# 2017 Sunshine Canyon Landfill Action Plan

Los Angeles County Solid Waste Management Committee Integrated Waste Management Task Force April 20, 2017

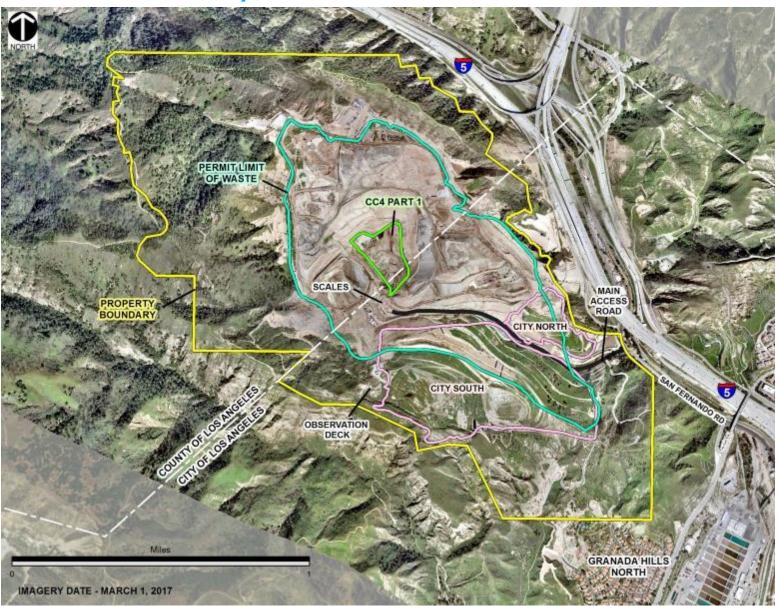
Rob Sherman – General Manager – Sunshine Canyon Landfill Elena Goodhall – Corporate Director Engineering, Field Operations

### What are we going to do?

- Goal: Eliminate offsite odor
- Actions:
  - 1. Collect and control landfill gas (Presented Today)
  - 2. Control waste odors on site
  - 3. Reduce conditions for future odors



### Sunshine Canyon Site Orientation

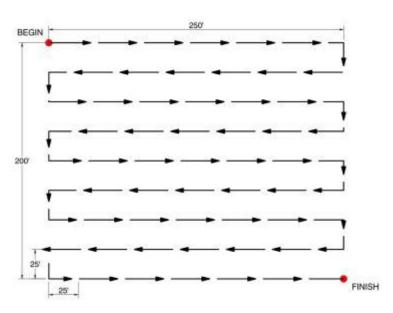


## Action #1: Collect and Control Landfill Gas Current Status

- Odors from fugitive gas emissions resulted from requirement to deviate from industry standard operating procedures
- Watered-in gas wells are presenting a new and extreme challenge to efficient gas collection
- The Order for Abatement, and our own additional measures, described herein, constitute a system augmentation to address unique conditions

## Fugitive Emissions Detected by Surface Scans

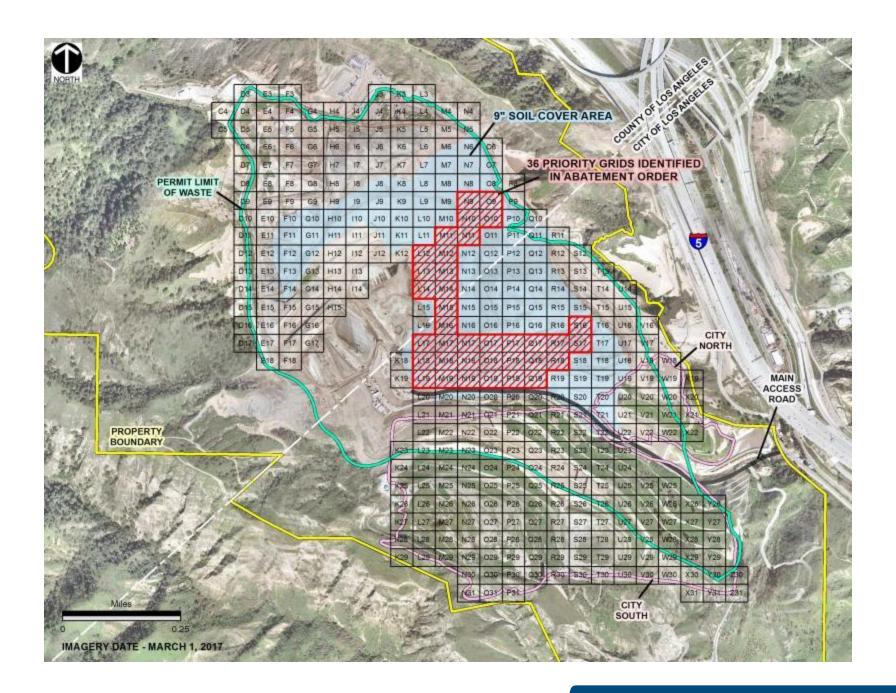
- Uncollected gas that diffuses through the cover and into the air
- Can be directly located with surface scans
- Monthly scans conducted to pinpoint fugitive emissions



Typical grid scan route



Scan instrument



#### Landfill Gas Odor Control

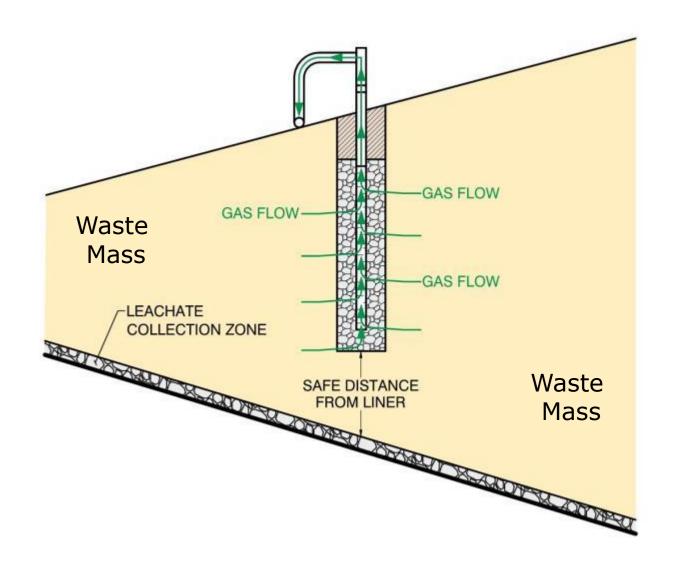
#### **Primary Solution – Improve gas collection**

- Efficient gas collection with minimal cover is effective
- Adding or replacing more than 150 gas wells to improve coverage
- Adding pumps to over 250 gas wells (unusual need for Southern California landfills)

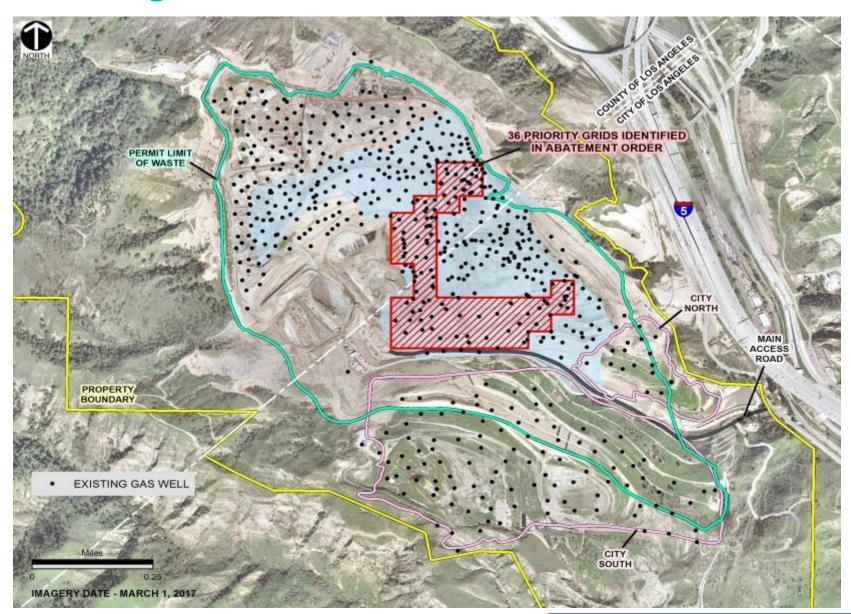
#### **Secondary Solution – Enhanced cover**

- No cover works well without efficient gas collection
- SCL always meets Federal and State cover requirements
- Enhance intermediate cover over 115 acres

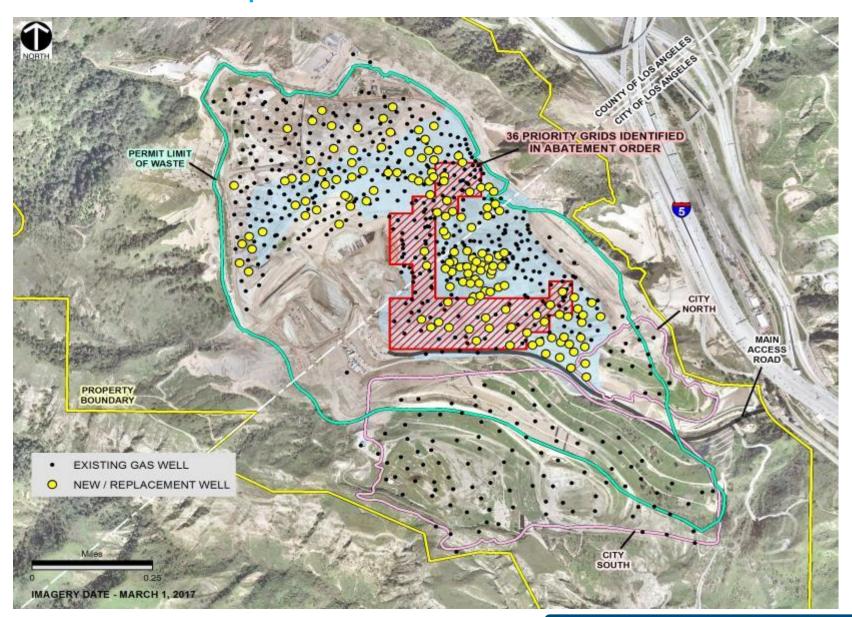
## Proper Gas Well Operation



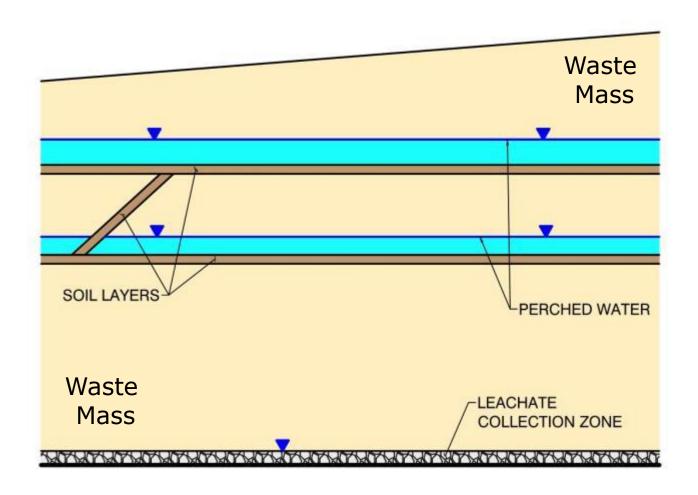
## **Existing Gas Wells**



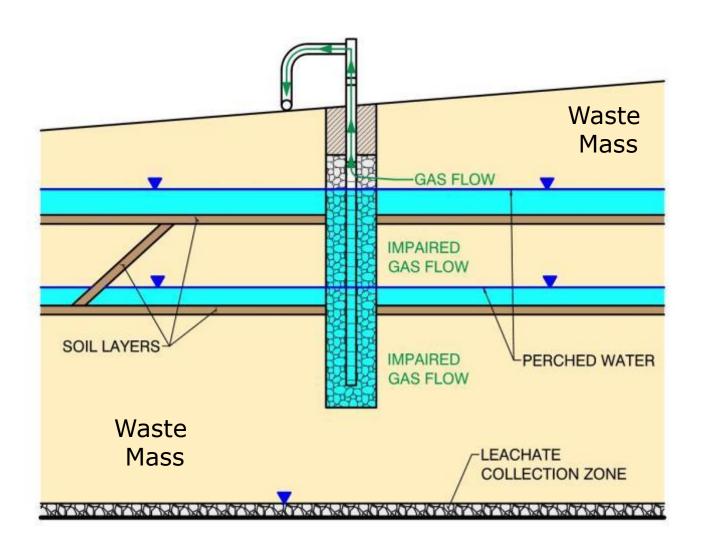
## New and Replacement Gas Wells



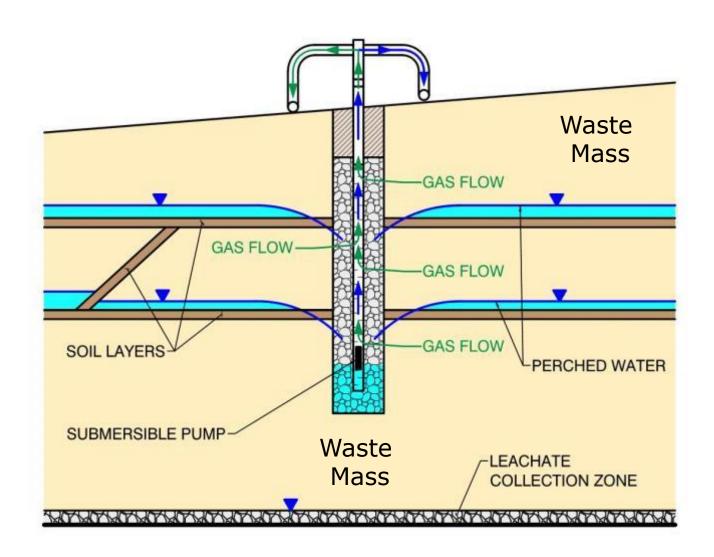
#### Perched Water



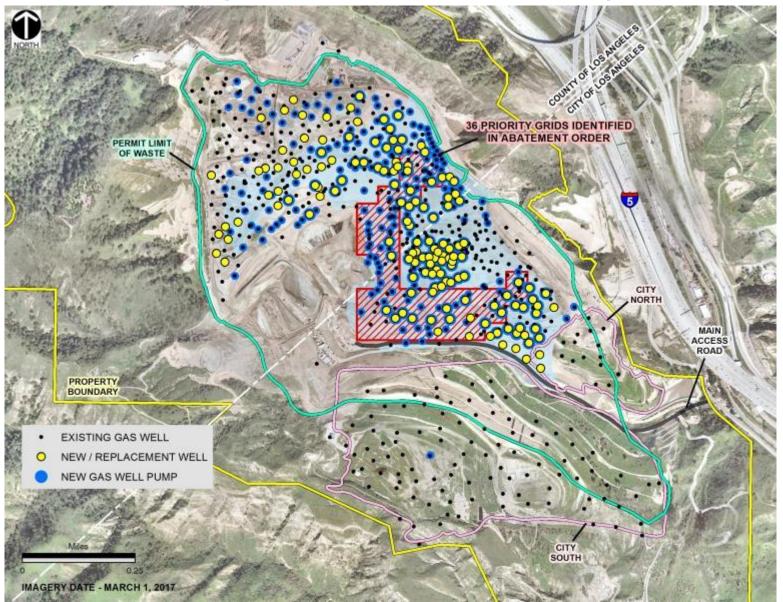
#### Watered-in Gas Well



### **Dewatering Pump Installation**



## New and Proposed Gas Well Pumps



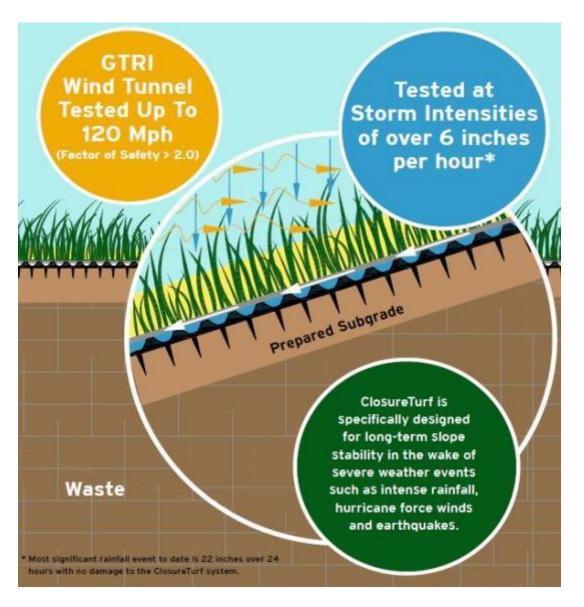
#### **Enhanced Intermediate Cover**

- Until the gas extraction system improvements become effective, enhanced intermediate cover will help prevent gas odors from escaping
- Third-party engineering report identified best enhanced intermediate cover options, three of which we are proposing:
  - 1. Closure Turf
  - Intermediate sprayon cover
  - 3. Vegetative cover



Closure Turf Example

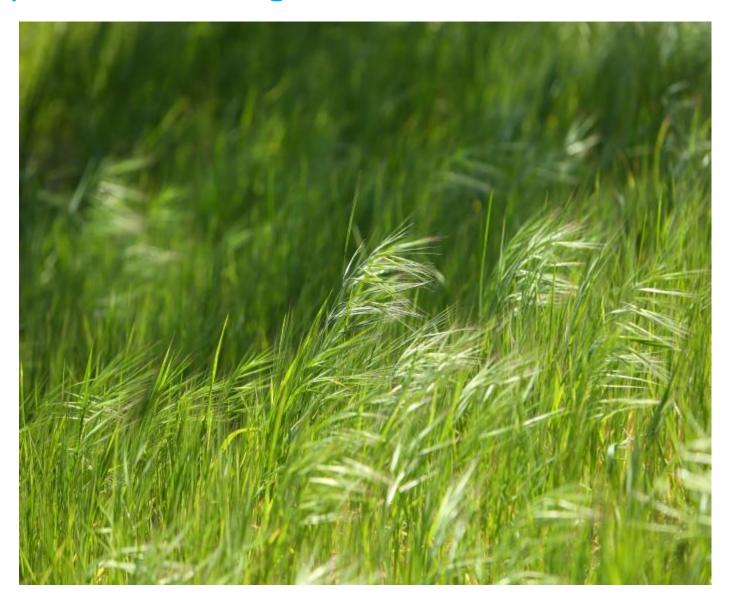
### Option #1 - Closure Turf

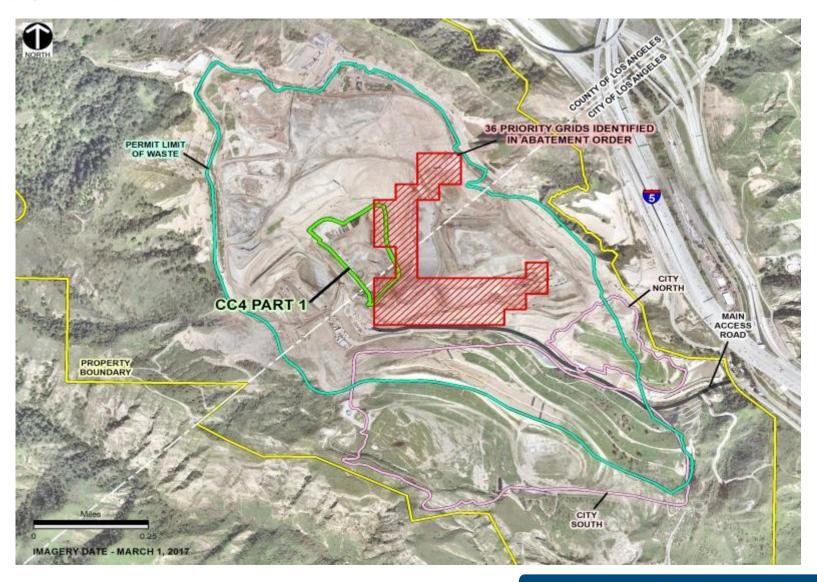


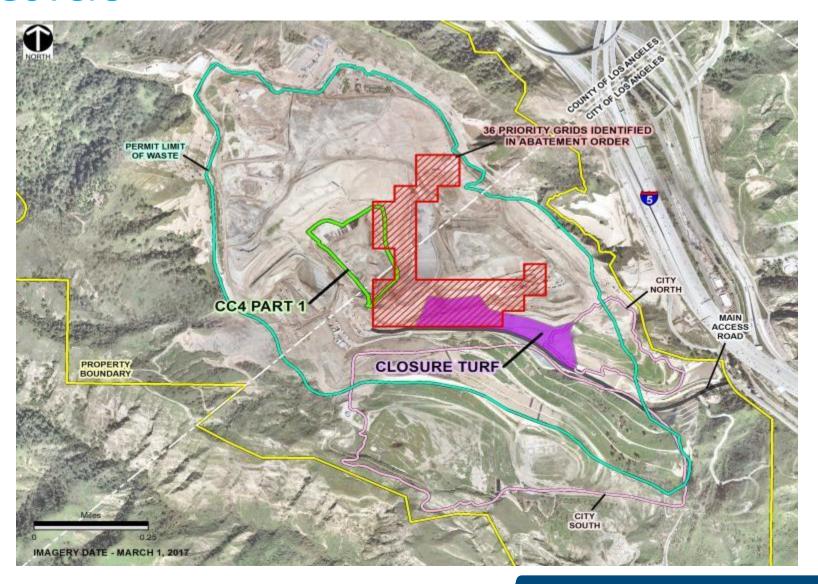
## Option #2 – Intermediate Spray-on Cover

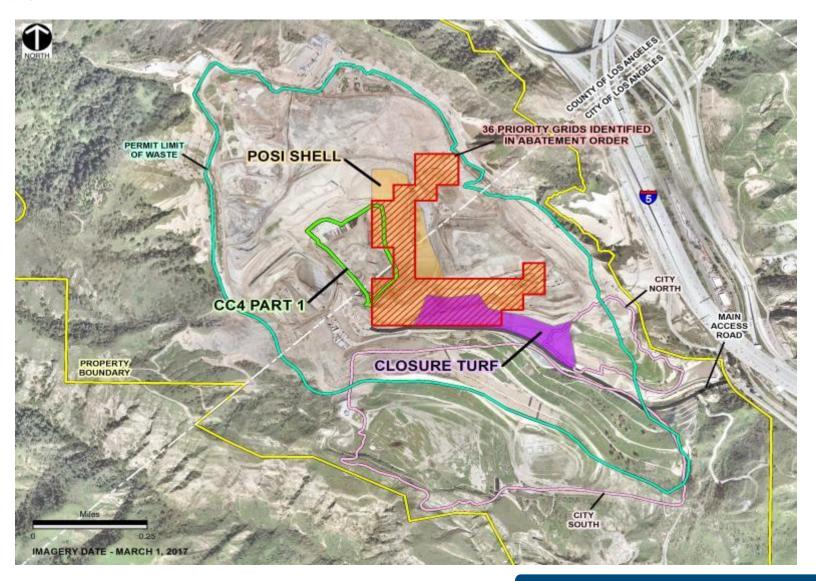


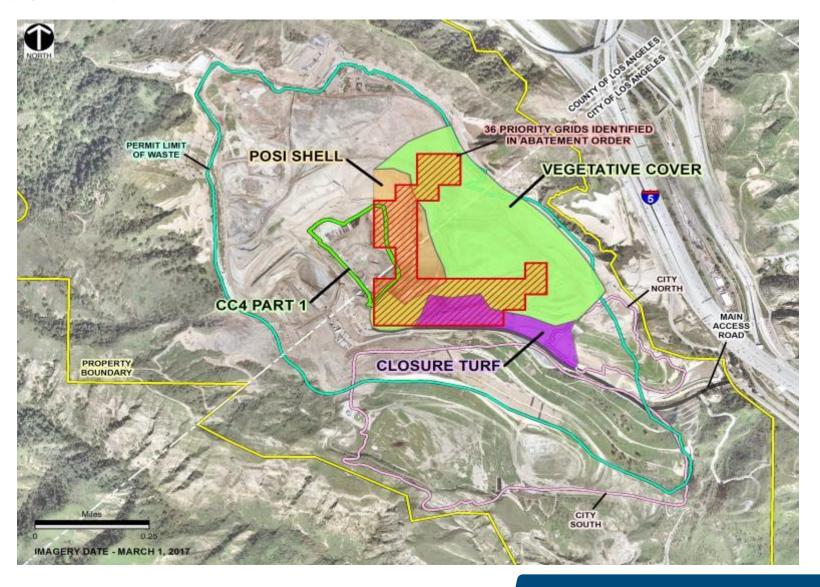
## Option #3 – Vegetative Cover



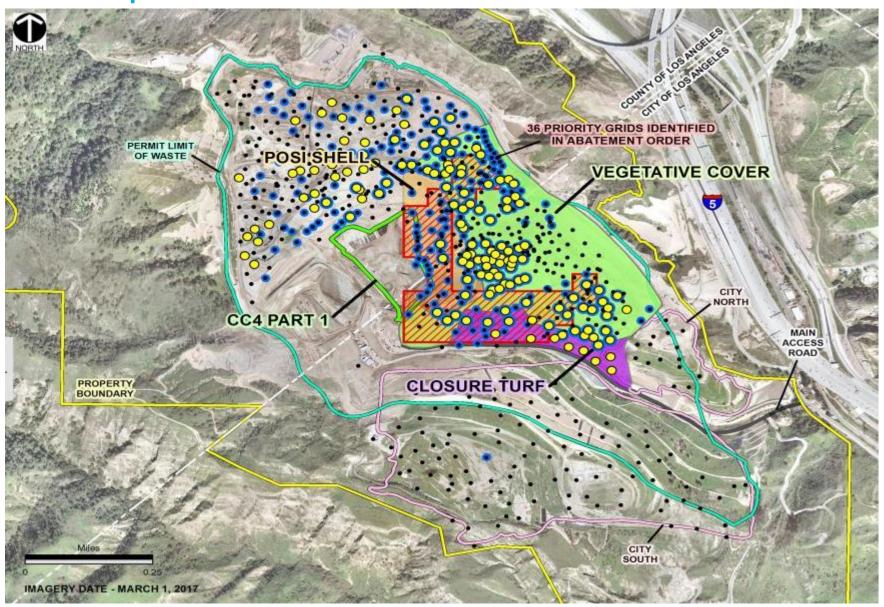








## **Comprehensive Solutions**



## When We Are Going to Do It

| Action                                                   | Target Month of Completion | Current Progress                                                          |
|----------------------------------------------------------|----------------------------|---------------------------------------------------------------------------|
| Add or replace more than 150 gas wells                   | July                       | 36 gas wells added or replaced                                            |
| Install pumps in more than 250 gas wells                 | August                     | 150 pumps installed                                                       |
| Apply 37 acres of intermediate spray-on cover            | August                     | Approximately 4 acres currently applied                                   |
| Install 21 acres of closure turf                         | August                     | Design completed;<br>materials ordered                                    |
| Prepare soil and seed<br>57 acres of<br>vegetative cover | December                   | 5-acre test plot underway (intermediate spray-on currently being applied) |

### Community Outreach

- Weekly e-Blast
  - Provides specific schedule updates and tracking of progress
- Expanded website with information updated weekly
  - Sunshinecanyon.com
- Quarterly Newsletters
- Neighborhood Group Outreach
  - Granada Hills Neighborhood Council
  - Community Advisory Committee

## Thank You

# SUNSHINE CANYON Landfill