Appendix C
Correlated PM_{10} Concentrations and Winds

IMPERIAL COUNTY SELECT SITES
(Figures C-1 to C-4)

The following graphs illustrate the direct correlation between wind speeds[1] and PM_{10} concentrations at select monitoring sites within the Salton Sea Air Basin on May 18, 2015. See **Figure 2-5 or B-1** for location of sites. Note that wind speed measurements may be taken at any time during the hour. Therefore, the following graphs reflect only the hour in which wind measurements were taken, and not necessarily the exact time. Air quality data in all graphs is from the EPA's AQS data bank.

FIGURE C-1
BRAWLEY PM_{10} CONCENTRATION & WIND SPEED CORRELATION

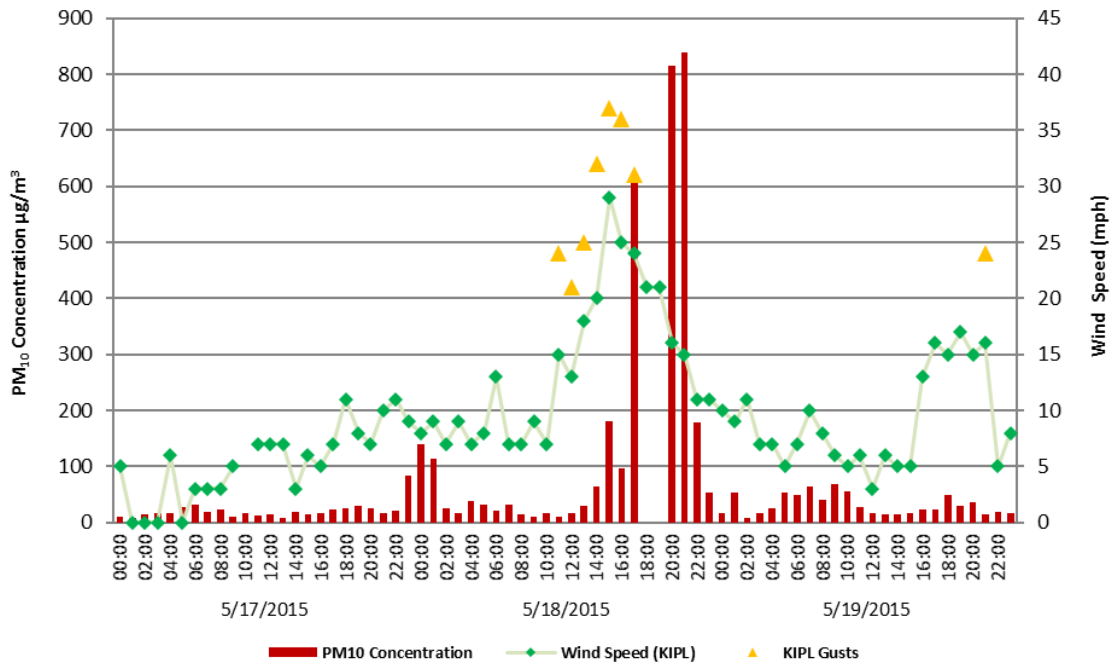

Fig C-1: Brawley recorded increased levels of PM_{10} as winds speeds increased during the afternoon on May 18, 2015. If not for two missing hours, the FEM monitor most likely would have recorded an exceedance. Wind data from the NCEI's QCLCD system

[1] National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); http://w1.weather.gov/glossary/index.php?letter=w

FIGURE C-2
NILAND PM_{10} CONCENTRATION & WIND SPEED CORRELATION

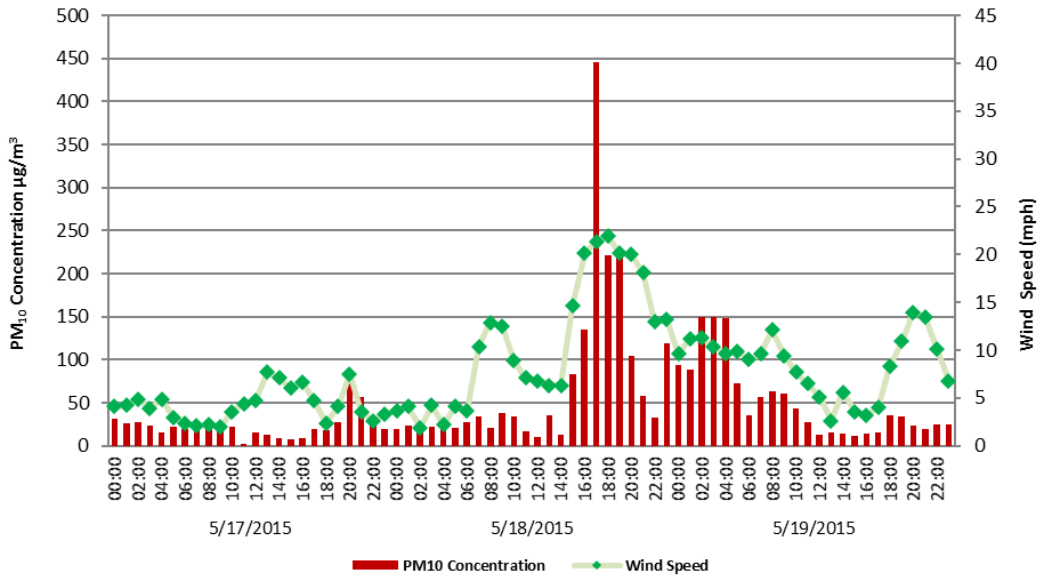

Fig C-2: Niland sites recorded increased levels of PM_{10} as winds speeds increased during the afternoon on May 18, 2015. Wind data from the EPA's AQS data bank

EASTERN RIVERSIDE COUNTY MONITORING SITES

FIGURE C-3
TORRES-MARTINEZ PM_{10} CONCENTRATION & WIND SPEED CORRELATION

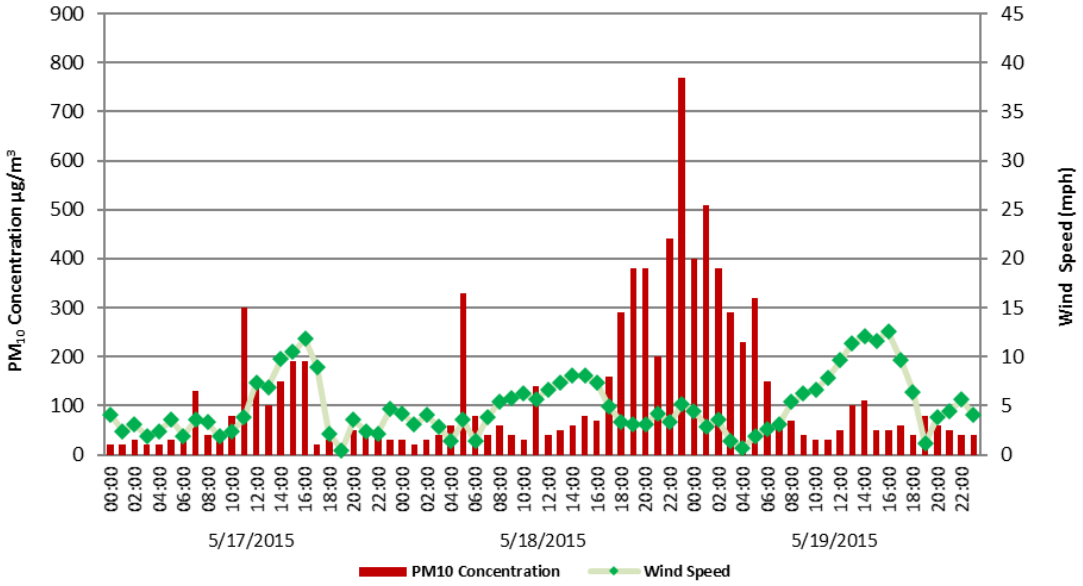

Fig C-3: T-M Tribal showed elevated concentrations following a brief spurt in wind speed. Wind data from the EPA's AQS data bank

FIGURE C-4
PALM SPRINGS FIRE STATION
PM_{10} CONCENTRATION & WIND SPEED CORRELATION

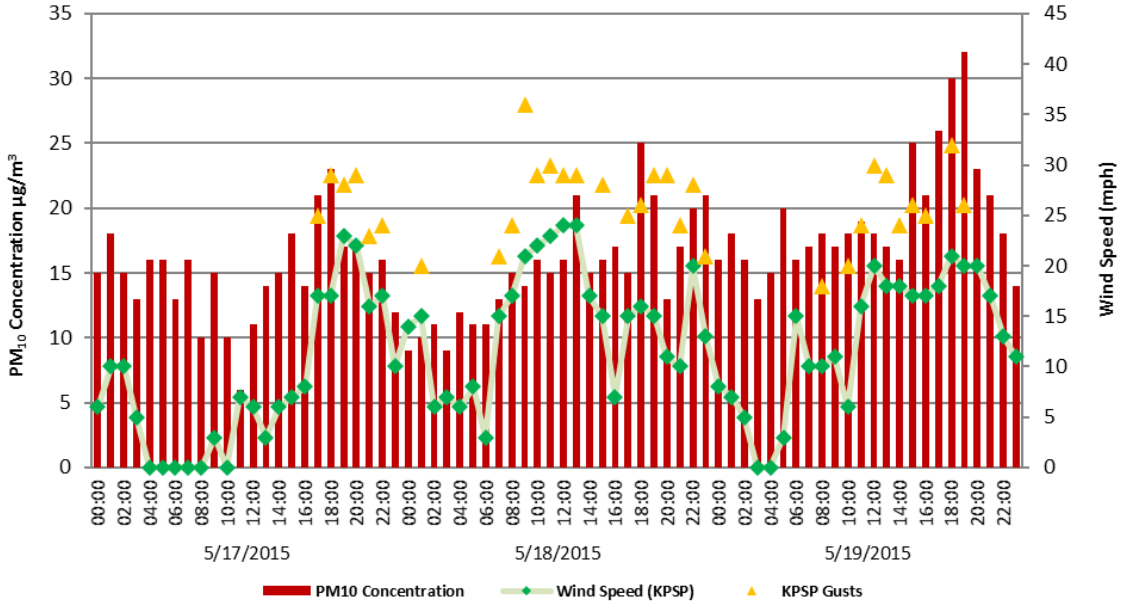

Fig C-4: Palm Springs Fire Station experienced modest increases and dips in hourly concentrations on May 18, 2015

FIGURE C-5
YUMA, ARIZONA SUPERSITE
PM_{10} CONCENTRATION & WIND SPEED CORRELATION

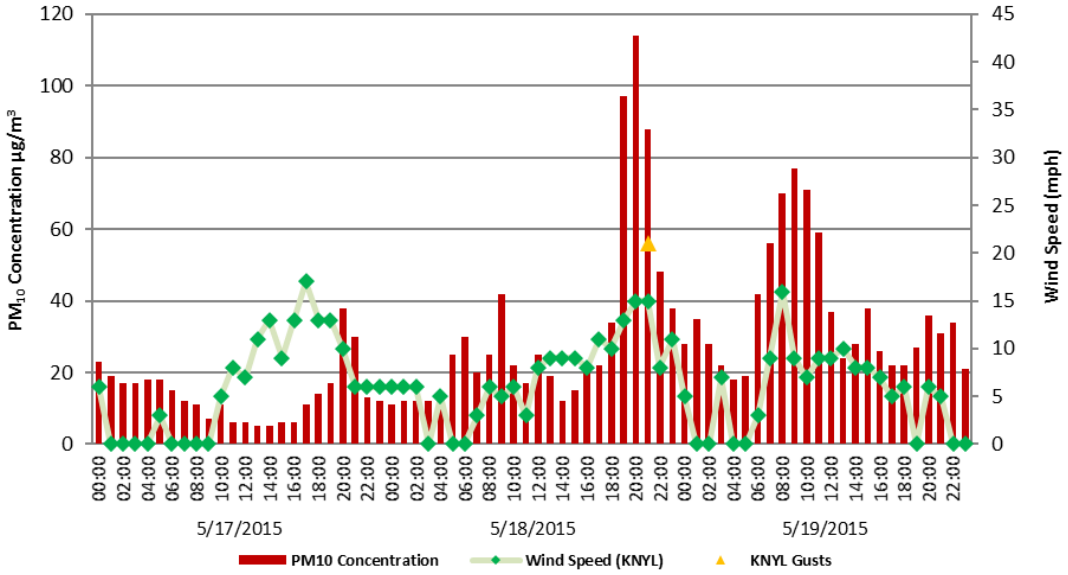

Fig C-5: Yuma monitoring site in Yuma, Arizona, located southeast of Brawley, saw corresponding increases in particulate matter as wind speed increased during the day