



Midpeninsula Regional
Open Space District

R-13-69
Meeting 13-17
July 24, 2013

AGENDA ITEM 4

AGENDA ITEM

Presentation of Ongoing Air Quality Monitoring Study at Rancho San Antonio Open Space Preserve

GENERAL MANAGER'S RECOMMENDATION

Receive an informational presentation on the air quality monitoring study in process at Rancho San Antonio Open Space Preserve

SUMMARY

Eric Winegar, PhD, of Winegar Air Sciences, will present results from the ongoing air quality monitoring study at Rancho San Antonio Open Space Preserve. The available data from the first half of the year-long study will be presented to the Board, with an opportunity for questions and discussion.

DISCUSSION

On January 9, 2013, the Midpeninsula Regional Open Space District (District) Board of Director's authorized an award of contract, in the amount of \$180,552, to Winegar Air Sciences, to undertake a year-long air quality monitoring study at Rancho San Antonio Open Space Preserve (see Report R-13-11). This study was initiated in response to public and District staff concerns regarding potential air quality impacts within the Preserve related to the adjacent Lehigh Permanente quarry and cement plant.

The Board was previously briefed on the project's progress at the Board meetings of February 13, 2013 and June 26, 2013.

Air quality monitoring stations were established within the Preserve in January 2013 at the Annex (main station), and adjacent to the PG&E Trail, the Preserve trail closest to the Point of Maximum Impact (PMI) as identified in Lehigh's 2011 Health Risk Assessment. These monitoring stations consist of continuous read monitoring instruments to measure PM10 (particulate matter less than 10 micrometers in diameter), PM2.5 (particulate matter less than 2.5 micrometers in diameter), and black carbon (an established surrogate for diesel exhaust). Small particulate matter and diesel exhaust are known to impact human health. Additionally, these two monitoring stations include sampling instruments dedicated for shorter duration, specific

sampling events to measure different particle sizes, as well as specific elemental constituents (e.g. metals). Particle size and elemental analysis can provide a unique signature of various air masses, and can identify plume origin. These parameters are sampled by a DRUM sampler (Davis Rotating Unit for Monitoring), where air samples are imbedded on a continuous tape, run for a six week or twelve week period, with samples processed later at the University of California at Berkeley Synchrotron X-ray fluorescence lab. Additional short-duration sampling instruments are also being utilized to screen for volatile organic compounds and other potential toxics in the air at both locations.

A third monitoring site has been established at the Deer Hollow Farm. This location is set up to monitor PM10, to compare the data with the other two sites. All three sites have weather sensors for wind speed and direction, to help understand air movement and potential plume movement at the Preserve.

The data presented by Dr. Winegar is preliminary data, subject to further change or refinement as the study progresses and as all the data collected are synthesized. The air monitoring study is anticipated to continue through February 2014, with a final report scheduled for completion in April 2014.

BOARD COMMITTEE REVIEW

Committee review is not required for this agenda item.

PUBLIC NOTICE

Public notice was provided as required by the Brown Act.

CEQA COMPLIANCE

The air quality monitoring study at Rancho San Antonio Open Space Preserve does not constitute a project under the California Environmental Quality Act (CEQA).

ATTACHMENT

1. Rancho San Antonio Air Monitoring Update/ Progress Report, July 2013

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