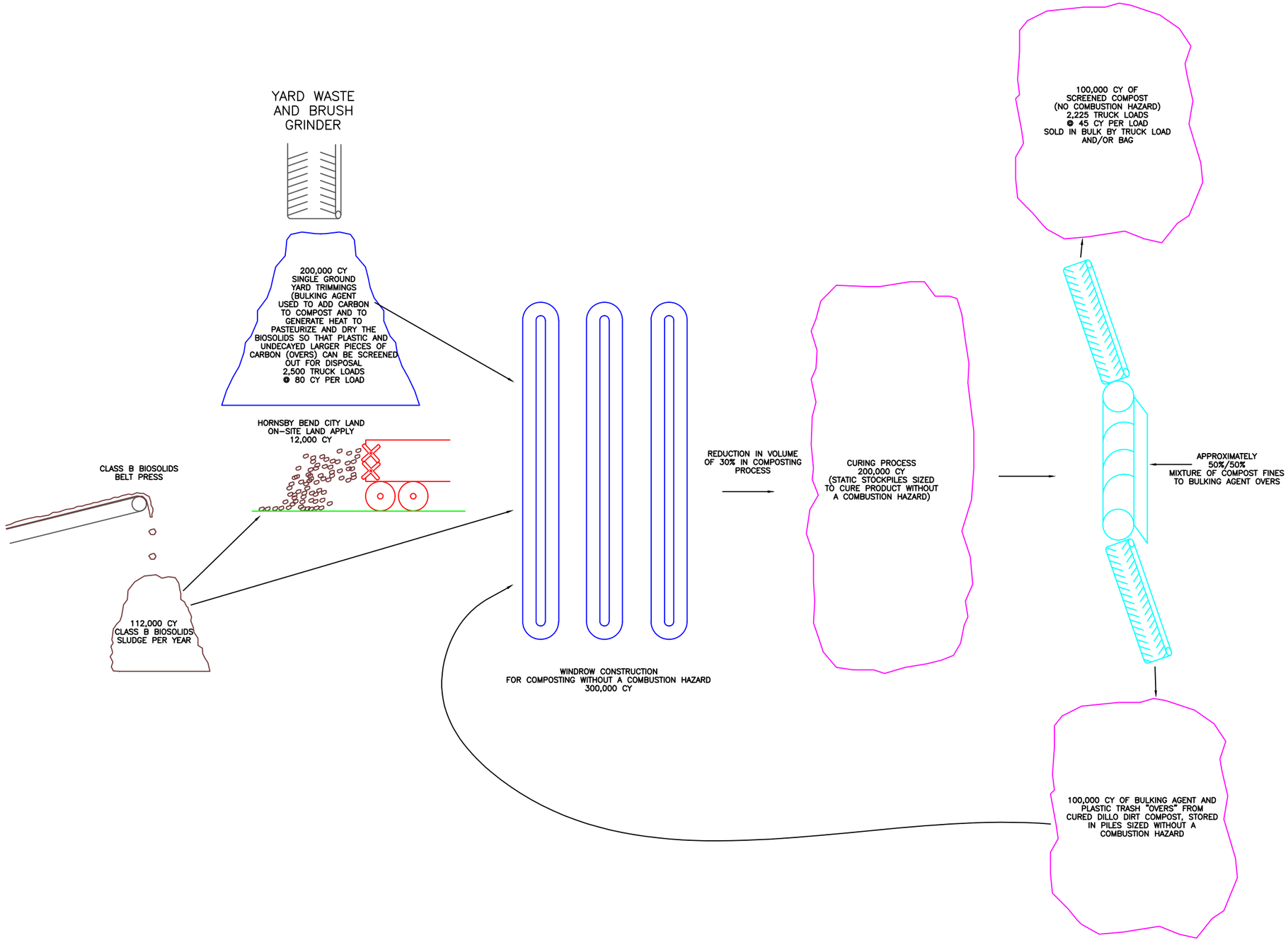
HORNSBY BEND COMPOST PROCESS
FOR DILLO DIRT
(CURRENT VOLUMES IF ALL SLUDGE IS COMPOSTED, CURED AND SCREENED)



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Various Scenarios - Hornsby Bend Biosolids

(The following are estimates of the various amounts of inputs and outputs of different biosolids composting scenarios)

ASSUMPTIONS

(a) 2015 COA Biosolids generation (information provided in RFP)
- 112,000 cubic yards per year = 94,360 tons per year

(b) 1 cubic yard of Biosolids (information provided in RFP)
- 1,685 lbs. per cubic yard = 0.8425 tons per cubic yard

(c) 3 cubic yards of Bulking Agent is needed to fully and properly compost 1 cubic yard of Biosolids into "Dillo Dirt"
- 500 lbs. per cubic yard = 0.25 tons per cubic yard
- Bulking Agent is shredded yard trimmings, leaves, brush, limbs, etc.

(d) 3 cubic yards of Bulking Agent is needed to fully and properly compost 1 cubic yard of Biosolids into "Dillo Dirt"
- 1 cy of Biosolids plus 3 cy of Bulking Agent once composted produces 1 cy of cured and screened Dillo Dirt and 1 cy of "Overs" (larger pieces of carbon & plastic trash)
- Screening typically produces a 50/50 split of Dillo Dirt "Fines" and carbon and plastic trash "Overs"
- Dillo Dirt takes 6.5 months to produce, per City staff

(e) 1.5 cubic yards of Bulking Agent is reported by Synagro to be needed to partially compost 1 cubic yard of Biosolids into "Ag Compost", which is not cured or screened of "Overs" and plastic trash

(f) Truck cargo weights
- Bulking agent: 40,000 lbs (80 cy)
- Dillo Dirt: 42,000 lbs (45 cy)
- Agricultural Compost with unscreened "Overs" and plastic trash: 44,000 lbs (30 yds)
- Class B land application: 44,000 lbs (26 cy)

(h) Curbside collected yard waste and food waste cannot be processed at the Hornsby Bend facility, per City staff
- The City currently collects approximately 100,000 cubic yards per year of unshredded yard waste Bulking Agent without food waste, per City staff
- This volume is reduced to 50,000 cubic yards after shredding.

Fully & properly compost 100% of Biosolids into Dillo Dirt

Process	Volume of Biosolids	Current Yard waste Available for Dillo Dirt	Additional Bulking Agent Required for Dillo Dirt	Cured & Screened Dillo Dirt Produced	# Inbound Trucks Bulking Agent	# Outbound Trucks Dillo Dirt	# Outbound Trucks Class B Land Apply	Inbound + Outbound Truck Total (approx)
Dillo Dirt	100,000 cy [1] 84,250 tons	50,000 cy	200,000 cy [2]	100,000 cy	1,875 - 2,500	2,222	n/a	4,097 - 4,722

There is a *SHORTAGE OF 150,000 CUBIC YARDS* of bulking agent if current yard waste volumes *ARE USED* for composting 100% of the biosolids into Dillo Dirt

There is a *SHORTAGE OF 200,000 CUBIC YARDS* of bulking agent if current yard waste volumes *ARE NOT USED* for composting 100% of the biosolids into Dillo Dirt

1. Scenario considers direct land application of 12,000 cy of Class B Biosolids onsite at Hornsby Bend (an RFP requirement)
2. Scenario considers utilization of 100,000 cy of "Overs" in the composting process, therefore reducing the overall amount of required inbound Bulking Agent to 200,000 cy

Fully & properly compost 50% of Biosolids into Dillo Dirt
Direct land application of 50% of Class B Biosolids offsite

Process	Volume of Biosolids	Current Yard waste Available for Dillo Dirt	Additional Bulking Agent Required for Dillo Dirt	Cured & Screened Dillo Dirt Produced	# Inbound Trucks Bulking Agent	# Outbound Trucks Dillo Dirt	# Outbound Trucks Class B Land Apply	Inbound + Outbound Total Trucks (approx)
Dillo Dirt	50,000 cy [1] 42,125 tons	50,000 cy	100,000 cy [2]	50,000 cy	625 - 1,250	1,111		3,659 - 4,284
Land Apply Offsite	50,000 cy 42,125 tons		n/a n/a	n/a n/a	n/a n/a	n/a n/a	1,923	

There is a *SHORTAGE OF 50,000 CUBIC YARDS* of bulking agent if current yard waste volumes *ARE USED* for composting 50% of the biosolids into Dillo Dirt

There is a *SHORTAGE OF 100,000 CUBIC YARDS* of bulking agent if current yard waste volumes *ARE NOT USED* for composting 50% of the biosolids into Dillo Dirt

1. Scenario considers direct land application of 12,000 cy of Class B Biosolids onsite at Hornsby Bend (an RFP requirement)
2. Scenario considers utilization of 50,000 cy of "Overs" in the composting process, therefore reducing the overall amount of required inbound Bulking Agent to 100,000 cy

Fully & properly compost 25% of Biosolids into Dillo Dirt
Direct land application of 75% of Class B Biosolids offsite

Process	Volume of Biosolids	Current Yard waste Available for Dillo Dirt	Additional Bulking Agent Required for Dillo Dirt	Cured & Screened Dillo Dirt Produced	# Inbound Trucks Bulking Agent	# Outbound Trucks Dillo Dirt	# Outbound Trucks Class B Land Apply	Inbound + Outbound Total Trucks (approx)
Dillo Dirt	25,000 cy [1] 21,063 tons	50,000 cy	50,000 cy [2]	25,000 cy	313	556		3,754
Land Apply Offsite	75,000 cy 63,188 tons		n/a n/a	n/a n/a	n/a n/a	n/a n/a	2,885	

There is a *SHORTAGE OF 50,000 CUBIC YARDS* of bulking agent if current yard waste volumes *ARE NOT USED* for composting 25% of the biosolids into Dillo Dirt

1. Scenario considers land application of 12,000 cy onsite at Hornsby Bend (an RFP requirement)
2. Scenario considers utilization of 25,000 cy of "Overs" in the composting process, therefore reducing the overall amount of required inbound Bulking Agent to 50,000 cy

Quick composting of 100% of Biosolids and Bulking Agent without curing or screening into "Agricultural Compost" and marketed as "All Grow" (per Synagro)

Process	Volume of Biosolids	Current Yardwaste Available for Dillo Dirt	Additional Bulking Agent Required for Ag Compost	Uncured & Unscreened Ag. Compost Produced	# Inbound Trucks Bulking Agent	# Outbound Trucks Class A Land Apply	# Outbound Trucks Class B Land Apply	Inbound + Outbound Total Trucks (approx)
Ag Compost	100,000 cy [1] 84,250 tons	50,000 cy	150,000 cy	85,225 tons	1,875	2,841		4,716

There is a *SHORTAGE OF 100,000 CUBIC YARDS* of bulking agent if current yard waste volumes *ARE USED* for composting 100% of the biosolids in Agricultural Compost

There is a *SHORTAGE OF 150,000 CUBIC YARDS* of bulking agent if current yard waste volumes *ARE NOT USED* for composting 100% of the biosolids into Agricultural Compost

1. Scenario considers land application of 12,000 cy onsite at Hornsby Bend (an RFP requirement). Scenario also considers a 30% reduction of biosolids volume from moisture reduction and partial composting process.