

ODOR CONTROL ADVISORY BOARD

Village Green
5300 Rodeo Road, Los Angeles
October 14, 2002

MEETING MINUTES

- Attendees: See attached attendance list
- Meeting Minutes Recorded by: Hyginus O. Mmeje, City of Los Angeles,
Bureau of Sanitation, Wastewater Engineering
Services Division
- Handouts: With the exception of handout No. 4 that was brought by a representative of the Center for Law in the Public Interest, the following handouts were presented and explained by Adel Hagekhalil.
1. Meeting Agenda
 2. Odor Control Advisory Board, contact list
 3. Stipulated Case Management Order, dated 7/3/01
 4. Independent Review of Sewer Odor Control Program at the City of Los Angeles, monthly report no. 1
 5. City of Los Angeles Outreach Flyer and Business Card, Odor Reporting Hotline
 6. Map of the City of LA Wastewater Collection System
 7. Presentation Material - Overview of the City's Wastewater Collection System
 8. Presentation Material – A Primer on Sewer System Odors
 9. WWW.Lasewers.org - Online Sewer Odor Complaint Hotline
 10. Odor Advisory Committee Board Meeting Schedule (As of October 14, 2002)

Introductory Issues

- Victor Nahmias chaired the meeting.
- Member Introductions – Board Members introduced themselves and briefly described their backgrounds.
- Corrections to the contact list - The spelling of Deborah Harris and Milton Bassett were corrected.
- First Time Attendees – Those attending the meeting for the first time provided their contact addresses and affiliations.
- Alternates – Some of the members designated alternate members from their represented groups.

Background:

Adel explained that one of the six major areas of sewage overflow during the 1998 El Nino rainstorm was near the intersection of 42nd Street and Kansas, in South Los Angeles. As a result of the El Nino related overflows, the Regional Water Quality Control Board, Los Angeles Region (LARWQCB) issued a Cease and Desist Order (CDO) to the City of Los Angeles, in 1998, that requires, among other things, the construction of the East Central Interceptor Sewer (ECIS). Also, in 1998, the Santa Monica Bay Keepers filed a lawsuit against the City of Los Angeles. The federal and state governments joined the lawsuit, in January 2001. Later, the Judge handling the case allowed others to intervene in the lawsuit. Thereafter, the Judge issued a Case Management Order (CMO) requiring the City to implement its Fats, Oil, and Grease (FOG) Program, implement its Odor Program, select an independent Odor Consultant, create Sewer Odor Control Advisory Board (SOCAB), etc. Additionally, the CMO required the City to establish odor hotline which the City has since established, including the establishment of a sewer order hotline website. The sewer odor hotline will be the focus of future SOCAB meeting.

First Presentation: **Overview of the City's Wastewater Collection System by Adel Hagekhalil**

Adel presented that the City's wastewater collection system consist of 6,500 miles of sewer, 140,000 maintenance holes, 47 pumping plant, serves as outlet for 29 contract agencies, serves 4 million people, covers approximately 530 square miles, conveys 450 million gallons of wastewater each day, and varies in size from 6 inches to 150 inches. Adel further explained that the 90 percent of the City's wastewater collection system is less than 15 inches (secondary sewers) and they serve local neighborhoods, while the remaining 10 percent of the collection system is greater than 15 inches (primary sewers) which represent the trunk, interceptor and outfall sewers that convey wastewater received from the secondary sewers to the treatment plants. The City has two wastewater treatment plants and two water reclamation plants.

Second Presentation: **A Primer on Sewer System Odors by Vladimir Deleon Lorenzo**

Vladimir explained that of the typical compounds causing odor in wastewater, the rotten egg smelling Hydrogen Sulfide is the most prevalent. Vladimir indicated that Hydrogen Sulfide is colorless, it can be detected as low as 0.5 ppb, and it can have impacts ranging from offensive odor to life threatening. The Hydrogen Sulfide is produced through the anaerobic decay of organic matter and by microbial reduction of sulfates to sulfides through the action of sulfate reducing bacteria that thrive in the slime layer on the sewer pipe walls below the water surface. The Hydrogen Sulfide is released into the sewer headspace under turbulent conditions. The City's effective implementation of the EPA pretreatment standards resulted in less toxic materials in the sewers such as the heavy metals that tie up Hydrogen Sulfide, and thus lead to the increase in Hydrogen Sulfide. Other factors that influence the increase in Sulfide generation include such sewer system characteristics as low velocity sewer, full pipes, and turbulence; and such wastewater characteristics as neutral pH, low dissolved oxygen and high strength sewage. Also,

temperature increases the rate of Hydrogen Sulfide production. The rate doubles for every 10 degree Celsius increase. This explains why more Hydrogen Sulfide is produced during the summer months. Odor emission points within the wastewater collection systems include the maintenance holes, transition or junction structures, pumping plant wet well, inverted siphons and airlines, and plumbing vents. Existing City of Los Angeles odor control efforts are two pronged, namely: maintenance activities, and chemical addition. Maintenance activities include sewer cleaning, trap maintenance hole repair, sealing of maintenance holes, inspection of structures, and monitoring of gases. Chemical addition is a \$2 million/year program that includes Caustic Shock Dosing, which the City has implemented since October 1997, and Ferrous Chloride Injection, which the City has implemented since April 2000. The Caustic Shock Dosing points are at designated sewers in the South LA area. The Ferrous Chloride injection is done in the Boyle Heights area but treats flows in the Maze/South Los Angeles area. Chemical treatment has reduced Hydrogen Sulfide levels in sewers from 200+ to 20+ ppm, an equivalent of approximately 90 percent reduction. Additionally, Adel added that biofilters would be installed to treat Hydrogen Sulfide and organic materials in the sewer.

Questions, Answers and Action Items: The following are some of the questions or issues, and the answers or comments, as well as action items that I was able to capture.

	QUESTIONS/ISSUES	RESPONSES/COMMENTS	ACTION ITEMS
1.	Patrick McCullough – Why was Maze built the way it is? (i.e., How was Maze constructed? How was the alignment decided?)	Adel Hagekhalil – It was built to provide relief.	The City would pull together the history of Maze and share with members.
2.	Patrick McCullough – Will there be a pump station on ECIS?	Adel Hagekhalil – No, there will not be a pump station on ECIS, rather, ECIS will eliminate one pump station.	None
3.	Milton Bassett – What is the schedule for the Crenshaw Relief Sewer (CRS)?	Adel Hagekhalil – The CRS is no longer needed now but could be needed in 20 to 25 years time. The flow that CRS would have been built to convey has been diverted	Vladimir to check (with Brad Jensen) the status of CRS flow diversions and the abandonment of the portions of the Hollywood Main Sewer
4.	Victor Nahmias – Are any of the sewer gases flammable?	Vladimir – Not at the concentrations we have seen. Adel – Lower explosive limit (LEL) levels are measured every time the crews enter the sewer.	None
5.	Milton Bassett – Toluca Lake area has no sewer odor problem, has sealed	Vladimir – We (the City) are doing more to control sewer odor in the South Los Angeles area than in the	None

	<p>maintenance holes and has 9 to 12 flow monitoring stations. Whatever is done in Toluca Lake to ensure no sewer odor problems there should be done in this area (Maze/South Los Angeles).</p>	<p>Toluca Lake area.</p>	
6.	<p>Deborah Harris – How do we deal with extra sludge from Burbank? Sewer tiles are known to have fallen off into the sewer and are reducing the sewer capacity. How will we solve the capacity problem?</p>	<p>Adel – ECIS and the North East Interceptor Sewer (NEIS) will provide adequate capacity for now and the future. Falling tiles compromise sewer structural integrity and to prevent sewers from collapsing, we had to line them, which also reduces the capacity. ECIS will provide ample airspace for local lines in addition to the hydraulic relief.</p>	<p>None</p>
7.	<p>Milton Bassett – Why do we have off-gas condition around West LA College?</p>	<p>Vladimir – As part of ECIS project, the City will build odor facility near Jefferson and Duquesne that will eliminate the off-gas condition.</p>	<p>None</p>
8.	<p>Samuel Hart – Better public outreach from ECIS project team is needed.</p>	<p>Adel – We will invite ECIS project team representative to a future meeting.</p>	<p>The City would bring ECIS Public Outreach person to a future meeting to discuss ECIS public outreach issues.</p>
9.	<p>Deborah Harris and Carol Tucker - ECIS Newsletter is nebulous and insulting by characterizing homeowners' remarks and comments as not in my back yard (NIMBY) issue.</p>	<p>Adel – We will convey the message and will invite ECIS project team representative to a future meeting.</p>	<p>The City would bring ECIS Public Outreach person to a future meeting to discuss ECIS public outreach issues.</p>
10.	<p>Carol Tucker – I felt educated and I appreciate the presentations, they are excellent.</p>	<p>Comments were noted</p>	<p>None</p>
11.	<p>Samuel Hart – The hotline takes forever to get to where you want to go and should be streamlined.</p>	<p>Adel – It will be streamlined</p>	<p>City to streamline the hotline.</p>
12.	<p>Milton Bassett – The sludge or slime layer in the Maze area should be removed. Could the</p>	<p>Adel – Removal of the sludge is not the problem but the full flowing pipes or surcharged pipes.</p>	<p>None</p>

	sludge be held at Tillman for up to one to two weeks?		
13.	Milton Bassett – North Hollywood Sewer has been completed from Tillman Plant to the Los Angeles/Glendale Plant.	Adel – North Hollywood Interceptor Sewer (NHIS) has been completed and it does not go up to the Los Angeles/Glendale Plant. It is stopped at Riverside Drive. The NHIS extended from Burbank and Tujunga to Riverside and Cahuenga Blvd.	None
14.	Samuel Hart – I smelled a strong odor on September 24, 2002 for almost 20 to 30 minutes. I contacted the agencies including Fire Department and they could not identify the source. I felt it wasn't sewer odor but I thought I should mention it.	Comments were noted.	None
15.	Ted – I observe that the City seems to be addressing the problem more forthrightly now than during the ECIS project. The tone of this Odor Control Advisory Board meeting is much more positive than during ECIS meetings. The City seems to be doing a better job.	Comments were noted.	None
16.	Deborah Harris – Verify that there is an 800 number for conference call at the CD8 Constituents' Center, where the next meeting is scheduled to take place.	The Group decided not to have their next meeting at the CD8 constituents' Center. The Group decided to hold their next meeting at the Baldwin Recreation Center, instead, if it would be available.	The City would reserve the Baldwin Recreation Center for the next meeting by contacting Lisa Coleman of CD10.

Next Meeting: The next meeting of the Odor Control Advisory Board will be held at Village Green, 5300 Rodeo Road, Los Angeles, on October 28, 2002. The City will send out minutes and other meeting materials prior to the next meeting date and will confirm the next meeting location. It was decided by members that Samuel Hart would chair the next meeting.

Adjournment: The meeting adjourned at almost 9:00 pm.