ANATOMY OF A LANDFILL

AND RESOURCE RECOVERY FACILITY

COUNTY OF ORANGE OC Waste&Recycling Our Community. Our Commitment.

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 regional stormwater management infrastructure.

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.

WINDROW COMPOSTING

Greenwaste that comes from OC residents' curbside bins is a resource. Through composting, it becomes a soil amendment that eventually is returned to the community. The process takes from three to six months, and specially trained OCWR staff monitor, turn and test the piles.

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.

Proactive Soil Cover

Fabric Filter

Gravel

Plastic Liner

Low Permeable Layer

Native Subgrade

Leachate Collection Pipes

GROUND WATER MONITORING WELL

GAS MONITORING PROBE

Condensate Collection Pipe

Leachate Collection Pipe

ENVIRONMENTAL PROTECTION

1. Wells are used to monitor for any impacts from the landfill to the groundwater beneath the landfill.
2. To control dust, trucks spray dirt areas as needed using liquids recycled from the landfill.
3. Portable screens are used to trap and collect any stray litter, to keep it from flying away. They can be moved based on wind directions.
4. Special misting machines spray a very fine mist into the air to help confine odors.
5. Hundreds of probes monitor subsurface gas at various elevations and detect if any escapes.
6. In addition to waste disposal OC's landfills also serve as Resource Recovery Facilities, which divert resource materials such as greenwaste, metal and mattresses for reuse. Resource recovery preserves landfill capacity that is an important component of our community's waste management system.
7. Bird Abatement – A falconry program keep birds from feeding on waste, keeping trash where it belongs for a safer and cleaner community.
8. Legislation – New state laws make recycling more important than ever, with food and green waste as a big part of the recycling stream.

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