OC Waste & Recycling
Landfill Tour Program

Southern California
SWANA Chapter Workshop
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Strategic Vision

✓ Safety/security
✓ Best practices standardization and operations
✓ Preservation and advancement of OCWR reputation
✓ Educational messaging
Strategic Vision

All components tie to the strategic vision in one or multiple ways

- Amended/fortified tour rules and structure
- Established schedule
- Online reservation system
- Tour guide binder
- Pre-tour video
Components – Amendments/Fortification

Amended/fortified tour rules/structure

- Multiple guides – engineering and operations
- Set route with 3-4 stops; no stops at active location, vantage points
- Set schedule – three-site system
- Safety rules; laminated sheet in vehicle
Established schedule

Weekday coverage across three-landfill system

Saturdays by appointment

Will support conference room availability for pre-tour activity

*VIP by appointment still ok
Components – Online Reservation System

- Online reservation system
  - Record of guests and their stated purpose for the tour
  - Introduce tours with consistency
  - Pre-load available tour dates
  - Post-tour survey
Components – Online Reservation System

www.oclandfills.com

Tour an Orange County Landfill

Frank R. Bowerman Landfill -- Irvine
11002 Bee Canyon Access Road

Olinda Landfill -- Brea
1942 N. Valencia Ave.

Prima Deshecha Landfill -- San Juan Capistrano
32250 La Pata Ave.

Tour Reservations Click Here:

OC Waste & Recycling

The mission of OC Waste & Recycling is to provide waste management services, protect the environment, and promote recycling in order to ensure a safe and healthy community for current and future generations.

OC Waste & Recycling offers free tours based on the availability of staff at our three sites. If the site you requested is unable to provide a tour on a particular day, please check the other two sites. Individual guests requesting a general tour may be grouped together.
Components – Program Binder

Tour program binder

Resource, reference

Training for new employee
Components – Pre-Tour Video

Pre-tour video

1. OCWR, landfill and recycling messages
2. Shows what happens in active areas
3. Professional, standardized presence, impressions
Components – Program Materials

Handouts: tour stops and landfill fact sheet

Welcome to Frank R. Bowerman Landfill

Thank you for your interest in our landfill. We are pleased to show you our landfill operations, which we believe reflect environmental engineering at its best. Please be sure to keep your seat belt fastened and stay in the vehicle unless directed by landfill personnel. Enjoy the tour!

Office
- Landfill operations and administration.
- Display of fossils excavated during landfill construction.

Fee Booths
- Trucks enter the landfill to be weighed and pay fees.

Household Hazardous Waste Storage
- Household hazardous waste items that waste inspectors pull out of the trash are stored here for future safe and proper disposal.
- FRS is a Class III landfill with a liner. It does not accept hazardous waste items such as paint, electronics, pesticides, and batteries.

Landfill Gas to Energy Plant
- Decomposing organic waste produces gas. It is collected, isolated for methane, and sent through engines to produce electricity.
- Produces power that is sold to Anaheim Public Utilities; there’s enough to power 26,000 homes.

Vantage Point – Active Lift Area
- Lift is a landfill lift. The active lift is the area where waste is currently being buried. Each day a new layer of waste is placed on top of another.
- This is landfilling in action – active trash disposal.
- A steady stream of trucks drop off the trash, which is moved into place by dozers and compressed by trash compactors.
- The trash is completely covered every day, with soil or tarps.

Falconer Staging Area
- Used for bird abatement.
- Between October and March, a falconer uses predatory birds to keep sea gulls from scavenging the trash.

Frank R. Bowerman Landfill

At a Glance

Opened 1990
Acreage 725 total acres; 534 for waste disposal
Tonnage Average of 7,000 tons per day

Public services available
Bowerman does not provide waste disposal services directly to the public. It is a commercial landfill.

Environmental protection highlights
Bowerman landfill is completely lined; some of the liner is visible in certain locations. The liner ensures groundwater protection.

During a landslide mitigation project, 10-12 million-year-old whale fossils were discovered, excavated, and preserved.

Habitat
The landfill is surrounded by open space and sensitive coastal sage scrub habitat. Onsite restoration preserves the coastal sage scrub and wetlands habitats.

Environmental Engineering Feats
The landfill’s stormwater runoff is collected in two concrete-lined basins to allow it to settle.

Once clear, the stormwater from the south basin drains into a wetlands restoration basin, which creates habitat for native plants and wildlife.

Opened in 2016, the Bowerman Power Plant is an award-winning public-private partnership. It produces up to 21 megawatts of electricity for the City of Anaheim – enough to power 26,000 homes.

Trivia
The landfill is named after the engineer and codevelopment department head who originally designed the site, Frank R. Bowerman was a long-time County employee and nationally renowned landfill engineering pioneer.

August 2015
Components – Program Materials

Handouts: Game and route map
Components – Program Materials

Anatomy of a Landfill

Landfill Gas Conversion
Decomposing waste in landfills naturally produces methane gas. The gas is collected through pipes then sent to a facility for conversion to renewable energy or to be flared.

Desilting Basin
Desilting basins help protect our streams and ocean. They capture storm water runoff and trap sediment, keeping it from entering the storm water released into drains.

Condensate and Leachate Storage Tanks
Leachate is liquid that results from decomposing waste. Condensate is the liquid that forms inside the landfill gas collection system. These liquids are collected and stored in tanks. Some of the collected liquid is used for dust control.

Creating a Cell
Each day trash is placed, compacted and covered with a layer of soil or tarps in sections until a specified size is reached, forming a cell.

Environmental Protection
1. To control dust, trucks continuously spray dirt areas with water that has been “recycled” at the landfill.
2. Portable screens are used to trap and collect any stray litter, to keep it from flying away. They can be moved based on wind direction.
3. Special misting machines spray a very fine mist into the air to help confine odors.

Protective Soil Cover
- Gravel
- Fabric Filter
- Leachate Collection Pipe
- Gravel
- Plastic Liner
- Low Permeable Layer
Thank You!