NCRA 2017 RECYCLING UPDATE

West Contra Costa Sanitary Landfill Organics Material Processing Facility

Transitioning from Standard Windrow Composting to Covered Aerated Static Pile

March 21, 2017



West Contra Costa Sanitary Landfill – Team Members



Don Litchfield - Area Manager Post Collection

- 25 + years of professional experience in the environmental industry
- 9 years at Republic Services
- B.S. Degree in Geological Engineering from the South Dakota School of Mines & Technology

West Contra Costa Sanitary Landfill OMPF



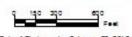
West Contra Costa Sanitary Landfill Organics Material Processing Facility (WCCSL OMPF) is key in providing comprehensive recycling services in Contra Costa County and the surrounding communities.

- Transfer Station 21,900 square foot transfer facility
- OMPF Composting Facility Environmentally responsible, organics recycling
- Construction and Demolition Recycling Capable of diverting approximately 90 percent of C&D material
- Gas to Energy 2.4 MW gas-to-energy facility using landfill gas as the energy source





West County Landfill





West Contra Costa Sanitary Landfill – Synopsis



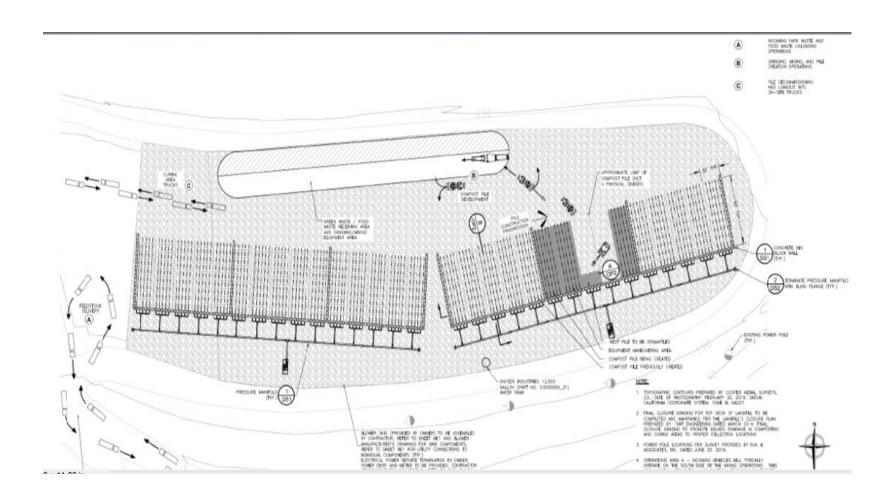
Transitioning from Windrow System to Covered Aerated Static Pile.

The new CASP system utilized components directly from landfill gas collection system equipment including HDPE headers and aerators, blower systems, and state-of-the-art SCADA system temperature and moisture controls.

Advantages of the CASP are 90% reduction in emissions, 50% reduction in composting time and 25% reduction in water use.

Covered Aerated Static Pile Bunker System





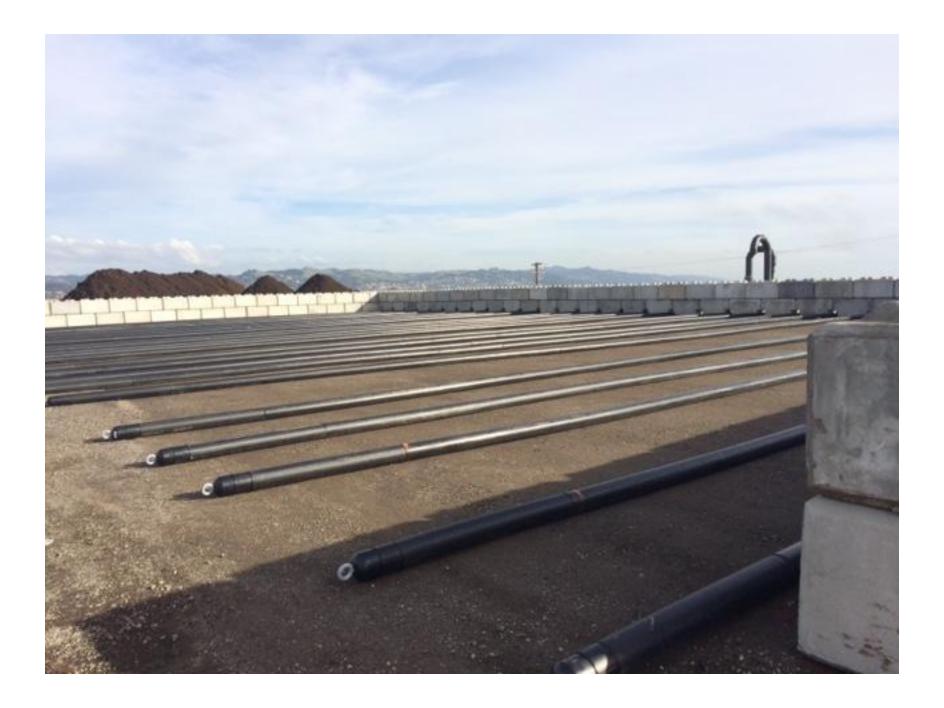


Aerated Static Pile Composting System Bunker #1 of 6 bunkers to be utilized













Odor control systems



The West County facility employs several odor mitigation measures, including:

- Landfill gas collection and control system
- On Demand misting systems to control potential odors
- A meteorological station to monitor weather patterns
- Construction of a new, state-of-the-art Covered Aerated Static Pile compost system will reduce the potential for odors
- Water trucks to spray down any dust-producing areas



A meteorological station monitors weather patterns



Being Good Neighbors



Being a good neighbor is a top priority for the management team and employees of the West Contra Costa Sanitary Landfill OMPF

- Committed to improving and eliminating any impacts
- Upgraded odor control systems
- Implemented best management practices
- Active participant in the community
- Maintains Wildcat Marsh & Landfill Loop Trail

Best Management Practices



Best management practices for the WCCSL OMPF

- Covered Aerated Static Pile compost system
- Air District preferred method for composting
- More efficient processing of green waste
- Fully automated for temperature and aeration flow control
- Bunker-style system requires less movement of material

Future of WCCSL OMPF



- New composting facility completed January 2017
- Continue and expand best management practices
- Ensuring our company runs the most environmentally responsible facilities.
- Unique regional facility designed to meet State organic processing requirements