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
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 mi\(^2\)
- 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
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

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

*through March 31, 2016*
Notices of Violation (NOVs) Issued Annually to Sunshine Canyon Landfill for Creating a Public Nuisance

![Graph showing NOVs from 2009 to 2016]

*through March 31, 2016

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
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

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
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)

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
Sunshine Gas Producers
Gas-to-Energy Plant

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

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
New SCAQMD webpages
http://www.aqmd.gov/home/regulations/compliance/sunshine-canyon-landfill

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

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
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

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
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