

BALDWIN HILLS CSD  
COMMUNITY ADVISORY PANEL (CAP) MEETING  
Minutes February 26, 2015  
Approved March 26, 2015

**A. Call to Order - 7:00 PM**  
John Kuechle Chair.

**B. Baldwin Hills Air Quality Study (Study)**

Dr. Paul Roberts and Dr. Michael McCarthy from Sonoma Technology, Inc.

Dr. Roberts, with Dr. McCarthy's assistance, presented an overview of the Baldwin Hills Air Quality Study ("Study"). Dr. Roberts provided a brief summary of his and Dr. McCarthy's qualifications and background in working in the atmospheric sciences.

- *Overview and Objectives* - Dr. Roberts provided a summary of the overview and objectives, primary and secondary, of the Study. The Study was set up to quantify air toxics from the oil field, assess the health risk of the exposure of those pollutants, and determine to the extent feasible the oil field's contribution to the overall health risk in the areas surrounding the oil field. See page ES-1 of the Study report.
- *Study Pollutant Selection* - Dr. Roberts provided the approach the Study took to determine the type of air toxics selected for the Study. The pollutants were selected by reviewing the emissions data from the EIR and the toxicity/health effects of each of the air toxic pollutants. The pollutants were ranked by calculating the amount of pollutant (lbs/year) times the toxicity of the pollutant to determine their relative risk weighted emission toxicities. The Study was then designed to be focused on the air toxics of greatest concern. The Study used the threshold or benchmark risk levels as determined by the State agency Office of Environmental Health Hazard Assessment (OEHHA) consistent with the SCAQMD MATES studies. Diesel particulate matter (DPM) from engine exhaust is the key pollutant for cancer risk in the oil field area. See pages 1-1 through 1-3 and Table 1-1 of the Study report.
- *Study Technical Approach/Methods* – The locations, instrumentation type, sampling time duration, and overall Study design was summarized. Dr. Roberts explained how DPM was measured by collecting black carbon on particulate filters as a direct measurement of DPM is not possible. The instrumentation for each type of measurement was discussed; aethalometer for black carbon, x-ray fluorescence spectrometer for metals, and PTR-TOFMS for Volatile Organic Compounds (VOC). The location of the four monitoring stations as pairs was discussed and that using locations at the edges of the oil field along with the prevailing wind direction, analysis and comparison of the sources of the air pollution from both on and off the oil field is possible. Dr. Roberts also discussed the local meteorology and how a wind rose diagram works. See pages 2-3 through 2-7 of the Study report. Information on oil field activities and the associated emissions was also used to help determine the relative contribution of diesel exhaust from both on and off the oil field, see pages 2-10 through 2-11 of the Study report.
- *Quality Control/Quality Assurance* – Dr. Roberts described the methods used to verify the data collection and audit the calibration of the instrumentation. Quality control includes the methods used during collection of the data in the field such as checking the flow rates of the instrumentation, routine maintenance, and field audits. Quality assurance is the analysis done after data collection to ensure the quality of the information collected. Much of the data was available daily to STI via the internet to check on the data collection in real time during the Study. See pages 2-3 through 2-7 of the Study report.
- *Data Analysis/Results* – Dr. Roberts explained some of the analysis techniques used in development of the report. Meteorology and the use of the monitoring station pairs were used to help make determinations on the source of air pollutants as an air parcels move from off the oil field, across the oil field and then to the downwind edge of the oil field. Various graphs, plots,

and charts were presented to explain the results of the Study. Dr. Roberts, with assistance from Dr. McCarthy, provided an overview of the results for each type of pollutant (black carbon, metals, and VOCs). DPM was determined to be primarily from diesel vehicle exhaust from throughout the area, including the oil field. Nickel and manganese was determined to be associated with oil field activities. See pages 3-1 through 3-34 of the Study report.

- *Health Risk Results* – Results of the air monitoring data and the OEHHA thresholds for health risk assessment were used to calculate the risk and hazard characterization results. Dr. Roberts presented the health risk values and the relative contribution to that health risk from the oil field as compared to the overall area. For cancer risk, of which DPM is the primary cause, the DPM risk was determined to be 6.7 in a million from oil field sources and 250 in a million for the overall area which is consistent with the results determined in the MATES IV study. The threshold for concern from cancer risk is 10 in a million which assumes a 70 year exposure. Cadmium results did not correlate well with either oil field or other area sources and was not consistent with what was determined in the MATES IV Study; the anomalous results are likely due to the difficulty in measuring cadmium at such low concentrations. Dr. Roberts summarized the chronic and acute effects of metals and VOCs and noted that none of the health risk values were above the associated health risk concern levels. See pages 3-35 through 3-38 of the Study report.
- *Discussion/Questions* – Mr. Gless asked about whether the Study addressed other health effects besides cancer and Dr. McCarthy explained that the chronic and acute OEHHA health risk standards take into account those other health risk pathways such as respiratory or reproduction effects. Hydrogen Sulfide (H<sub>2</sub>S) was also inquired about and Dr. McCarthy explained that the combination of low toxicity and very low emissions of H<sub>2</sub>S at the oil field determined H<sub>2</sub>S was not a pollutant of concern for the Study. Acrolein was also discussed and Dr. Roberts noted that the source is from vehicle and equipment exhaust. The new forthcoming OEHHA health risk calculation methodology was noted, as was the fact that the new approach will change the results of the Study, MATES IV or any other health risk assessment due to different exposure calculations. Dr. Roberts noted that the July sampling period for VOCs worked well because the predominant breeze during the time frame was across the oil field in the direction of the East sampling station. The CAP noted that with more funding, additional monitoring stations could have been set up and/or longer monitoring periods could have been completed for the Study. Ms. Steva asked about the oil field activity data and whether it was representative of normal operations, Dr. Roberts noted that for several of the measurement periods a rig was in operation near one of the monitoring stations. Mr. Gless asked about monitoring locations at the gate to the oil field and Dr. McCarthy noted that the vehicle traffic into the oil field was tracked and taken into account for the study; in addition, the majority of exhaust sources in the area are Stocker and La Cienaga roads.
- *Comments* – Mr. Stapleton noted that the report is final but that comments may be sent to him and that Dr. Roberts will return next month to provide the opportunity for more questions on the Study.

### **C. Regional Planning/ECC Update - Timothy Stapleton**

Mr. Stapleton noted the recent compliance document submittals including:

- E.19 – Fourth Quarter 2014 Groundwater Monitoring Results
- E.30 – Well Production and Reporting
- Well Production Reports
- Well Production Maps 2014
- SCAQMD October 19, 2012 NOV Summary
- Fourth Quarter 2014 Complaint log

Mr. Dusette provided that the ground water monitoring results showed that the same two wells contained water in each quarterly monitoring report for 2014, all others wells tested dry, in response to Ms. Steva's inquiry at the January CAP meeting.

**D. Operator Update – Lisa Paillet**

Ms. Paillet noted the 2015 drilling program has not been initiated to date and that the field currently contains between 2 to 3 maintenance rigs at any given time. Ms. Paillet also provided feed-back to Mr. Kuechle's question on odor complaint follow-up by SCAQMD; FM O&G has documentation that SCAQMD provided investigation for four of seven complaints. FM O&G is preparing a response to the Culver City letter on down-hole locations. FM O&G is also waiting on a drawing/description from Mr. Ferrazzi to determine an answer to his question on a flare like object he had inquired about. Ms. Paillet noted a produced water leak on 2/23/15 from an injection line that spilled 42 barrels of water down a V-ditch along Stocker St. and back into a basin in the oil field. Ms. Paillet will check into questions on bottom hole locations outside the administrative boundary of the oil field.

**E. Approval of Minutes**

The CAP reviewed and approved the January 2015 minutes.

**F. Announcements**

March 26, 2015 next scheduled CAP meeting.

Dr. Roberts of Sonoma Technology will attend for further discussion on the air quality study.

Adjourn 09:00.

ATTENDANCE: 2/26/15

(\*absent)

**DESIGNATED SEATS PER 22.44.142.J.1.a*****Governmental Entities***

1	Department of Regional Planning	Timothy Stapleton
2	City of Culver City	Meghan Sahli-Wells
3	West Los Angeles College	Nabil Abu-Ghazaleh*

***Operator (per 22.44.142.C)***

5	Freeport McMoran Oil & Gas	Lisa Paillet
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**NOMINATED SEATS PER 22.44.142.J.1.a****(Accepted first-come/first-served within each sub-group)*****Landowners (per 22.44.142.C)***

6	Vickers Family Trust	Roger Shockley
7	Cone Fee Family Trust	Liz Gosnell*

***Neighborhood Organizations (Recognized Homeowners Association)***

8	Ladera Heights Civic Assoc.	Carmen Spiva
9	Windsor Hills HOA	Gary Gless
10	United HOA (View Park)	Charles McCaw
11	Culver Crest Neighborhood Assoc.	John Kuechle
12	Blair Hills HOA	Jon Melvin*
13	Raintree Community HOA	Keith Curtiss
14	Baldwin Hills Estates HOA	Lory Johansson

***Neighborhood Organizations (No Recognized Homeowners Association)***

15	Ladera Crest Homeowner	George Mallory*
16	Baldwin Vista Homeowner	Irma Munoz

***School Districts***

17	Los Angeles Unified	Glenn Striegler*
18	Culver City Unified	Susanne Robins*

***Neighborhood Organizations (All Others)***

19	Windsor Hills Block Club	Toni McDonald-Tabor*
20	Community Health Councils	Erin Steva
21	Baldwin Hills Conservancy	David McNeill*
22	The City Project	Daphne Hsu*