

COMMENT LETTER*

TO: State Water Resources Control Board – Division of Water Quality
Attn.: USTClosuresComments@waterboards.ca.gov

FROM: Kevin D. Brown, CEG #2180; geobrown@earthlink.net

DATE: November 15, 2013

SUBJECT: Comment Letter – ConocoPhillips No. 256228

SITE ADDRESS: 9093 Imperial Highway, Downey, Los Angeles County, CA 90242

***Disclaimer:** The views and opinions expressed in this comment letter are solely those of the author in his private capacity and do not in any way reflect the views of his employer or any related entity.

Dear State Water Resources Control Board,

I have reviewed the “NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT” and the “UST CASE CLOSURE SUMMARY”, pertaining to the referenced site. As a California-licensed professional geologist and certified engineering geologist who wants to ensure that accurate geologic interpretations have been conducted at UST sites before case closure, I have the following comments.

Comment #1

On Page 2 of the closure summary, it states “Site releases **HAVE NOT AFFECTED GROUNDWATER.**”

Reportedly, groundwater was encountered in exploratory borings, but samples were not collected for laboratory analysis. Can it truly be stated, with any degree of certainty, that groundwater has not been “affected” by historic chemical releases at the site? Would it be better to say that the true impact to groundwater is unknown?

Comment #2

On Page 7 of the closure summary, the geologic term “interbedded” is used several times to describe the alluvial deposits underlying the site. Interbedded is not a word that is typically used to describe alluvium; it’s frequently used to describe sedimentary bedrock (e.g., the Purisima Formation is generally composed of interbedded sandstone and siltstone).

Comment #3

On Page 7 of the closure summary, it states:

Hydrogeology: Groundwater beneath the Site is unconfined to semi-confined and exists in both the fill and alluvium and within low permeable fractures in the underlining bedrock.

- If groundwater wasn't sampled, and there are no on-site groundwater monitoring wells, how was it determined that groundwater is "unconfined to semi-confined" beneath the site?
- Groundwater is present in the "fill" beneath the site? I presume this means man-placed fill capping the site. How deep is the fill? What is the depth to groundwater in fill beneath the site?
- What is meant by "underlining bedrock?"

Comment #4

Page 8 of the closure summary concludes with the following:

There are no soil samples results in the case record for naphthalene. However, the relative concentrations of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline. Taken from Potter and Simmons (1998), gasoline mixtures contain approximately 2% benzene and 0.25% naphthalene. Therefore, benzene concentrations can be directly substituted for naphthalene concentrations by a factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Table 1 of the Policy. Therefore, estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

- Does the State Water Board's *Low-Threat Underground Storage Tank Case Closure Policy* require the collection of naphthalene data for both soil and soil gas?
- Is it acceptable to assume weight percentages of "2% benzene and 0.25% naphthalene" in the fuel/gasoline historically released at this site?
- What is meant by a "factor of eight?"
- Is it appropriate to use benzene as a surrogate for naphthalene and, if so, why is the Potter and Simmons reference considered appropriate and conservative?

I look forward to receiving a written response to my concerns in the near future. Thank you.

Sincerely,



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