Award of Biosolids Transportation & Beneficial Use Agreements

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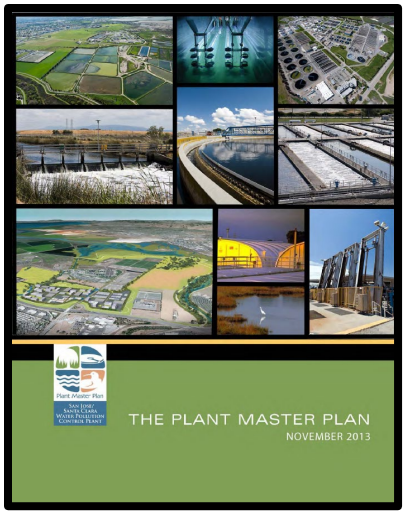
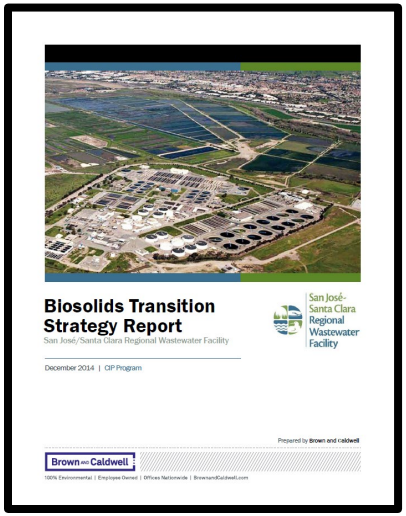
CIP San José-Santa Clara Regional Wastewater Facility

December 13, 2022
City Council Item 6.4

Previous Biosolids Management Decisions





2013 Plant Master Plan

- Incorporated 2010 Milpitas Guiding Principles
- Biosolids management goals:
  - Reduce odors
  - Multiple and diversified disposition options
  - Reduce footprint of processing area
  - Flexibility to respond to regulatory and market changes

2015 Biosolids Transition Strategy

- Proceed with new dewatering facility and retire lagoons and drying beds
- Postpone on-site thermal and greenhouse drying facilities
- Enter into various off-site disposition service contracts

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What has happened since 2015?

2019

Biosolids Disposition Market Assessment

- Purpose: Evaluate capacity and cost changes for biosolids disposition options
- Findings: Limited beneficial use capacity around SF Bay Area and rising rates
- Rates (per wet ton, excludes transportation costs): land application = $20-$60, composting = $37-$66, liquid fertilizer production = $65-85

2021

Approval of Dewatered Biosolids Management Strategy

- **Short-term: Procurement of off-site beneficial use service agreements**
- Long-term: Development of an on-site partner facility that further processes the RWF's dewatered biosolids
- Also includes permitting of local natural and working lands to receive biosolids

2022

Senate Bill 1383 Regulations Take Effect

- Goal: Reduce short-lived climate pollutants from organic waste landfill disposal
- Regulations include biosolids in organic waste definition
- Regulations encourage wastewater facilities to beneficially use biosolids

2022

Approval of Amended Design-Build Contract for Dewatering Facility

- **Anticipated completion in 2025**
- Will enable RWF to the transition from an open-air drying operation to an enclosed mechanical dewatering process

Current Biosolids Management

Future Biosolids Management

New Dewatering Facility

Truck Entrance to Dewatering Facility Site

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Procurement Process

- RFP issued November 30, 2021
- Proposals were due March 4, 2022
- Final ranking issued June 2, 2022
  1. Denali Water Solutions, LLC
  2. Synagro West, LLC
  3. Lystek International Limited
  4. Mannco Solutions of California
  5. Aries Clean Technologies LLC
- Negotiations began late June 2022
  - Confirmed each company's approach to managing the RWF's dewatered biosolids, the availability and capacity of the sites to be used, and clarified commercial terms of the agreements

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Proposed Management Approach

Company	Primary Beneficial Use Sites	Recommended Allocation
Denali WATER SOLUTIONS	•Land Application Sites (Merced County – dry weather) •Jess Ranch Compost Facility (Alameda County – year-round)	35%
SYNAGRO YOUR PARTNER FOR A CLEANER, GREENER WORLD	•Land Application Sites (Sacramento County – year-round, Merced County – dry weather, Solano County – mid-April to mid-October) •Liberty Compost Facility (Kern County – year-round)	57%
Lystek	•Fertilizer Facility (Fairfield OMRC – year-round)	8%

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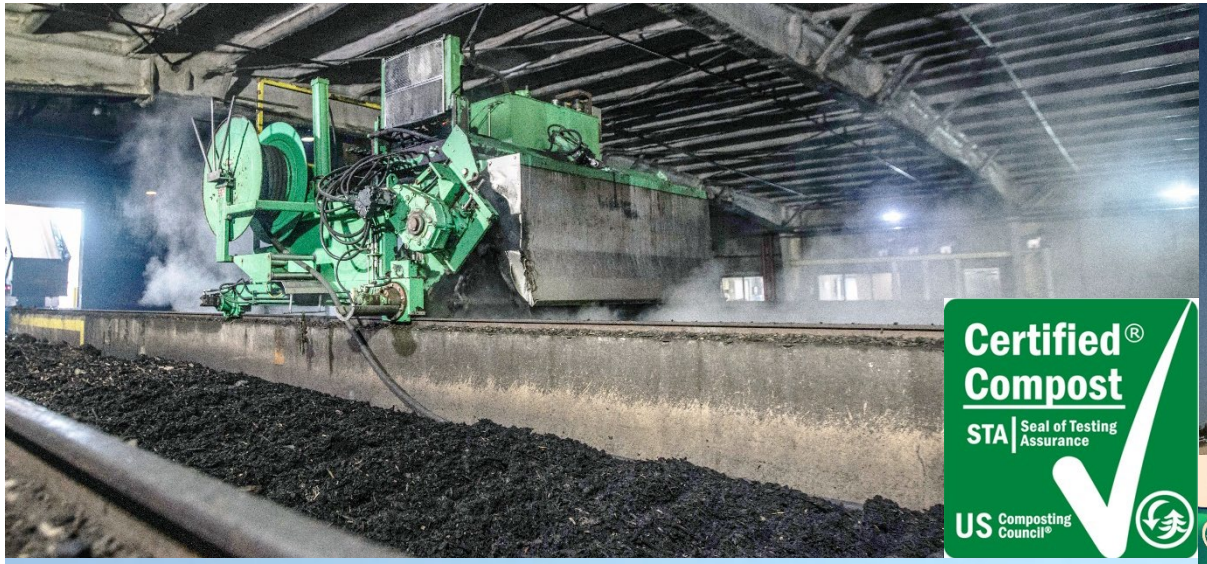
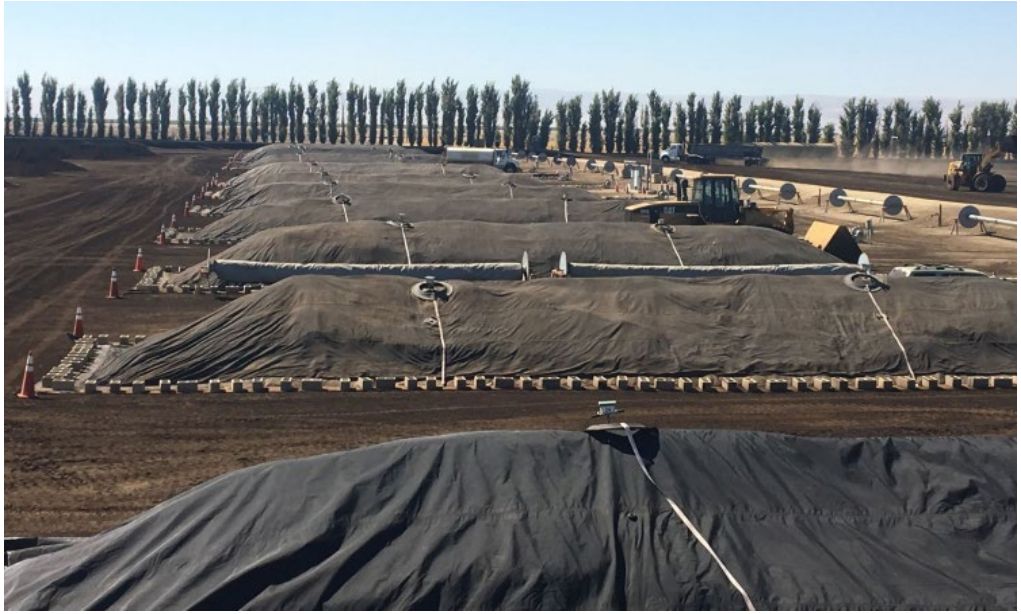
Denali – Land Application and Composting



Synagro – Land Application and Composting



Lystek – Liquid Fertilizer Production

Negotiated Rates and Benchmarking

	Rates Currently Paid by Others in Northern CA (1)	All-Inclusive Rates Negotiated by City Staff
Land Application	$49-$106 (2)	$88.47-$89.70
Composting	$71-$98	
Liquid Fertilizer Production	$105-$141 (3)	$156

Notes:

(1) Includes: Central Marin Sanitation Agency, East Bay Municipal Utility District, Palo Alto, Roseville, San Francisco Public Utilities Commission (SFPUC), Santa Cruz, Santa Rosa, and Union Sanitary District

(2) Includes average paid by SFPUC for loads delivered to Merced, Sacramento, and Solano counties

(3) Based on the sum of rates for third-party haulers and rates for Lystek as wastewater agencies surveyed have separate contracts for transportation and beneficial use services.

Recommendation

- Adopt a resolution approving the Addendum to the Environmental Impact Report for the San José-Santa Clara Water Pollution Control Plant Master Plan

- Approve and execute dewatered biosolids transportation and beneficial use services agreements with:
  - Denali Water Solutions, LLC to manage approximately 35% of the dewatered biosolids produced annually by the RWF through June 30, 2029, with options to extend through June 30, 2033, and a maximum compensation of $18,400,000 subject to the appropriation of funds
  - Synagro West, LLC to manage approximately 57% of the dewatered biosolids produced annually by the RWF through June 30, 2029, with options to extend through June 30, 2033, and a maximum compensation of $29,600,000, subject to the appropriation of funds
  - Lystek International Limited to manage approximately 8% of the dewatered biosolids produced annually by the RWF through June 30, 2029, with options to extend through June 30, 2033, and a maximum compensation of $7,300,000, subject to the appropriation of funds

- Adopt a resolution delegating authority to the City Manager or their designee to negotiate and execute amendments to account for changes to the percentage of the dewatered biosolids managed under each agreement and the corresponding compensation and/or execute extensions to the initial term of the agreement if such amendments do not exceed total of $55,300,000

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