



Contra Costa County

To: Board of Supervisors
 From: David Twa, County Administrator
 Date: May 22, 2018

Subject: Report on soil conditions at the parking lot behind 651 Pine Street

RECOMMENDATION(S):

CONSIDER the report on soil conditions at the parking lot behind 651 Pine Street.

FISCAL IMPACT:

No fiscal impact.

☒ APPROVE

☐ OTHER

☒ RECOMMENDATION OF CNTY ADMINISTRATOR

☐ RECOMMENDATION OF BOARD COMMITTEE

Action of Board On: **05/22/2018** ☒ APPROVED AS RECOMMENDED ☐ OTHER

Clerks Notes:

VOTE OF SUPERVISORS

AYE: John Gioia, District I Supervisor
 Candace Andersen, District II Supervisor
 Diane Burgis, District III Supervisor
 Karen Mitchoff, District IV Supervisor
 Federal D. Glover, District V Supervisor

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Supervisors on the date shown.

ATTESTED: May 22, 2018

David Twa, County Administrator and Clerk of the Board of Supervisors

By: June McHuen, Deputy

Contact: Eric Angstadt
 925.335.1009

cc:

BACKGROUND:

As part of the construction of the new parking lot behind 651 Pine Street samples of the soil uncovered once the old asphalt was removed were taken and analyzed. The samples were tested for a wide variety of both naturally occurring substances and potential contaminants. A total of 23 samples were taken from the parking lot area. No tested compounds exceeded the environmental screening levels for a commercial/industrial use. However a small number of samples showed levels of the naturally occurring metals lead and mercury to be above the screening level for residential use but still well below the screening level for a commercial/industrial use.

For lead the San Francisco Bay Regional Water Quality Control Board (SF RWQCB) set an environmental screening level (ESL) for shallow soil (less than 10 feet) direct exposure for residential use at 80 mg (milligrams)/kg (kilograms). For shallow soil commercial/industrial use direct exposure the ESL is 320 mg/kg. Both of these values come from the SF RWQCB Table S-1 in their February 2016 update. Five of the 23 samples (22%) had levels above 80 mg/kg but below 320 mg/kg, the values were 87.1, 94.9, 122, 205 and 236 mg/kg. Even the highest reading of 236mg/kg is still more than 25% less than the commercial/industrial ESL.

For mercury the residential ESL is 13 mg/kg and the commercial/industrial ESL is 190 mg/kg. Four of the 23 samples (17%) were between these values, with the exact values being 22.1, 28.1, 34.8 and 40.1 mg/kg. The highest reading of 40.1 mg/kg is almost 80% below the commercial/industrial ESL.

***Discussion:**

The ESL levels set by the SF RWQCB are, in their own words, “intended to be conservative, but reasonable.” All the tested samples are below the conservative screening values for a commercial/industrial use and no further testing or action is required. Testing indicated that the samples with the higher lead and mercury readings came from the top two or three feet of soil. Samples of the deeper soil all had levels well below the residential ESL. This suggests that the soil used as fill when the parking lot was first constructed likely had those metals in it.

The industry standard action is to re-use materials on site if possible. In this case the parking lot use is ideal for re-use as this will not be a residential use. In addition, the site is designated in the City of Martinez General Plan and zoned for civic and governmental uses, not residential use. The soil in the areas with the higher readings will be covered with clean fill and then capped by the new parking lot asphalt surface greatly reducing any chance of direct contact. The contractor is aware of the results of the soil screening so the workers can take the appropriate measures to limit their exposure. The samples were also tested to determine that they are unlikely to percolate into the groundwater further reinforcing that capping in place is the most appropriate treatment.

CONSEQUENCE OF NEGATIVE ACTION:

Removal of the soil with levels above the residential ESL would cost at least \$120,000 based on current estimates and significantly delay the parking lot construction.