

South Coast Air Quality Management District

Sunshine Canyon Landfill Town Hall Meeting

April 21, 2016
6:30 p.m.

Van Gogh Elementary School
17160 Van Gogh Street
Granada Hills, CA 91344

AGENDA

1. Welcome	Mr. Wayne Nastri Acting Executive Officer
2. Status of SCAQMD Activities Regarding Sunshine Canyon Landfill	Mr. Mohsen Nazemi Deputy Executive Officer Engineering & Compliance
3. Health Impacts from Air Monitoring Data	Dr. Philip Fine Deputy Executive Officer Planning & Rules
4. Other Agency Comments	Agencies
5. Public Comments	Public
6. Closing Remarks/Adjourn	Mr. Wayne Nastri

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Status of SCAQMD Activities Regarding Sunshine Canyon Landfill

Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance

South Coast Air Quality Management District

- Local Air Pollution Control Agency in Southern California (All of Orange & Urban Portions of LA, Riverside & San Bernardino Counties)
- Population of 16.4 million (about half the population of the State of California)
- Area of 10,743 mi²
- Regulating over 27,000 stationary sources
- Worst air quality in the U.S. (Ozone & PM 2.5)





Sunshine Canyon Landfill

- Opened in 1958
- Operated within both the City and County of Los Angeles
- Owned and operated by Browning-Ferris Industries (Allied Waste/Republic)
- Operates a gas collection system and control equipment

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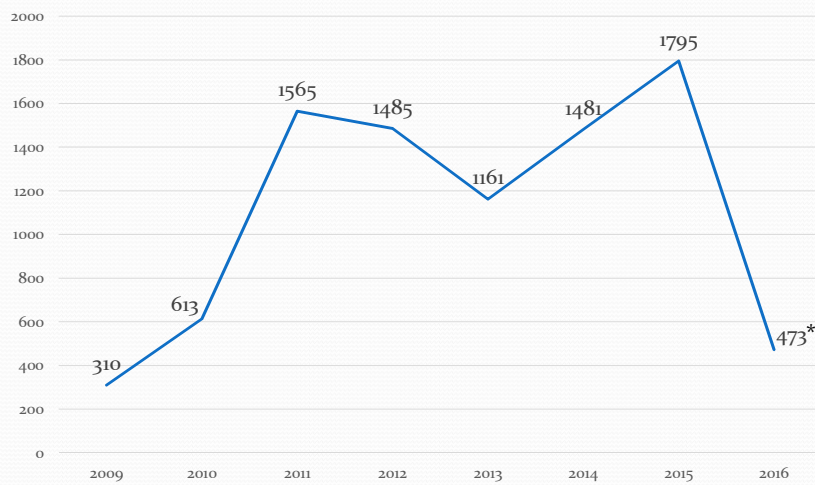


Air Quality Regulatory Activities at SCL

- Compliance Activities
 - Inspections
 - Complaint Response
 - Notices of Violation
 - Orders for Abatement
 - Others
- Annual Emissions Reporting to SCAQMD
- Air Quality Monitoring required per:
 - SCAQMD Rule 1150.1
 - SCAQMD Order for Abatement
 - Sunshine Canyon Landfill Local Enforcement Agency (LEA)
 - City/County of Los Angeles - Conditions of Approval

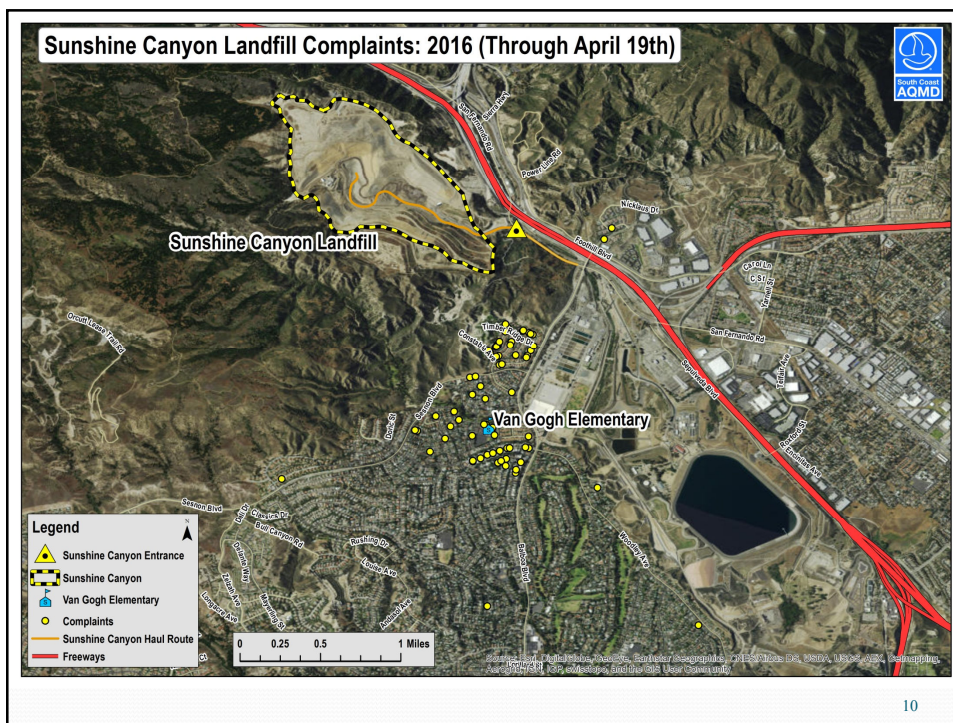
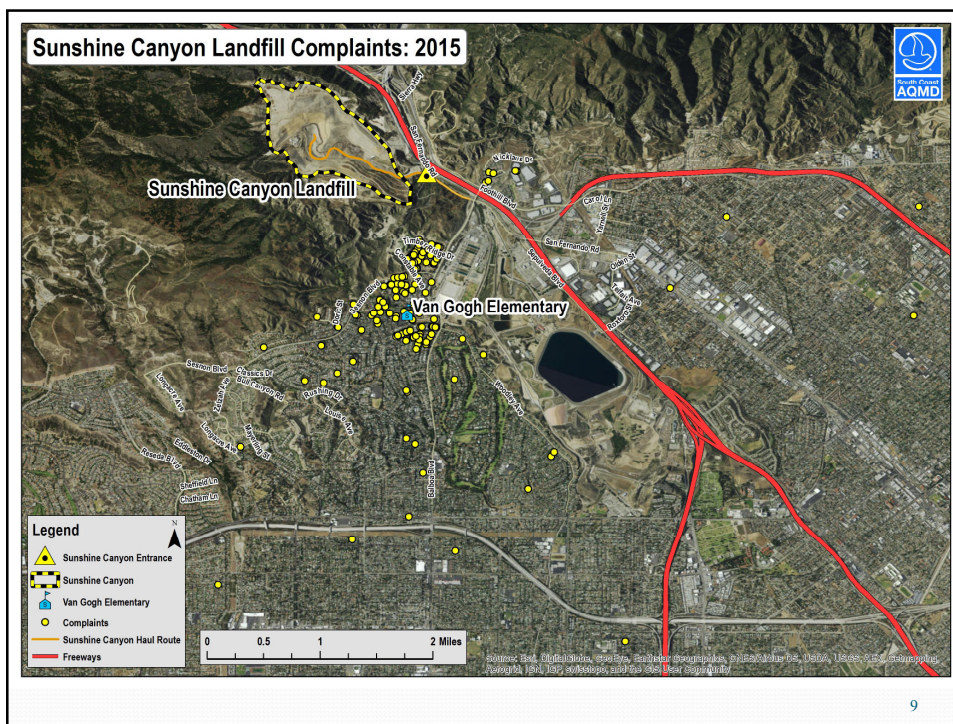
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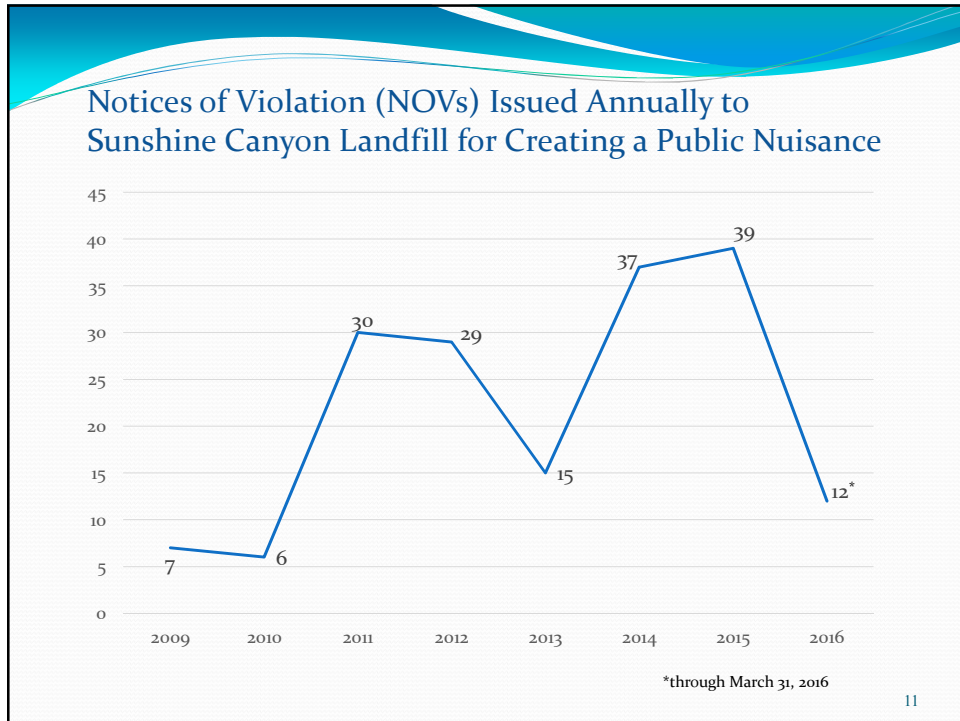
Complaints Reported Annually to SCAQMD Alleging Sunshine Canyon Landfill as the Source of Odors



*through March 31, 2016

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- ## SCAQMD Compliance Activities Order for Abatement (OA)
- November 2009 SCAQMD petitioned its Hearing Board for an OA for Sunshine Canyon to cease operating the landfill in violation of SCAQMD Rule 402
 - March 2010 Sunshine Canyon entered into Stipulated OA with SCAQMD
 - January 2011 OA modified
 - December 2011 OA modified
 - July 2012 OA modified
 - December 2013 OA expired
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LFG Collection System Improvements (2011 to present)

- Installed 553 vertical extraction wells
- Installed 27,845 linear feet of 12” to 36” header pipes
- Installed 77 horizontal wells
- Installed 68 LFG collectors
- Installed 38,900 linear feet of 4” to 6” lateral piping



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Alternative Daily Cover Pilot Project

- Plastic (EnviroCover) material instead of soil over daily waste
Designed to reduce odors and improve LFG collection
- Stipulated Agreement between Republic and SCL LEA in Sept 2015
- TAC Approved in Sept 2015
- Pilot Began Oct 2015



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LFG Control System (2011 to present)

- Blowers on existing flares replaced with higher capacity blowers (200 HP)
- Temp flare installed and operated to maintain flaring capacity until new permanent flares installed (2012)
- Flare 9 installed (2012)
- Flare 10 installed (2013)
- Permit application for Flare 11 submitted to SCAQMD (Identical to Flares 9 and 10)



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SCAQMD Consultant Evaluations and Reports (2015)

- HydroGeoChem (HGC) conducted field testing, performed computer modeling to evaluate effectiveness of LFG collection system and soil cover
- Dr. Yazdani performed an independent review of HGC report and made supplemental recommendations

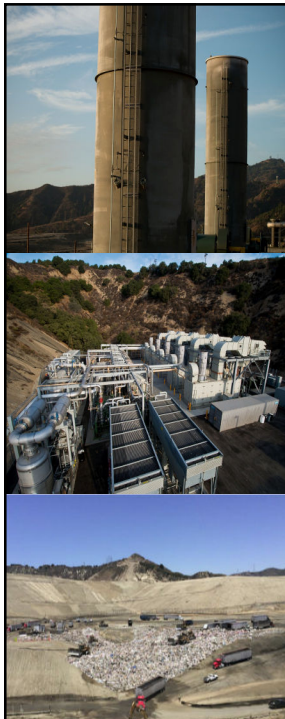
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Sunshine Gas Producers Gas-to-Energy Plant

- Permits to Construct granted May 2012
- Operational since Sept 2014
- Generating 24 MWs renewable energy



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Potential Emission Sources

- Odors from trash on the working portion of the landfill and from trash trucks
- Odors from landfill gas released from the surface of the landfill
- Combusted landfill gas in flares at Sunshine Canyon Landfill (SCL)
- Combusted landfill gas in turbines at Sunshine Gas Producers (SGP)
- Tailpipe emissions from trucks and off-road equipment
- Dust emissions from the landfill surface and from vehicles as they travel at the landfill

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New SCAQMD webpages

<http://www.aqmd.gov/home/regulations/compliance/sunshine-canyon-landfill>

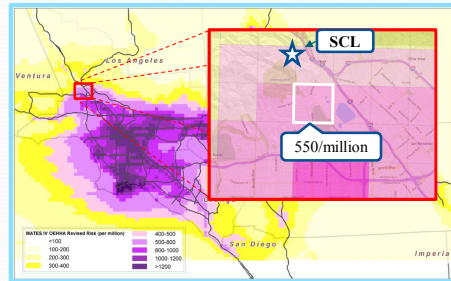
The image displays two screenshots of the South Coast Air Quality Management District (SCAQMD) website. The left screenshot shows the 'Sunshine Canyon Landfill' page, which includes a 'TOWN HALL MEETING' announcement for Thursday, April 22, at 7:00 PM. The right screenshot shows the 'Odor Complaints and Public Nuisance Violations' page, which features a line graph titled 'Complaints Reported from 2010 to 2015' showing a significant increase in complaints starting in 2014. The graph shows approximately 10 complaints in 2010, rising to about 20 in 2011, 30 in 2012, 40 in 2013, and peaking at over 100 in 2014 and 2015.

Health Impacts from Air Monitoring Data

Philip Fine, Ph.D.
Deputy Executive Officer
Planning & Rules

Potential Health Impacts from Sunshine Canyon Landfill Gas

- Reported emissions levels have been below screening levels requiring a detailed facility-specific Health Risk Assessment
- Measured air toxics levels generally no worse than typically seen in SCAQMD region
- Cancer risk estimates for area near SCL below Basin average
- Significant ongoing odor issue
 - Strong unpleasant odors can evoke physiological responses, e.g. headaches, nausea

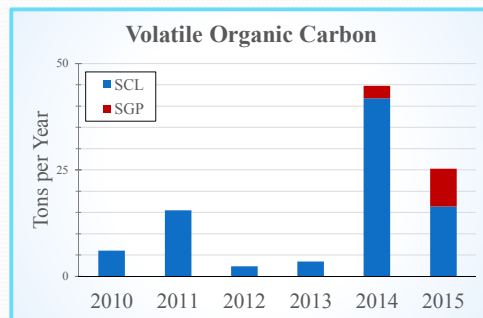


SCAQMD MATES IV Study

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Reported Emissions

- Sunshine Canyon Landfill (SCL) and Sunshine Gas Producers (SGP) report emissions annually to SCAQMD
 - Emissions currently undergoing audit
 - Calculation errors found in previous years
- Emissions variability through time:
 - 2011-2012
Corrected calculations error
 - 2013-2014
Used different method for fugitive emissions
 - 2014-2015
Default assumption replaced with actual data



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2012-13 Air Monitoring Study

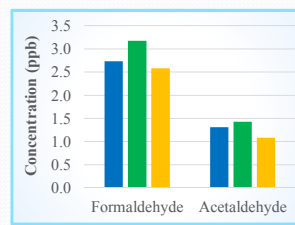
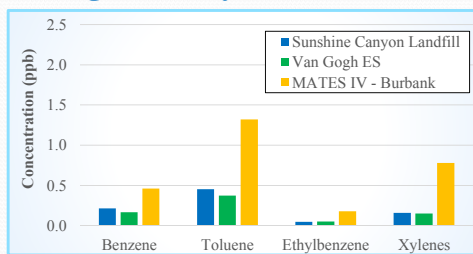
- **Objective:** to estimate long-term air toxic exposure in the community, and compare to levels at the landfill and in the Southern California region.
- SCAQMD Hearing Board orders the study (2011)
- BFI hired consultants to conduct the study in 2011-2013
 - Similar approach to SCAQMD MATES IV study
 - One year+ of sampling at Van Gogh ES and at the landfill
 - Data quality concerns raised in multiple independent reviews



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2012-13 Air Monitoring Study Results

- Measured levels at the landfill are typically higher than at the school
- Most air toxics too low to be measured, or not higher than typical Basin levels
 - Potential laboratory method issues with formaldehyde and acetaldehyde
- Results generally consistent with other monitoring efforts
 - City of LA PM monitoring
 - Rule 1150.1



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Next Steps by SCAQMD

- Continue to audit emissions reports and refine emissions reporting guidance for landfills
- Work with the City of LA on upcoming toxics monitoring study
- Conduct Inter-Agency Work Group Meetings to coordinate mitigations of odor related issues
- Implement additional stricter operational measures to address both trash and landfill gas odors
- Continue complaint response and enforcement presence
- Continue to provide and update information about Sunshine Canyon Landfill on our website

<http://www.aqmd.gov/home/regulations/compliance/sunshine-canyon-landfill>

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