## Safeguarding the Environment Through Compost Manufacturing in Charlotte County



City of Venice December 10, 2019



#### **INDUSTRY LEADER**

**SYNAGR** 

Synagro is the nation's largest and most experienced Biosolids Management Company



#### Synagro Experience and Breadth

- Over 600 municipal and industrial clients in 34 states
- Manage over 12 million tons of biosolids annually
- 9 Class A drying/pelletizing single-customer facilities
- 3 Regional Merchant Thermal Reduction Facilities
- 6 Class A Compost Facilities

- Over **70** permanent and mobile dewatering locations
- Permitted land base of over 1,0**00,000** acres
- Over **\$350** million in annual revenues
- \$3 billion contract backlog
- Acquired by EQT Infrastructure II Fund August 2013

## SYNAGRO FLORIDA SERVICES

Synagro is Florida's largest biosolids management partner with annual revenues of ~ \$25 million

#### CCBRC COMPOSTING



#### MOBILE DEWATERING



#### PINELLAS DRYING



LAND APPLICATION



## FLORIDA WASTEWATER ENVIRONMENT

## CHARLOTTE COUNTY BIO-RECYCLING CENTER (CCBRC)





Opened 1<sup>st</sup> quarter 2014, the facility provides Class AA biosolids processing services to over 30 municipal generators in the sensitive Okeechobee and Caloosahatchee watersheds.

#### CHARLOTTE COUNTY BIO-RECYCLING CENTER (CCBRC) ENVIRONMENTAL CONTROLS

## Facility Protection of Ground and Surface Water Quality

- Composting on covered asphalt pad providing impervious operating surfaces to minimize stormwater generation.
- The entire facility is within the boundaries of the landfill and is part of the overall landfill stormwater management plan.
- Excess water collected at the facility is routed to an onsite pump station and sent to Charlotte County's Landfill Leachate Treatment System.
- With impervious operating surfaces, as well as drainage/berms and wastewater control features, combined with routing wastewater to Landfill's Leachate Treatment, the Facility design is protective of water resources and the environment.



### HOW DO WE MANUFACTURE CLASS AA COMPOST AT CCBRC?

- Turned windrow technique
- Mix biosolids with wood waste
- Turn 5 times in 15 days to meet "pasteurization" requirements (time/temp)
- Aged/cured for 3 months to ensure stability and maturity
- Screened to produce specific products



## CLASSES AND TREATMENT OF BIOSOLIDS FOR USE **IN FLORIDA**

- Treatment is required to reduce or eliminate pathogens:
  - Class B treatment (significantly reduce pathogens)
  - Class A/AA treatment (eliminate pathogens)

SYNAGRO

- A vector attraction reduction option/treatment process must be met (reduces attractiveness to insects, birds, rodents, etc.).
- There are three regulatory classes of biosolids for beneficial use based on treatment/quality:
  - Class B minimum quality for beneficial use
  - Class A intermediate quality for beneficial use
  - Class AA highest quality for beneficial use
- Class AA biosolids distributed and marketed as fertilizers (due to their high level of treatment) are exempt from the nutrient restrictions for land applied biosolids.

# What This Means...

- Composting organic materials such as biosolids and landscape waste is good for the environment if processed correctly.
- Recycling the City of Venice's Biosolids through the Class AA Compost Process is safe for the environment.



# QUESTIONS?

THANK YOU



