



TETRA TECH

June 9, 2021

Mr. Jose Capati  
USA Portola East, LLC,  
20 Corporate Plaza Drive,  
Newport Beach, CA 92260

**Subject: Interim Monitoring Summary  
Portola Hills Northeast  
Northeast of Glenn Ranch Road and Viejo Ridge Drive  
Lake Forest, California**

Dear Mr. Capati:

In accordance with your request, Tetra Tech, Inc. (Tetra Tech) is pleased to present a summary of the nuisance dust monitoring activities and instrument readings to date. Five Dust Track 8533 dust monitoring stations were set up and field monitoring implemented for the period of May 24 through June 4, 2021 in accordance with the Soil Stockpile Excavation Dust Monitoring Plan. The stations were located based upon prevailing wind directions. Three of the monitoring stations were set up along the east adjacent property line and serve as downwind monitoring locations for nuisance dust during the stockpile soil excavation and loading activities. A dust monitoring station was set up adjacent to newly completed homes to the north of the soil stockpile excavation and haul road serving as a cross/side wind monitoring location. The fifth monitoring station and portable weather wind monitoring devices were set up behind (West) of the active grading area, serving as the upwind monitoring station location. All of the monitoring equipment was/is set up and dismantled on a daily basis during the soil stockpile excavation activities. No soil excavation or dust monitoring activities were performed during weekends.

During the period referenced in the paragraph above, a technician performed daily observations and monitoring of the soil excavation and loading into trucks for transportation to an off-site disposal facility. The technician monitored ambient air with a photoionization detector (PID) within the breathing zone downwind from the soil excavation and loading operations for the detection of any possible volatile organic compounds that may have been present in the air. The technician also observed readings from the five TSI 8533 Dust Track DRX monitors. On a daily basis the field technician set up and calibrated the Dust Track dust monitors. Due to construction equipment traffic (scrapers, dump trucks, etc. on the dirt haul roads) within the soil stockpile excavation area, and for safety, each round of perimeter dust monitoring at the five monitoring locations took approximately one hour to complete as it averaged about 10 to 15 minutes for the technician to document readings on the dust monitor and PID and to travel between each of the dust monitoring station locations.

The PID detects volatile organic compounds (VOCs); however, the PID does not ascertain what specific VOCs are being detected. The PID is used as a screening tool to alert the user as to whether there may be VOCs present within the work area or breathing zone.

Instrument readings on the PID have been consistently registered at a concentration of 0 parts per million (PPM) from May 25 through June 4, 2021. However, a very low detection on the PID registered a concentration of 0.4 PPM on May 24<sup>th</sup> at one of the downwind monitoring locations. Conversely, the ambient background (upwind) PID concentration on May 24<sup>th</sup> for the project site was registered at a concentration of 0.2 PPM. Therefore, the PID instrument readings of ambient air for the period of May 24 through June 4 did not exceed field monitoring action levels nor OSHA worker safety levels for VOCs or other regulatory thresholds.

The dust control activities observed by the technician of the on-site dust suppression contractors appeared to be adequate as the water trucks continuously applied the necessary quantities of water throughout the site daily to minimize dust emissions. The soil excavation and loading operations observations and instrument observation activities were performed in accordance with CA Code of Regulations Title 8 General Industry and 29 CFR 1910 and 29 CFR 1926 Construction Regulations.

The community action level for nuisance dust referenced in the Soil Stockpile Excavation Dust Monitoring Plan for the Portola Hills Northeast residential development (Tetra Tech, 2021) is 0.05 milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ); however, because the TSI 8533 Dust Track DRX monitoring instrument readings are registered in micrograms per cubic meter ( $\text{ug}/\text{m}^3$ ), the conversion factor from  $\text{mg}/\text{m}^3$  to  $\text{ug}/\text{m}^3$  adjusts the action level to  $50 \text{ ug}/\text{m}^3$  ( $0.05 \text{ mg}/\text{m}^3 \times 1,000 = 50 \text{ ug}/\text{m}^3$ ) which complies with the State ambient air quality standards.

The following provides a summary of the range of the total daily average dust concentrations recorded for the background (upwind), downwind and crosswind dust monitor locations for the period of May 24 through May 28, 2021:

- Background (upwind) location ( $0.013 \text{ ug}/\text{m}^3$  to  $0.027 \text{ ug}/\text{m}^3$ ); Crosswind location ( $0.016 \text{ ug}/\text{m}^3$  to  $0.027 \text{ ug}/\text{m}^3$ ); Downwind locations ( $0.015 \text{ ug}/\text{m}^3$  to  $0.075 \text{ ug}/\text{m}^3$ )

The following provides a summary of the range of the total daily average dust concentrations recorded for the background (upwind), downwind and crosswind dust monitor locations for the period of June 1 through June 4, 2021:

- Background (upwind) location ( $0.025 \text{ ug}/\text{m}^3$  to  $0.035 \text{ ug}/\text{m}^3$ ); Crosswind location ( $0.025 \text{ ug}/\text{m}^3$  to  $0.036 \text{ ug}/\text{m}^3$ ); Downwind locations ( $0.022 \text{ ug}/\text{m}^3$  to  $0.080 \text{ ug}/\text{m}^3$ )

The summary of the total daily average dust concentrations recorded to date for the background, downwind and crosswind dust monitor locations referenced above are well below the established community action level for nuisance dust that is referenced in the Soil Stockpile Excavation Dust Monitoring Plan and the requisite rules and regulations governing such activities and worker safety standards. Visual observations indicate that the dust suppression activities implemented by the

contractor also have been performed in general accordance with the recommendations provided in the plan and are successfully in compliance with regulatory thresholds.

**Sincerely,  
Tetra Tech, Inc.**



**Dave Brown  
Project Manager**



**Steven Bradley, CEG 1625  
Principal Engineering Geologist**

## References

- 1) Tetra Tech 2021. Soil Excavation Dust Monitoring Plan. Portola Hills Northeast. May 19.