



Midpeninsula Regional
Open Space District

Memorandum

DATE: August 6, 2014

MEMO TO: Board of Directors

THROUGH: Stephen E. Abbors, General Manager 

FROM: Matt Baldzikowski, Planner III

SUBJECT: Rancho San Antonio Air Monitoring Study Update

Air quality monitoring at Rancho San Antonio began in January 2013, and on-site monitoring continued through mid-June, 2014. The Final Report of this study is currently being prepared, including analysis and synthesis of all data collected during the study. The District's consultant, Winegar Air Sciences, has prepared draft report sections for staff review, with initial summaries of findings, as the report compilation process progresses. The purpose of this memo is to inform the Board of these initial findings, prior to the full completion of the report. Staff believes that the study completed was well done, and extensive in terms of parameters measured and the duration of study (17 months).

The overall findings are consistent with previous findings reported to the Board and the public through quarterly progress reports. These findings conclude that the air quality at Rancho San Antonio is generally of high quality, and reflects a low-impact environment, with some effect from the nearby industrial (Lehigh) and urban areas (including Hwy 280). The level of impact from these nearby sources does not appear to pose a substantial health risk at the Preserve; however nuisance level dust impacts are evident, and PM10 and PM 2.5 (PM10 = Particulate Matter with diameter of 10 microns or smaller; PM2.5 = diameter of 2.5 microns or smaller) on average, do exceed State ambient air standards. These average PM10 and PM2.5 levels fall on the low end of values established for the San Francisco Bay Area Air Basin.

Samples were also taken for a suite of potentially toxic compounds. The measured levels did not exceed accepted health level standards. The summary table of preliminary monitoring results, with average values and accepted health risk levels, is included in this memo for your reference.

Once completed, the Final Monitoring Study Report will be presented at a regularly scheduled Board Meeting in September or October 2014.

Rancho San Antonio Air Monitoring Study

Preliminary Findings Summary Table

Parameter	Sample Location	Average Concentration (ug/m ³)	CA Standard; (ug/m ³)	San Francisco Bay Air Basin Average Concentration (ug/m ³)
PM10	Annex	16	20	26-35
	PG&E Trail	22		
	Background OSD	26		
	Background BLN	13.2		
PM2.5	Annex	14	12	13-16

Parameter	Sample Location	Average Concentration (ng/m ³)	Reference Concentration Level, Health Standard (RfC; ng/m ³)
Black Carbon	Annex	235	5,000
	Background BLN	269	
	Background OSD	602	
Mercury (Hg)	PG&E Trail	2.9	300
Chromium VI	PG&E Trail	0.4	200

Parameter	Sample Location	Average Concentration (ug/m ³)	Reference Exposure Level (REL), OEHHA Standards; ug/m ³)
Benzene	PG&E Trail	1.22	27 Acute 1-hr
	Annex	0.93	3 8-hour
	Background BLN	0.96	3 Chronic (annual)
	Background OSD	0.06	
Bromomethane	PG&E Trail	3.11	3900 Acute 1-hr
	Annex	1.82	5 Chronic (annual)

Note: Annex and PG&E Trail monitoring sites were located within Rancho San Antonio OSP. Background OSD location was located at the District Administrative Office, Background BLN was located in Los Altos Hills, typically upwind of Rancho San Antonio.