



TETRA TECH INC.

September 1, 2020

Lynn Nakashima
Project Manager
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, CA 94710

**Subject: Notification of Piezometer B278 and CTPS Abandonment and Reinstallation
EPA North Meadow Removal Action
University of California, Berkeley, Richmond Field Station**

Dear Ms. Nakashima:

The University of California, Berkeley plans to abandon and replace piezometers B278 and CTPS at the Richmond Field Station as a requirement of the upcoming soil removal action at the EPA North Meadow. The abandonment is scheduled for September 18, 2020. Installation of the replacement wells will be conducted in October or November 2020 following completion of the removal action and pending driller availability. All activities will be conducted in accordance with the Field Sampling Workplan, Phase I Groundwater Sampling Plan, dated June 2, 2010.

Piezometer B278 consists of a 2-inch PVC piezometer with a depth of 16.5 feet below ground surface (bgs), screened from 6 to 16 feet bgs. Piezometer CTPS consists of a 2-inch PVC piezometer with a depth of 14 feet bgs, screened from 4 to 14 feet bgs. Both piezometers will be abandoned and decommissioned according to Contra Costa County Health and Safety Division "Annular Seal and Well Destruction Materials" specification. The piezometers will be over-drilled, removed, and the entire borehole will be grouted. The piezometer materials removed will be drummed as investigation-derived waste (IDW).

The replacement piezometers will be installed approximately 5 feet north of the current locations and named B278-R and CTPS-R. The boreholes will be drilled with a hollow-stem auger drill rig creating a 6-inch diameter boring. Both piezometers will be constructed from 2-inch diameter schedule 40 PVC blank casing with 2-inch diameter schedule 40 PVC screen with 0.01-inch slot size. The screened interval of the piezometer will be consistent with the original constructions. The piezometers will be surveyed for horizontal and vertical controls following installation. A table provide existing and replacement piezometer details is included on the following page.

No soil samples will be collected for analysis during the well installation. Both piezometers will be developed according to the protocols of the installation of the previous piezometers and consistent with *Well Design and Construction for Monitoring Groundwater at Contaminated Sites*, prepared by the California Environmental Protection Agency, dated June 2014. Piezometer B278-R will be sampled in schedule with all other RFS piezometers in April 2021. Piezometer CTPS-R is not scheduled for sampling. Neither piezometer will be measured for groundwater levels on October 5 since their replacement will not have been completed due to potential ongoing soil removal activities within the EPA North Meadow prior to October 5, 2020.

Well ID	Installation Date	Coordinates	Top of Casing Elevation (NGVD)	Boring Depth	Casing Interval	Screen Interval	Filter Sand Pack Interval	Bentonite Seal Interval	Cement Annular Seal Interval
B278	7/29/2010	37.9140540512 122.336313126	12.75	16.5	0-16	6-16	5-16	3-5	0-3
B278-R	TBD	TBD	TBD	16.5	0-16	6-16	5-16	3-5	0-3
CTPS	7/28/2010	37.9143627267 122.337256895	15.25	16	0-14	4-14	4-14	2-3	0-2
CTPS-R	TBD	TBD	TBD	14	0-14	4-14	4-14	2-3	0-2

Notes:

NGDV: National Geodetic Vertical Datum, 1929

TBD: To be determined

Coordinates provided in latitude and longitude

Interval measurements presented in feet below ground surface

All wells constructed of 2-inch Schedule 40 PVC within 8-inch diameter borings


All wells flush mounted with lockable caps and robust concrete covers

Screen and filter sand pack intervals determined following initial measurement of groundwater elevations

Permits will be obtained prior to abandonment and piezometer installation, and a copy of the Well Driller's Report will be submitted to Contra Costa Environmental Health, UC Berkeley, and the State Department of Water Resources so that UC Berkeley can receive final destruction approval.

If you have any questions or comments regarding this submittal, please call me at (415) 497-9060.

Sincerely,



Jason Brodersen, P.G.

Project Manager

Attachment: Figure 1, EPA North Meadow Piezometer Replacements

cc: Alicia Bihler, Office of EH&S, University of California, Berkeley

