

March 11, 2015

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By Alameda County Environmental Health at 3:27 pm, Mar 12, 2015

Mr. Keith E. Nowell, P.G., C.H.G. Hazardous Materials Specialist Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

RE: RO#0000010_2015 Request to Eliminate Groundwater Monitoring - Port of Oakland, 651 Maritime Street, Oakland, CA 2015-03-11

Dear Mr. Nowell:

Please find enclosed the documentation and justification to cease groundwater monitoring entitled *Port of Oakland – Harbor Facilities Complex – Request to Eliminate Groundwater Monitoring* for the subject site located at 651 Maritime Street, Oakland.¹ This documentation was prepared by ARCADIS, U.S., Inc. ("ARCADIS") on behalf of the Port of Oakland ("Port"). This information is being submitted and uploaded to the applicable regulatory agency websites in accordance with your request during our meeting on Monday, March 9, 2015, located at our Port of Oakland office.

The Port has retained ARCADIS to prepare this documentation. Based on the conclusions and recommendations contained herein, the Port intends to cease groundwater monitoring at the site as of this current date. If you have any questions or comments regarding the results, please contact Jeff Rubin at (510) 627-1134.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report prepared by ARCADIS are true and correct to the best of my knowledge. Please note that the report is stamped by a Registered Professional Geologist in the State of California.

Sincerely,

Jeffrey L. Rubin, CPSS, REPA

Port Associate Environmental Scientist Environmental Programs and Planning

Enclosure: noted

Cc (w encl.):

Michele Heffes

Cc (w/o encl.):

Katherine Brandt, P.G. (ARCADIS)

Yane Nordhav (Baseline Environmental)

¹ The Site has been referred to historically as the "Shippers" and "Ringsby" sites, based on the Port tenants that occupied the site at the time of release discoveries. Prior to site redevelopment in 2004, the site was also referred to as 2277 and 2225 Seventh Street. After redevelopment, the Site address became 651 and 555 Maritime Street, although referenced hereafter (including within this Report) as only 651 Maritime Street (Fuel Leak Case R00000010).



Jeffrey Rubin
Port Associate Environmental Scientist
Port of Oakland
Division of Environmental Programs and Planning
530 Water Street
Oakland, CA 94607

ENVIRONMENT

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ARCADIS U.S., Inc. 2000 Powell Street Suite 700 Emeryville California 94608 Tel 510 652 4500

Subject:

Request to Eliminate Groundwater Monitoring
Port of Oakland, 651 Maritime Street, Oakland, California

Dear Mr. Rubin:

On behalf of the Port of Oakland (Port), ARCADIS U.S., Inc. (ARCADIS) prepared this *Request to Eliminate Groundwater Monitoring* for the Port's property located at 651 Maritime Street, Oakland, California (site).^[1] The Alameda County Health Care Services Agency is providing regulatory oversight under the Local Oversight Program, case number RO0000010.

The attached documentation indicates concentrations of groundwater constituents are stable to decreasing. Based on linear regression and trend analysis, dissolved constituents do not appear to be migrating downgradient. Results of a monitored natural attenuation assessment indicate petroleum hydrocarbons are actively being reduced through anaerobic degradation in the plume areas. The project team has collected sufficient data over the past 20 years to warrant discontinuing groundwater sampling. Based on the amount of data collected and respective analyses, ARCADIS recommends ceasing groundwater sampling immediately.

Date:

March 11, 2015

Contact:

Katherine Brandt

Phone:

510-596-9675

Email:

Katherine.Brandt@arcadisus.com

Our ref:

04656020.HFC1

^[1] The Site has been referred to historically as the "Shippers" and "Ringsby" sites, based on the Port tenants that occupied the site at the time of release discoveries. Prior to site redevelopment in 2004, the site was also referred to as 2277 and 2225 Seventh Street. After redevelopment, the Site address became 651 and 555 Maritime Street, although referenced hereafter as only 651 Maritime Street (*Fuel Leak Case RO0000010*).

ARCADIS

Mr. Jeffrey Rubin

March 11, 2015

We appreciate the opportunity to provide the Port of Oakland with professional consulting services on this project. If you have any questions regarding this deliverable, please feel free to contact me at (510) 596-6975 or via email at katherine.brandt@arcadis-us.com.

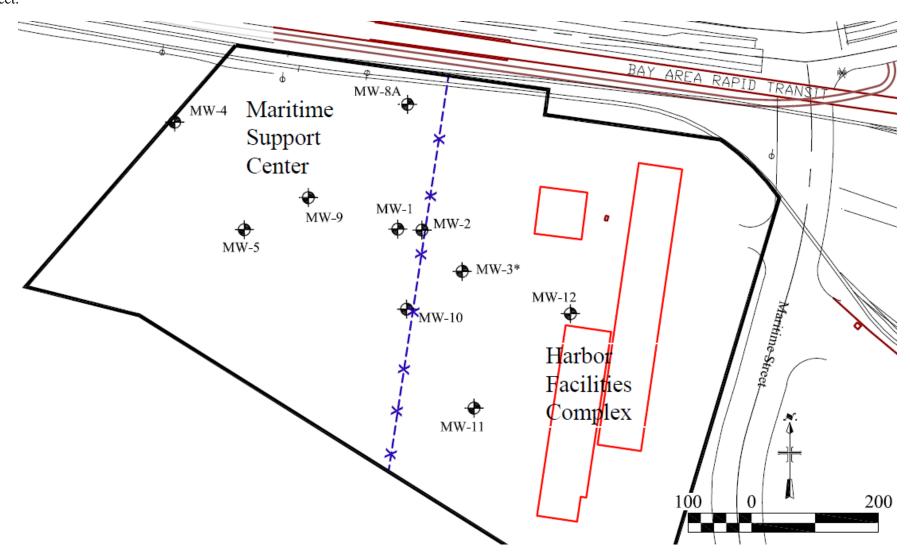
Sincerely,

ARCADIS U.S., Inc.

Katherine Brandt, P.G. Project Manager

Port of Oakland – Harbor Facilities Complex Request to Eliminate Groundwater Monitoring March 9, 2015 Jeff Rubin (Project Manager)

The Site encompasses an approximate 13-acre parcel, located between the former Oakland Naval Supply Center and former Oakland Army Base. Groundwater impacts beneath the Site are related to petroleum releases from two former underground storage tank (UST) sites located at 2277 Seventh Street and 2225 Seventh Street.



Existing Monitoring Wells

Existing Wountering Wens						
Monitoring Well	Date Installed	Quarterly Events (1994-2006)	Semi-Annual Events (2007-2015)**	Total Sampling Events	Range of Benzene Concentrations	Notes
MW-2	5/16/1994	43	18	61	ND – 39	
MW-4	8/25/1995	41	18	59	ND - 740	
MW-5	8/25/1995	39	18	57	ND – 3.3	
MW-8A	10/2/2001	20	18	38	ND	
MW-9	12/1/2008	0	15	15	ND – 69	
MW-10	12/1/2008	0	15	15	ND - 66	
MW-11	12/1/2008	0	15	15	ND	
MW-12	12/2/2008	0	15	15	ND	
MW-1	5/16/1994	1	6	7	7 – 120	Not sampled every time due to the presence of free-phase product

Notes:

Benzene is the only constituent shown because it is the primary constituent of concern.

ug/L = micrograms per liter

NA = not applicable ND = not detected

COCs

TPH-g, TPH-d, TPH-MO, BTEX were analyzed since 1994. MTBE was added in November 1998

Monitored Natural Attenuation (MNA) constituents were analyzed for methane, iron (II), sulfate, nitrate, manganese (II) in MW-1 through 4, 8A, 9 through 12 in September 2011, December 2013, June 2014, and January 2015. MNA constituents are sampled once a year.

Conclusions and Recommendations

Groundwater constituents' concentrations are stable to decreasing. MNA is occurring in plume areas. Based on linear regression and the trend analysis, dissolved constituents do not appear to be migrating downgradient. The project team has collected sufficient data over the past 20 years to warrant discontinuing groundwater sampling. Based on the amount of data collected and the analysis, groundwater sampling will be discontinued.

^{*} One additional monitoring well is part of the network, MW-3. It was installed on May 16, 1994 and has never been sampled due to the presence of free product.

 $^{{\}rm **}\ {\rm Quarterly\ groundwater\ sampling\ events\ took\ place\ in\ 2008\ wells\ were\ last\ sampled\ in\ 2015.}$

Port of Oakland – Harbor Facilities Complex Request to Eliminate Groundwater Monitoring Monitoring Well Constituent Concentration Trend Analysis Over Time

