied nutrients**
 - **N and P will be calculated once startup is complete**
 - **Will need to analyze relocation efforts**



Nutrient Trading Potential

- **Perdue will work with WQTAC, MDA, and MDE to identify best N and P avoidance calculations**
- **Perdue will continue to track nutrient data and location data for Seaford AgriSoil**



Questions?

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