

SUNSHINE CANYON LANDFILL ODOR NUISANCE MITIGATION



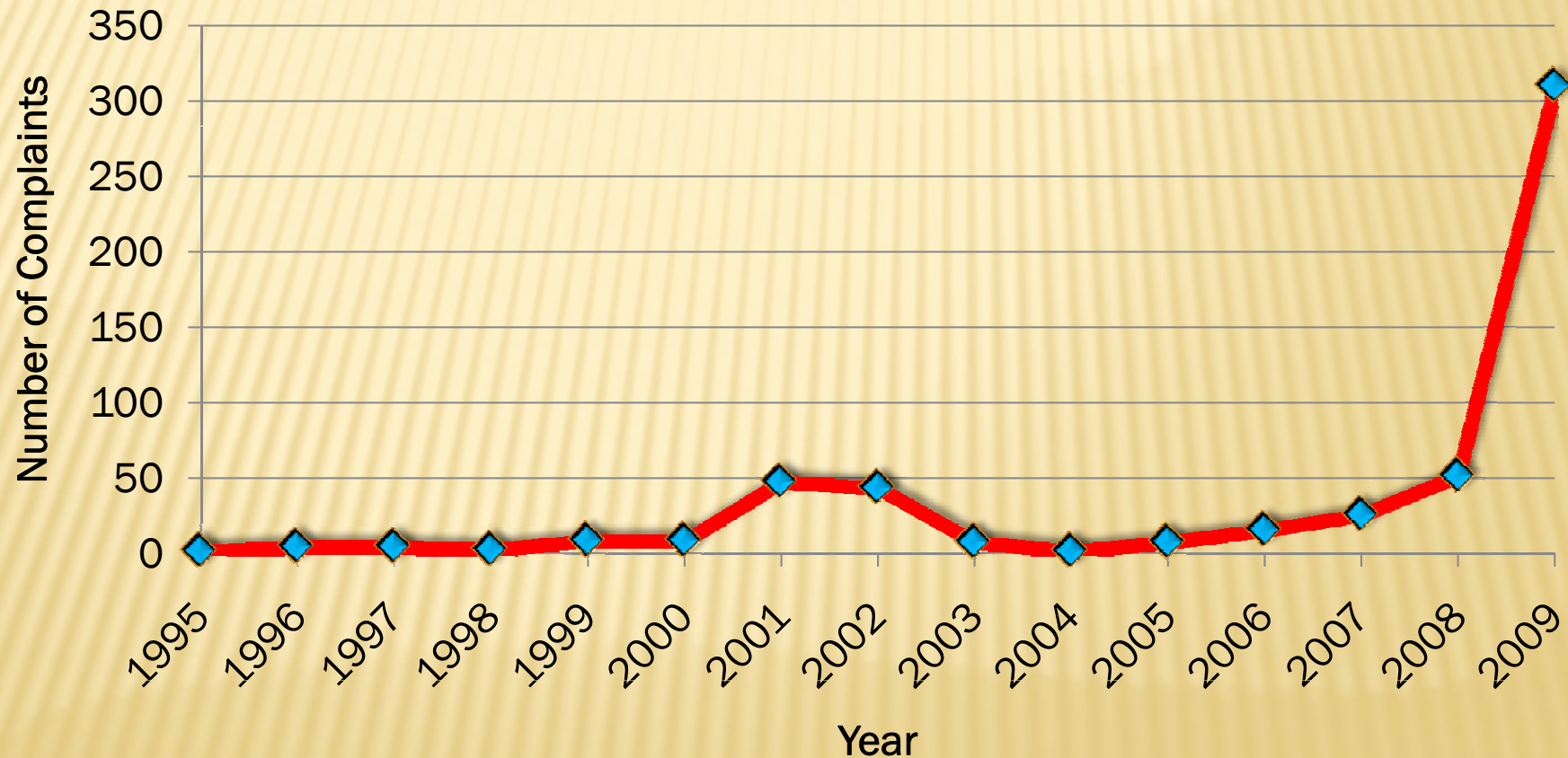
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County of Los Angeles Dept. of Public Works

November 18, 2010

BACKGROUND

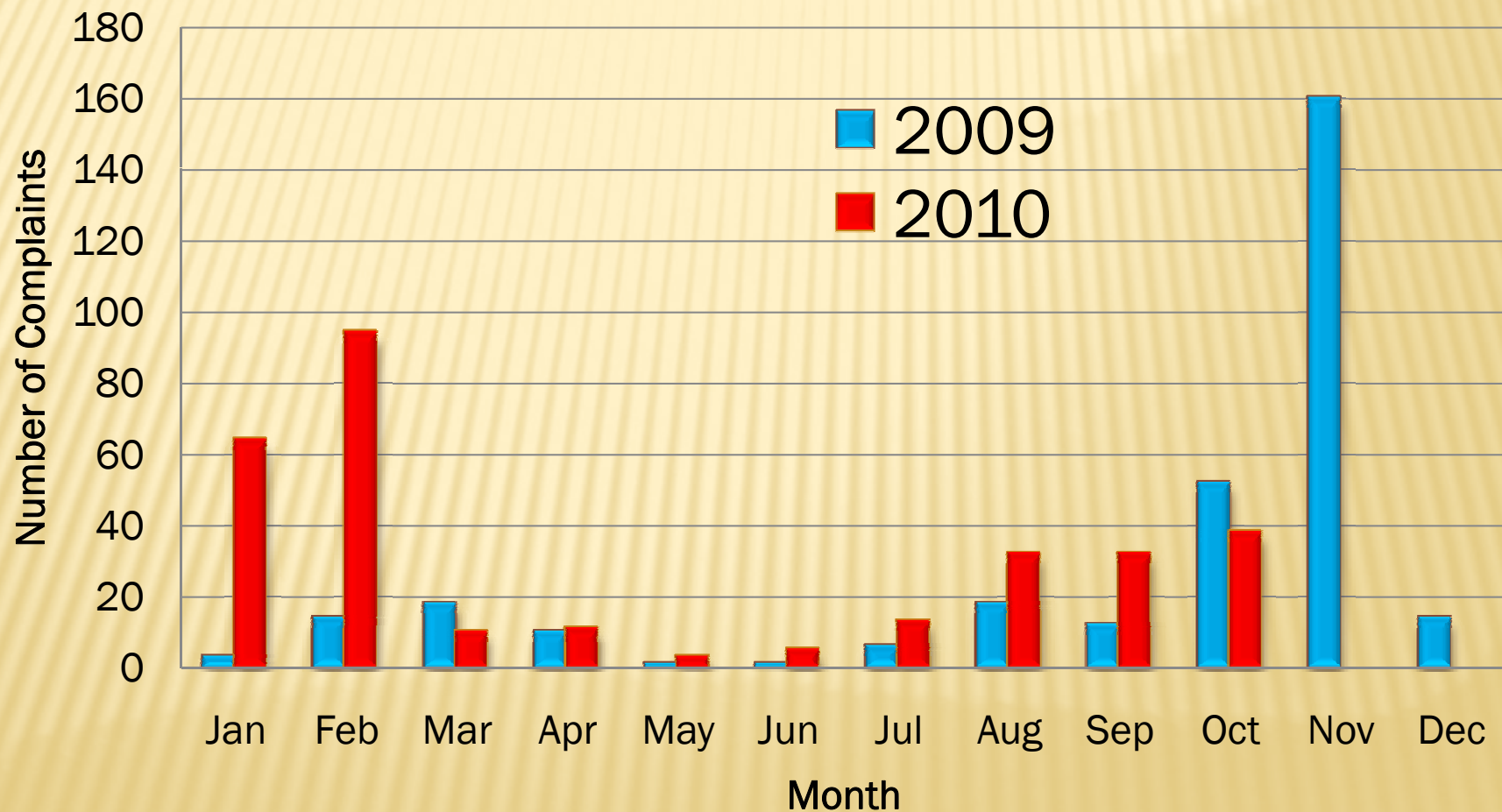
- ✘ Historical trend of alleged odor complaints received by AQMD



Source: South Coast Air Quality Management Districts (AQMD). The number of “verified” complaints is not yet available, and may be lower.

BACKGROUND

✘ 2009 vs. 2010 alleged odor complaints



Source: AQMD. The number of “verified” complaints is not yet available, and may be lower.

POTENTIAL SOURCES OF ODOR

- ✘ Increases in tonnages delivered
- ✘ Working face size & location
- ✘ Monday morning deliveries
- ✘ Wind direction & climate
- ✘ Trash trucks on haul road
- ✘ Destruction of vegetation due to wildfires in 2008
- ✘ Landfill gas emissions
- ✘ Type of daily cover material on working face
- ✘ Practice of removing in-place cover soil on Monday Mornings



Photo courtesy of Republic Services

AQMD – ORDER FOR ABATEMENT 3/24/10

× Measures Taken:

- + Restricting working face size
- + Reducing trash delivered on Monday mornings
- + Misting and odor control systems
- + Developing study proposals (neutralizers, landfill gas, working face)
- + Vegetation in southern areas



Photo courtesy of

<http://www.mswmanagement.com/the-latest/dustboss-db-60.aspx>

COUNTY IMPOSED MEASURES

DPW LETTER 9/27/10

- ✘ Immediate odor mitigation requirements
 - + Discontinue tarp use as daily cover
 - + Use compacted soil as daily cover material
 - + Keep compacted soil in-place
 - + Alternative daily cover material requires prior written approval from DPW
- ✘ Submit Odor Mitigation Plan
 - + Odorous loads, odor patrol, landfill gas
 - + Republic detailed the plan in its letter of October 27

Note: Republic Services (Republic) is the owner and operator of Sunshine Canyon Landfill.



REPUBLIC'S ODOR MITIGATION PLAN

✘ Managing odorous loads

- + Trained scalehouse personnel identifies loads
- + Odorous loads buried immediately
- + Unusual waste not allowed if odors are too strong



Photo courtesy of Republic Services

REPUBLIC'S ODOR MITIGATION PLAN

✘ Routine odor patrols

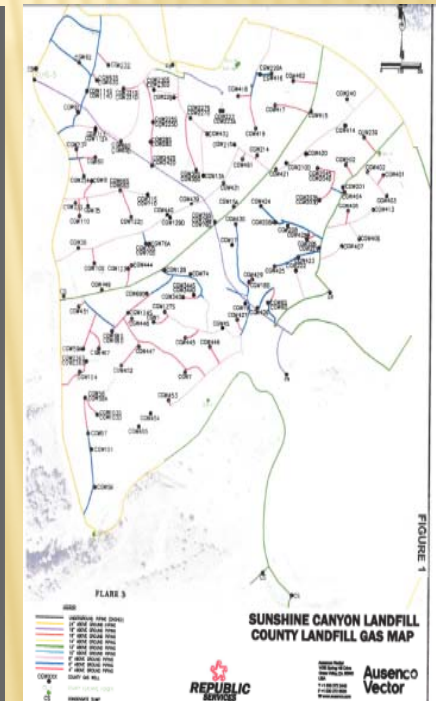
- + Continuous odor patrol between 7 - 9am, Monday through Fridays
- + Immediate survey when complaint is received
- + Survey will document names, route, description of odors, and corrective actions taken



REPUBLIC'S ODOR MITIGATION PLAN

✘ Gas collection and control system

- + 215 vertical gas wells
- + Header and lateral piping
- + Horizontal collectors
- + 3 flare stations



REPUBLIC'S ODOR MITIGATION PLAN

- ✘ Perimeter probe monitoring system
 - + Monitored on monthly basis
 - + Quarterly surface monitoring
 - + Tables summarizing gas exceedences

Table 2-1
SUMMARY OF EXCEEDENCE MONITORING RESULTS
(January 2012 to September 2013)
Produce Reported to Residents

Production Facility ID	COMPTON											
	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
221	0	0	0	0	0	0	0	0	0	0	0	0
222	0	0	0	0	0	0	0	0	0	0	0	0
223	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0
226	0	0	0	0	0	0	0	0	0	0	0	0
227	0	0	0	0	0	0	0	0	0	0	0	0
228	0	0	0	0	0	0	0	0	0	0	0	0
229	0	0	0	0	0	0	0	0	0	0	0	0
230	0	0	0	0	0	0	0	0	0	0	0	0
231	0	0	0	0	0	0	0	0	0	0	0	0
232	0	0	0	0	0	0	0	0	0	0	0	0
233	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0
236	0	0	0	0	0	0	0	0	0	0	0	0
237	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0
239	0	0	0	0	0	0	0	0	0	0	0	0
240	0	0	0	0	0	0	0	0	0	0	0	0
241	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0
243	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0
245	0	0	0	0	0	0	0	0	0	0	0	0
246	0	0	0	0	0	0	0	0	0	0	0	0
247	0	0	0	0	0	0	0	0	0	0	0	0
248	0	0	0	0	0	0	0	0	0	0	0	0
249	0	0	0	0	0	0	0	0	0	0	0	0
250	0	0	0	0	0	0	0	0	0	0	0	0
251	0	0	0	0	0	0	0	0	0	0	0	0
252	0	0	0	0	0	0	0	0	0	0	0	0
253	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0
255	0	0	0	0	0	0	0	0	0	0	0	0
256	0	0	0	0	0	0	0	0	0	0	0	0
257	0	0	0	0	0	0	0	0	0	0	0	0
258	0	0	0	0	0	0	0	0	0	0	0	0
259	0	0	0	0	0	0	0	0	0	0	0	0
260	0	0	0	0	0	0	0	0	0	0	0	0
261	0	0	0	0	0	0	0	0	0	0	0	0
262	0	0	0	0	0	0	0	0	0	0	0	0
263	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0
265	0	0	0	0	0	0	0	0	0	0	0	0
266	0	0	0	0	0	0	0	0	0	0	0	0
267	0	0	0	0	0	0	0	0	0	0	0	0
268	0	0	0	0	0	0	0	0	0	0	0	0
269	0	0	0	0	0	0	0	0	0	0	0	0
270	0	0	0	0	0	0	0	0	0	0	0	0
271	0	0	0	0	0	0	0	0	0	0	0	0
272	0	0	0	0	0	0	0	0	0	0	0	0
273	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0
275	0	0	0	0	0	0	0	0	0	0	0	0
276	0	0	0	0	0	0	0	0	0	0	0	0
277	0	0	0	0	0	0	0	0	0	0	0	0
278	0	0	0	0	0	0	0	0	0	0	0	0
279	0	0	0	0	0	0	0	0	0	0	0	0
280	0	0	0	0	0	0	0	0	0	0	0	0
281	0	0	0	0	0	0	0	0	0	0	0	0
282	0	0	0	0	0	0	0	0	0	0	0	0
283	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0
285	0	0	0	0	0	0	0	0	0	0	0	0
286	0	0	0	0	0	0	0	0	0	0	0	0
287	0	0	0	0	0	0	0	0	0	0	0	0
288	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0
290	0	0	0	0	0	0	0	0	0	0	0	0
291	0	0	0	0	0	0	0	0	0	0	0	0
292	0	0	0	0	0	0	0	0	0	0	0	0
293	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0
295	0	0	0	0	0	0	0	0	0	0	0	0
296	0	0	0	0	0	0	0	0	0	0	0	0
297	0	0	0	0	0	0	0	0	0	0	0	0
298	0	0	0	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0
300	0	0	0	0	0	0	0	0	0	0	0	0

0 = No odor reported to residents
 1 = Odor reported to residents
 2 = Odor reported to residents and reported to the public
 3 = Odor reported to residents and reported to the public and reported to the media
 4 = Odor reported to residents and reported to the public and reported to the media and reported to the state

REPUBLIC'S ODOR MITIGATION PLAN

- ✘ Corrective actions and measures taken
 - + 50 extra gas extraction wells in June & July
 - ✘ 42 on County side, 8 on City side
 - + Damaged wells replaced with new ones
 - + Additional soil cover around well casing
 - + Gas well tuning
 - + Landfill gas prevention work plan
 - ✘ Implementation Schedule



Photo courtesy of Republic Services

NEXT STEP

- ✘ Work with AQMD as lead air quality agency, SCL-LEA, City of Los Angeles, and County Regional Planning
 - + Continue monitoring odor nuisance complaints
 - + Set benchmarks for measuring acceptable levels of odor complaints
 - + Review and approve Odor Mitigation plan



QUESTIONS AND COMMENTS

