

## Hornsby Bend Biosolids Management Plant



*(Aerial of Hornsby Bend c. 2009)*

### Timeline

1950s – Hornsby Bend Biosolids Management Plant (Hornsby) is established to treat solids generated by the City of Austin wastewater treatment plants. The City acquires land for a series of stabilization ponds which discharge into the Colorado River. These ponds attract a variety of bird species making it a popular site for bird watching.



1980s – Additional treatment facilities and five concrete evaporation basins are constructed. The basins are used to dry the Class B sludge before land applying. Discharges to the Colorado River cease at this time.

1987 – AW begins a composting pilot using the windrows method of composting. A marketing plan is developed along with a logo and the name “Dillo Dirt.”



1989 – Dillo Dirt sales begin. The biosolids are either land applied or used in the Dillo Dirt.

1993 -1999 – Nearby Bergstrom Air Force Base closes, and in 1999 the new Austin-Bergstrom International Airport opens at that site. The City’s landfill, located next to the base, stops accepting municipal solid waste due to FAA regulations. The yard trimmings - 15 percent of the City’s waste stream - are taken to Hornsby for composting to avoid the tipping fees at a private land fill. To accommodate this increase in material, ARR (formerly Solid Waste Services), and AW collaborate to build a 14-acre concrete composting pad and install grinding equipment.

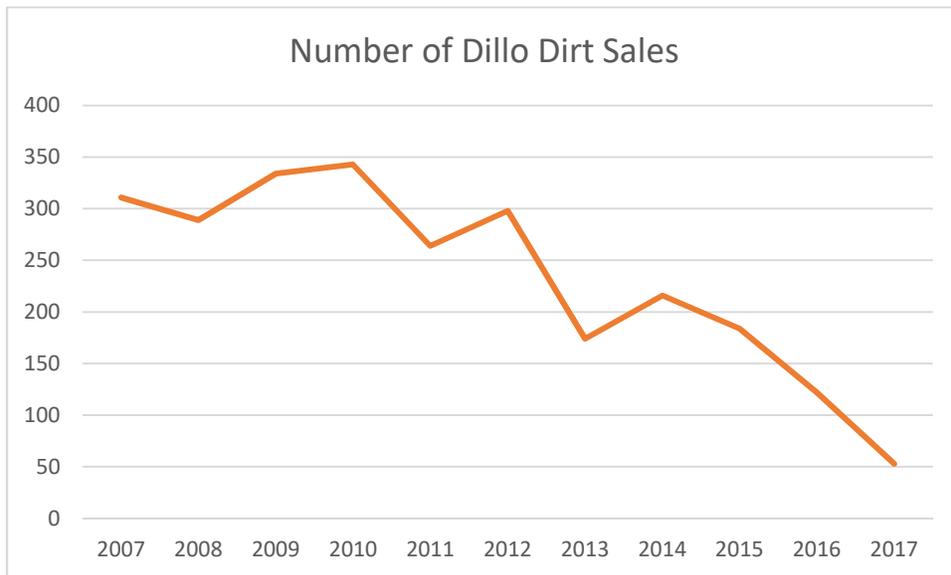
2009 – An additional 15-acre concrete compost pad is built using a 2008 American Reinvestment and Recovery Act zero-interest loan. At the same time a generator is constructed that utilizes methane from the sludge to largely power the plant and provide additional electricity to the grid.

October 2009 – Hornsby donates a large amount of Dillo Dirt to the Parks and Recreation Department for use on Zilker Park’s “Great Lawn” for the Austin City Limits

Festival. Subsequent rains result in oversaturation of the lawn and complaints of odor and rashes are attributed to the Dillo Dirt.

2010 – The City of Austin receives the Clean Water State Revolving Fund PISCES award from the US Environmental Protection Agency for innovation and environmental success for the Hornsby Bend plant improvements.

2010-2011 - Dillo Dirt sales decline. AW staff monitor sales for a year or two expecting a rebound, but sales remain depressed.

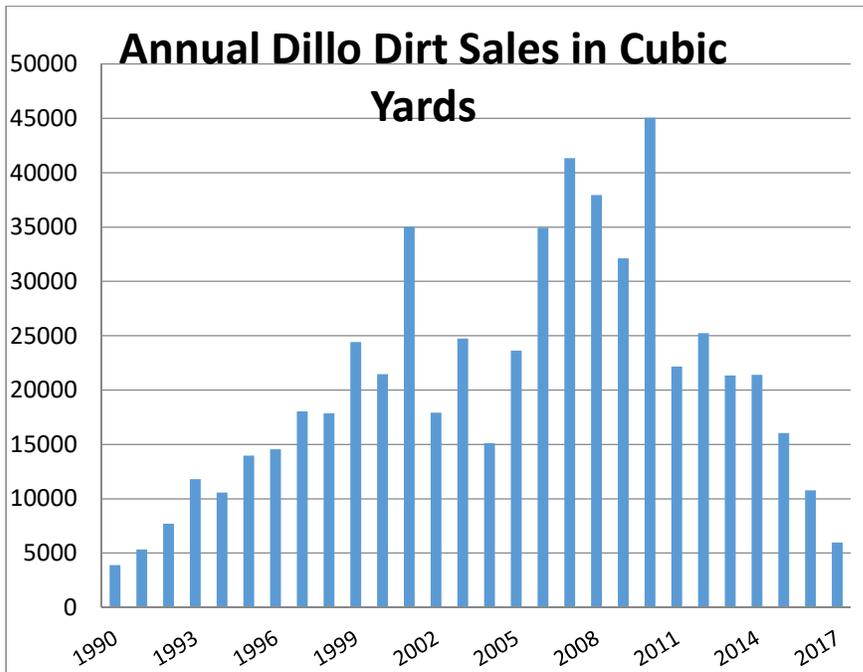


December 2012 – Fire erupts at Hornsby, in part due to accumulation of compost piles onsite. Fire is not completely extinguished until late March 2013.

2013 – Dillo Dirt sales are still down. Staff allows credit card sales by phone to make it easier to purchase Dillo Dirt.

November 2013 – Council approves a one-year contract with Synagro for beneficial reuse of biosolids. The contract is for 75% land application and 25% compost.

2014–2015 – AW begins an outreach program to find out what is harming sales. Dillo Dirt vendors, both past and current, are surveyed. As a result of the surveys, AW obtains Seal of Testing Assurance (STA) certification, lifts the daily load limits, extends loading hours, lowers rates (with a discount for high volumes), and improves loading ramp. Sales still do not improve.



2016 – The Synagro contract is expiring. Decreased sales of Dillo Dirt lead to an increased number of curing piles on the pad. Austin Water looks for alternate solutions for beneficially reusing biosolids. In an attempt to solicit as wide a range of options as possible, Austin Water issues a Request for Proposals (RFP), instead of an Invitation for Bids (IFB).

Proposals are received and scored. The highest scoring proposal is one using the whole site for compost. The price quoted for composting is 42% lower than the current contract price for composting.

August 2016 – Synagro contract is scheduled for Council action. Council directs AW to work with Water/Wastewater and Zero Waste Advisory subcommittee for input on policy issues pertaining to the contract.

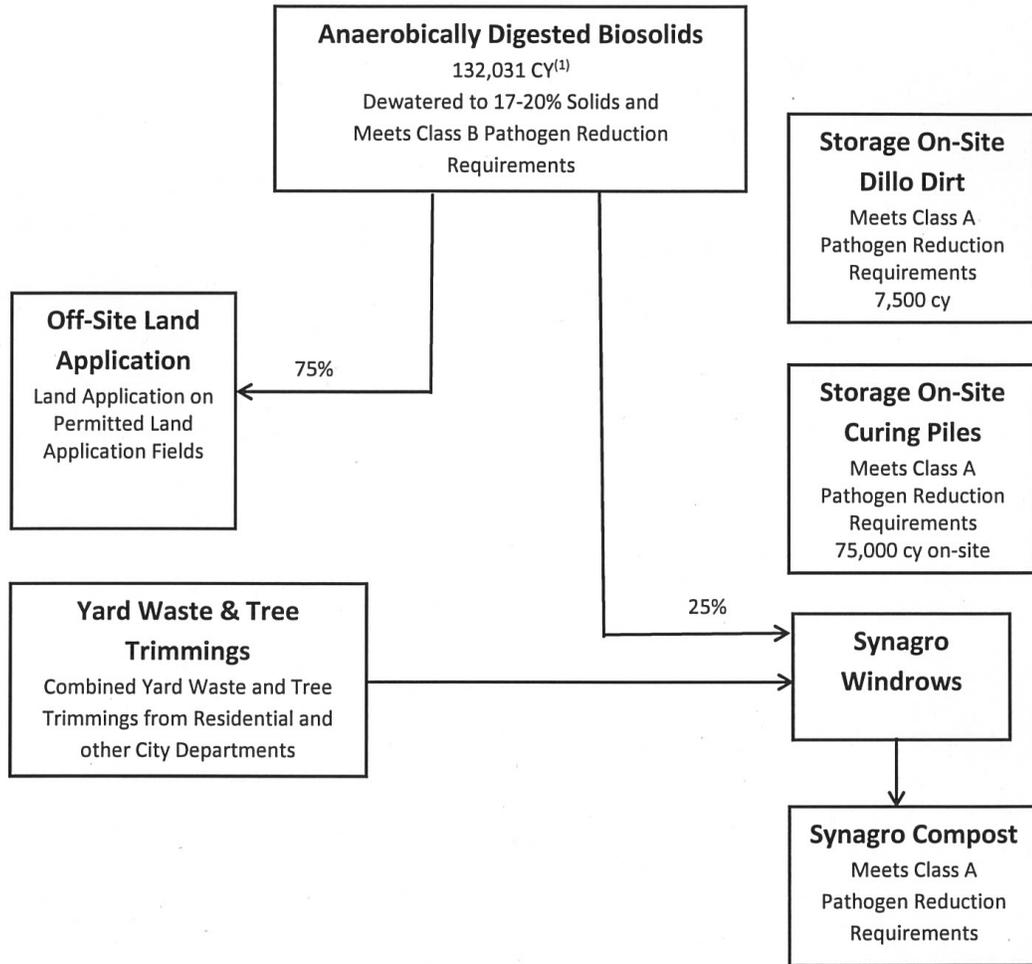
October 2016 – AW negotiates a contract to meet the stricter of the two policies recommended by the two commissions.

December 2016 – Council cancels the RFP, directing staff to resolicit the bid, retroactively waiving the Anti-lobbying Ordinance.

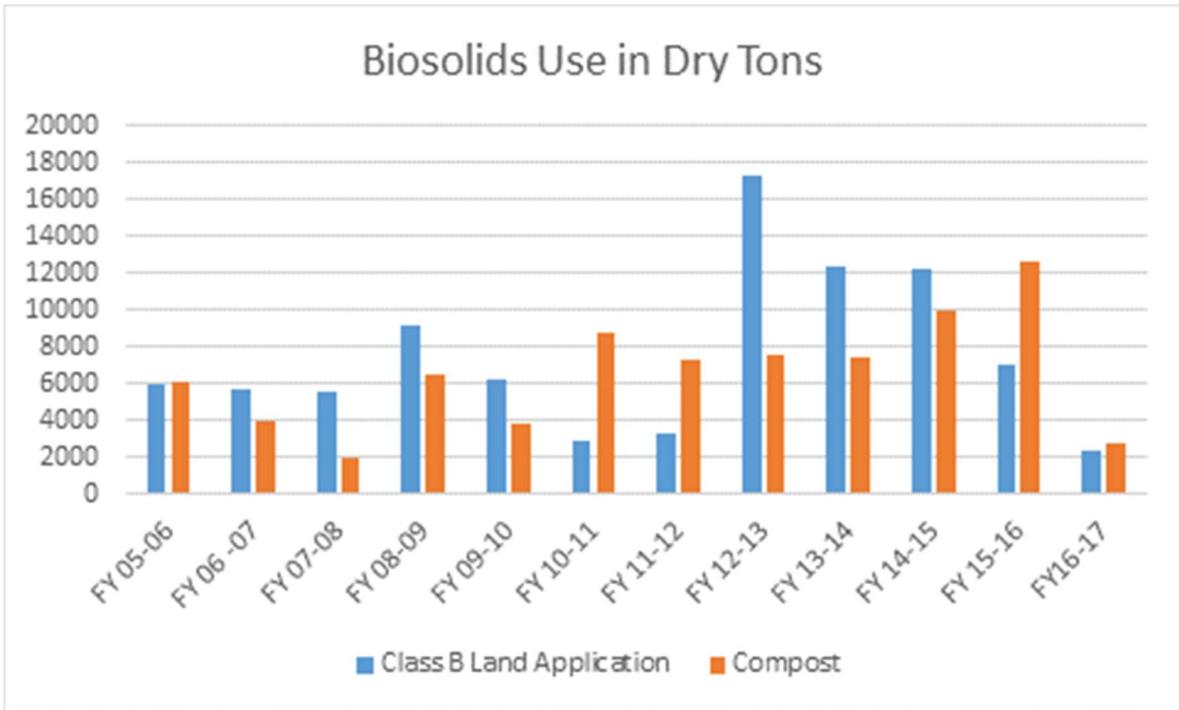
2017 — Synagro contract in a holdover until March 2018. Sixteen curing piles remain on site with ARR brush collection also occupying space on the pad.



## Hornsby Bend BMP Solids Process Flow Diagram



<sup>(1)</sup> Includes annual production of biosolids off the belt press and stored biosolids.



Q: What are other Cities doing?

- **Biosolids Handling - Texas**

- *Dallas* - *Monofill and Land Application of Class B*
- *El Paso* - *Monofill*
- *Fort Worth* - *Class AB Land Application*
- *San Antonio* - *50% Compost & 50% Land Fill*
- *Houston* - *Pelletizing, Land Application, Landfill*
- *Waco* - *Class A Heat Pelletizing*
- *Trinity River* - *Thermal Hydrolysis*

Q: What are other Cities doing?

- **Biosolids Handling – Other US Cities**

- *San Francisco* - *Landfill and Compost*
- *Seattle* - *Class B Land Application & Compost*
- *Portland* - *Class A Land Application*
- *Phoenix* - *Class B Land Application*
- *Denver* - *Class B Land Application*
- *Eugene* - *Class A Land Application and Compost*
- *Boulder* - *Class B Land Application*