

October 14, 2014

Anne Holden  
Lisa Dernbach  
Lauri Kemper  
California Regional Water Quality Control Board, Lahontan Region  
2501 Lake Tahoe Boulevard  
South Lake Tahoe, California 96150

**RE: Follow-up, Reflective Comments from the IRP Manager Regarding the Former Waste Pit Technical Exchange Meeting held at the IRP Manger's Office on September 11, 2014: Doubts About the Former Waste Pit Being Associated with the TPH Impacts Recently Measured at MW-163D.**

Dear Anne, Lisa and Lauri:

The IRP Manager would like to acknowledge the effort that the Lahontan Regional Water Quality Control Board (Water Board) has dedicated to address the issue at the Former Waste Pit located southwest of Community Blvd and Hinkley Rd. A Technical Exchange Meeting (TEM) was held at the IRP Manager's Office on September 11, 2014 involving the Water Board (South Lake Tahoe and Victorville Offices), the Community Advisory Committee (CAC), IRP Manager, PG&E and the United States Geological Survey (USGS, by phone) to discuss the "Former Waste Pit." The TEM was productive and provided a transparent forum all stakeholders to voice diverse opinions about the Former Waste Pit, and any conceived impacts it may have had on groundwater conditions.

The IRP Manger and the CAC thanks the Water Board for setting up the meeting, and PG&E for their participation in answering all the questions the CAC had submitted prior to the meeting. Such meetings and dialog build technical understanding and contribute to improved "trust."

Since the meeting, the IRP Manager and staff have considered the situation further and had internal discussions rethinking the various transport scenarios which were hypothesized during the meeting.

At the TEM the IRP Manger showed a conceptual X-section figure through the Former Waste Pit and local groundwater, noting the low detection<sup>1</sup> of Total Petroleum Hydrocarbon (TPH) at downgradient MW-163D. On further consideration, we note that the figure we presented was not to scale. In our ensuing internal discussions and review of the meeting's debate points, it is possible that PNL's figure may have mislead some CAC participants, and so, via this letter, we are clarifying the IRP Manager's technical position.

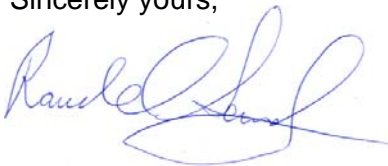
Attached **Figure 1** is a revised scale version of the figure that was presented during the September 11, 2014 TEM. This X-section drives the IRP Manager to a conclusion that there is an exceedingly low probability that the detection of TPH at MW-163D has resulted from a release from the Former Waste Pit. Our reasoning is that if the TPH detected at MW-163D originated from the Former Waste Pit, then given relative travel distances and vertical dispersion effects, the TPH impacts should have also been detected at MW-163S. TPH constituents have a lower density than water so one would expect TPH detections to be predominantly measured at the shallower well screen rather than the deeper well screen. Or, more strikingly, to not have both the shallow and deep screen intervals TPH-impacted, if the release was from the former waste pit, seems highly unusual.

Should you have any questions or comments, please feel free to contact either of the undersigned via email or phone as provided below:

Raudel Sanchez: [rsanchez@projectnavigator.com](mailto:rsanchez@projectnavigator.com), 714-388-1821

Ian A. Webster: [iwebster@projectnavigator.com](mailto:iwebster@projectnavigator.com), 714-863-0483

Sincerely yours,



Raudel Sanchez, Ph.D.  
Project Manager



Ian A. Webster, Sc.D.  
Hinkley IRP Manager

## Attachments

Figure 1: Former Waste Pit Investigation: Cross-sectional, Scale Schematic through the Former Waste Pit and MW's 163S and 163D

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<sup>1</sup> TPH was detected at 58 ppb and the detection limit was 50 ppb.

CC:

CAC Members

Mike Plaziak, California Regional Water Quality Control Board, Lahontan Region

Patrice Copeland, California Regional Water Quality Control Board, Lahontan  
Region

Brianna Bergen, California Regional Water Quality Control Board, Lahontan  
Region

Kevin Sullivan, PG&E

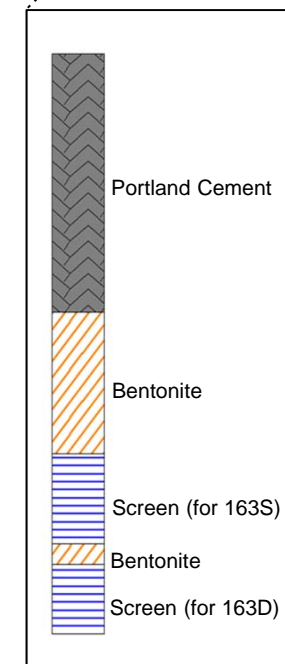
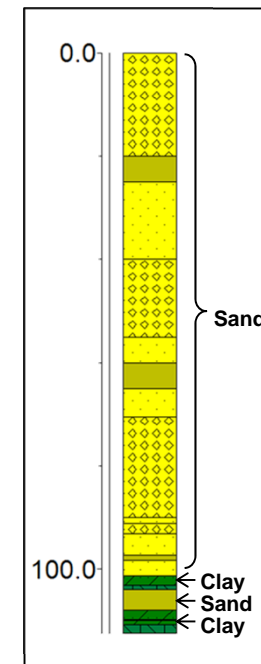
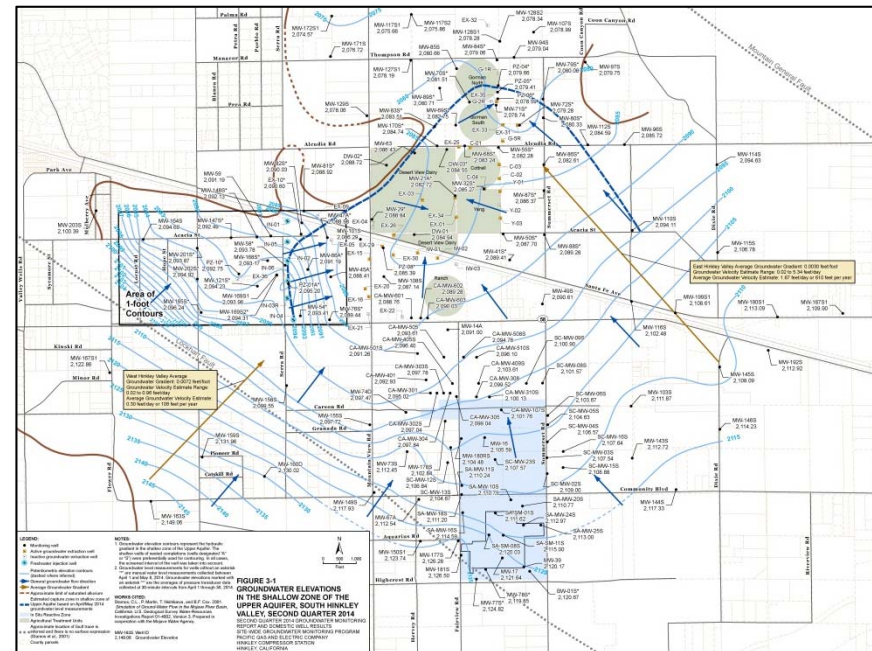
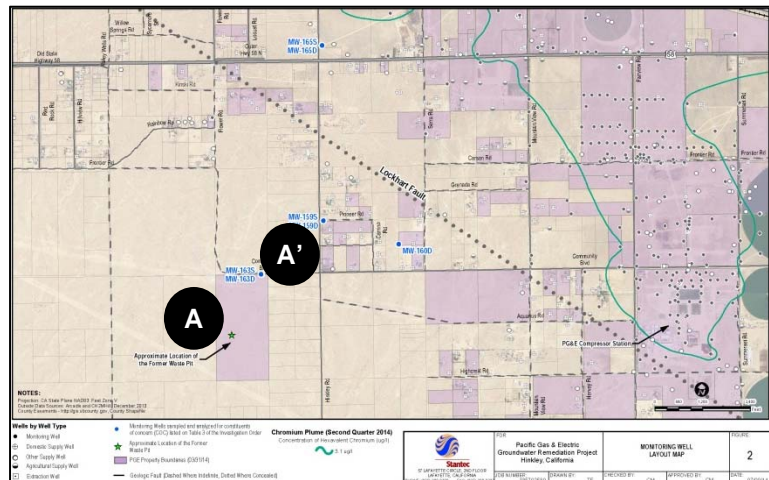
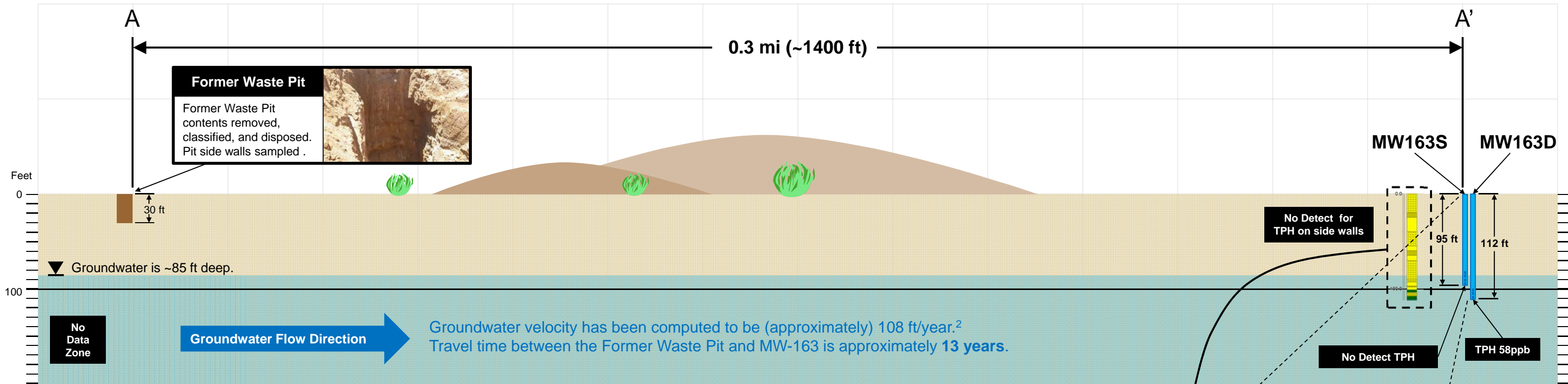
Iain Baker, PG&E

FIGURE 1

# Former Waste Pit Investigation: Cross-sectional, Scale Schematic through the Former Waste Pit and MW's 163S & 163D



Note: Each grid square represents a 100' x 100'.



**Location of Downgradient Monitoring Wells MW163 S & D (A'), Relative to the Location of the Former Waste Pit (A).<sup>1</sup>**

**Groundwater Elevations in the Shallow Zone of the Upper Aquifer, South Hinkley Valley<sup>1</sup>**

**Lithology from MW-163S/D**

**Well Construction**

<sup>1</sup> Source: Stantec. 2014. *Technical Memorandum – Transmittal of Additional Monitoring Well Data for the Southwest Area*. July 30.

<sup>2</sup> Source: CH2M Hill. 2014. *Second Quarter 2014 Groundwater Monitoring Report and Domestic Well Sampling Results, Site-wide Groundwater Monitoring Program, Pacific Gas and Electric Company, Hinkley Compressor Station, Hinkley, California*. June 30.