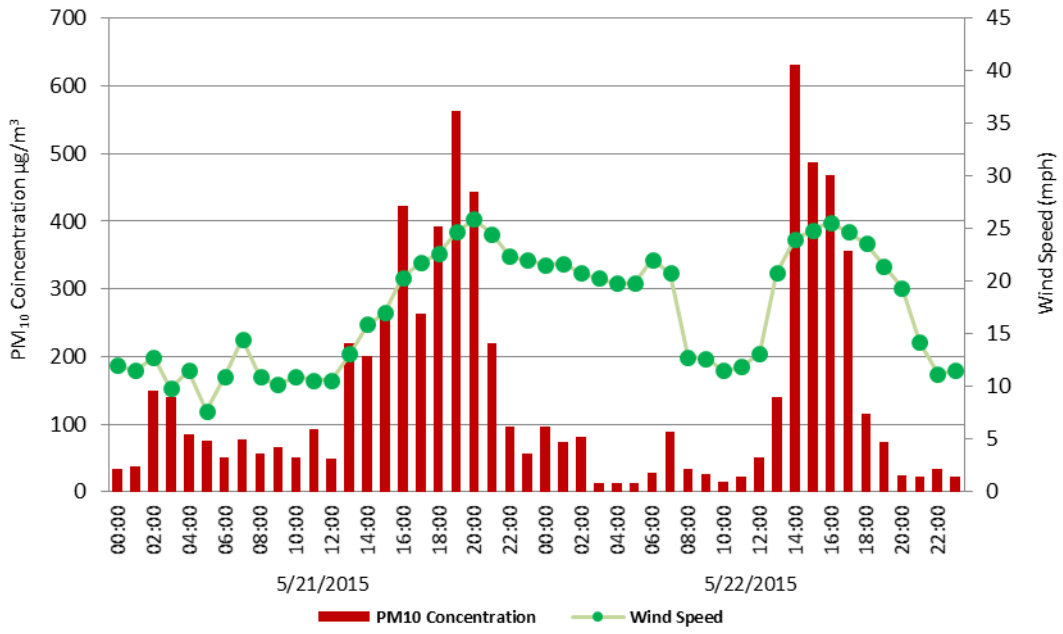
Appendix C
Correlated PM_{10} Concentrations and Winds

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 21, 2015 and May 22, 2015. See **Figure 2-5** or **Figure 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.

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

FIGURE C-1
NILAND PM_{10} CONCENTRATION & WIND SPEED CORRELATION
MAY 21, 2015 AND MAY 22, 2015



[1] [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
MAY 20, 2015 THROUGH MAY 23, 2015

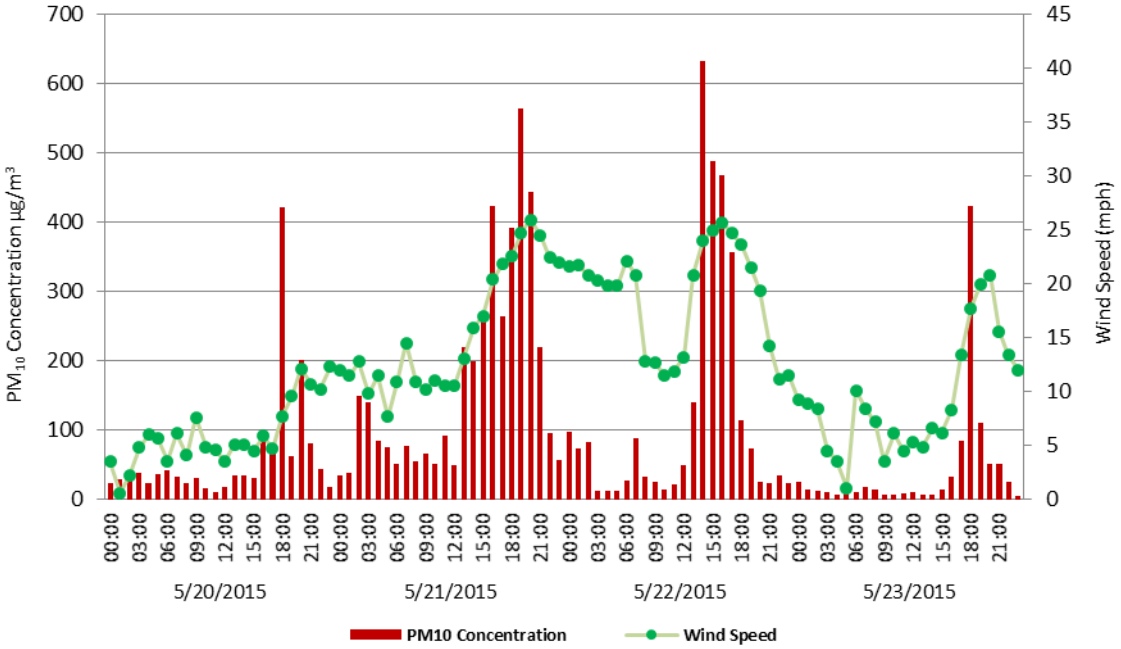


Fig C-1 and C-2: Niland monitoring site shows increased levels of PM_{10} as winds speeds increased on May 21, 2015 and May 22, 2015

FIGURE C-3
BRAWLEY PM_{10} CONCENTRATION & WIND SPEED CORRELATION
MAY 21, 2015 AND MAY 22, 2015

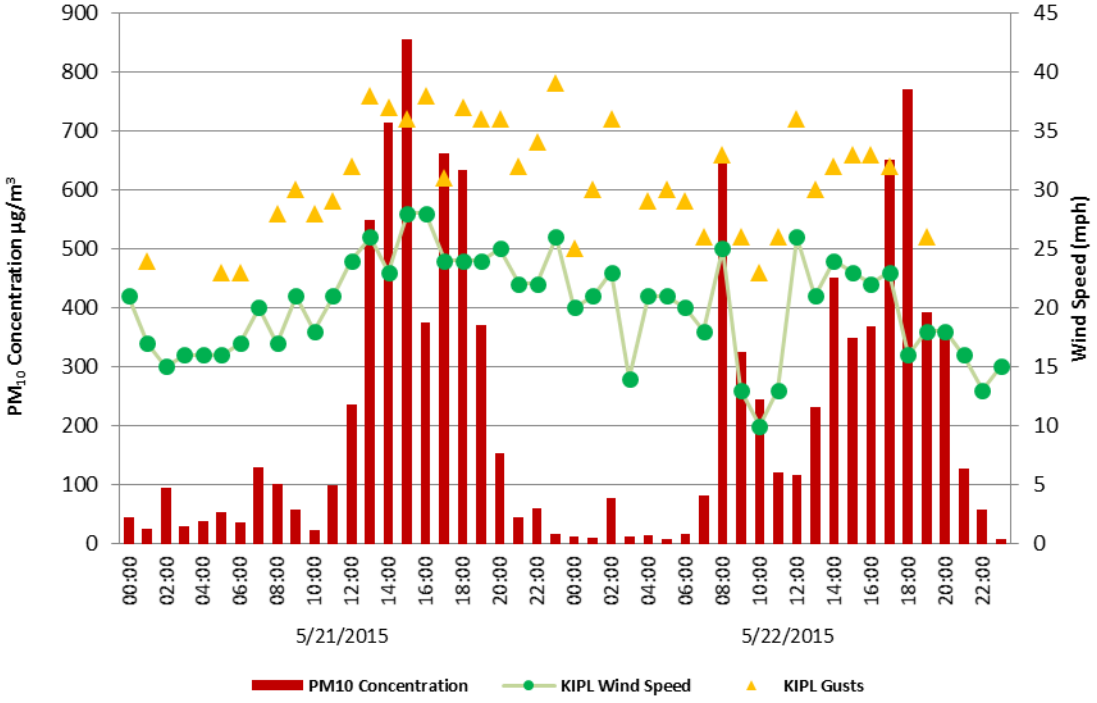


FIGURE C-4
BRAWLEY PM_{10} CONCENTRATION & WIND SPEED CORRELATION
MAY 20, 2015 THROUGH MAY 23, 2015

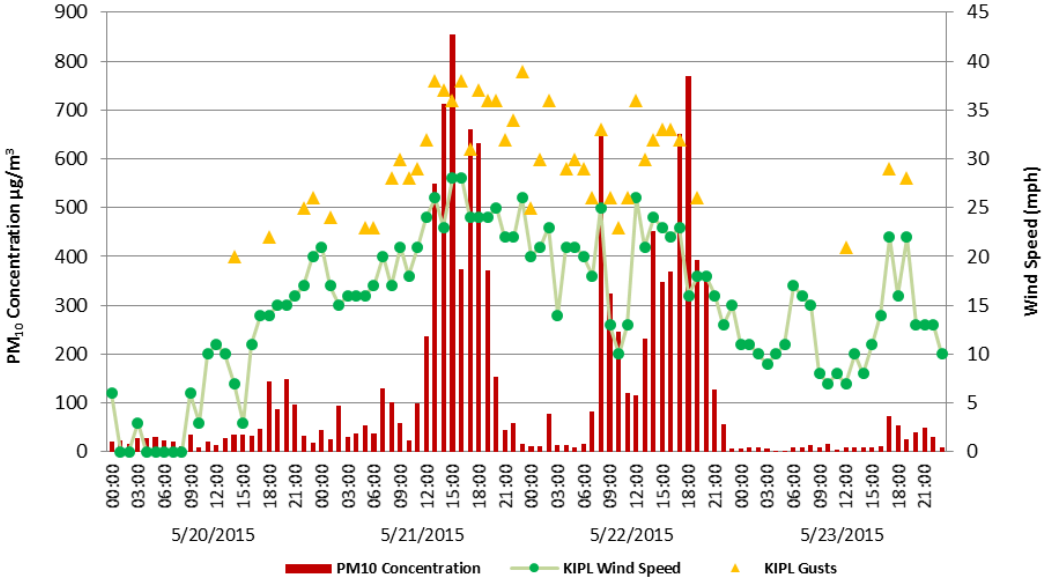


Fig C-3 and C-4: Brawley monitoring site shows increased levels of PM_{10} as winds speeds increased on May 21, 2015 and May 22, 2015

RIVERSIDE COUNTY MONITORING SITES

FIGURE C-5
PALM SPRINGS FIRE STATION PM_{10} CONCENTRATION & WIND SPEED CORRELATION
MAY 20, 2015 THROUGH MAY 23, 2015

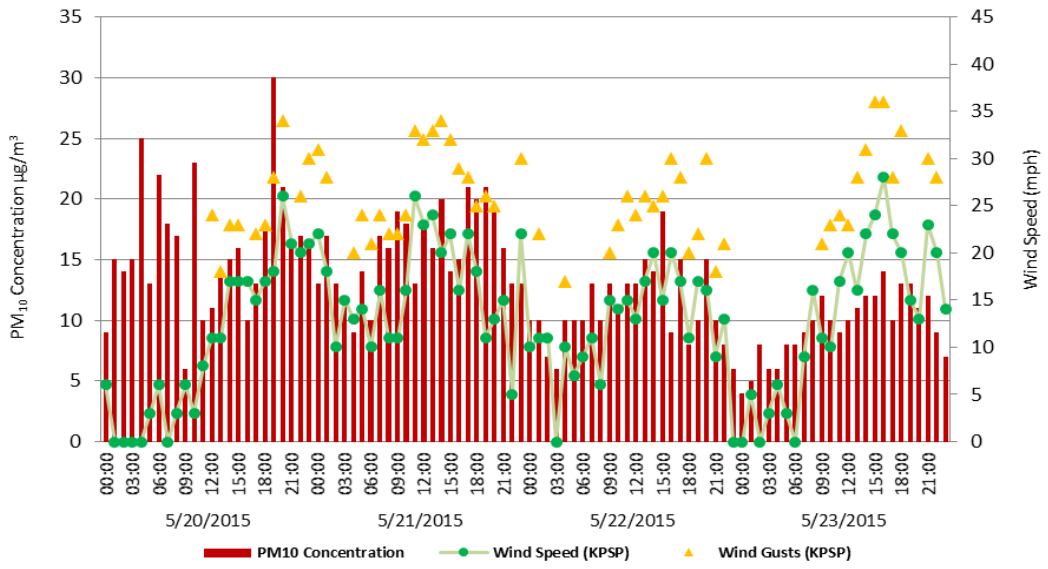


Fig C-5: Palm Springs Fire Station uses Palm Springs International Airport wind

FIGURE C-6
TORRES-MARTINEZ TRIBAL PM_{10} CONCENTRATION & WIND SPEED CORRELATION
MAY 20, 2015 THROUGH MAY 23, 2015

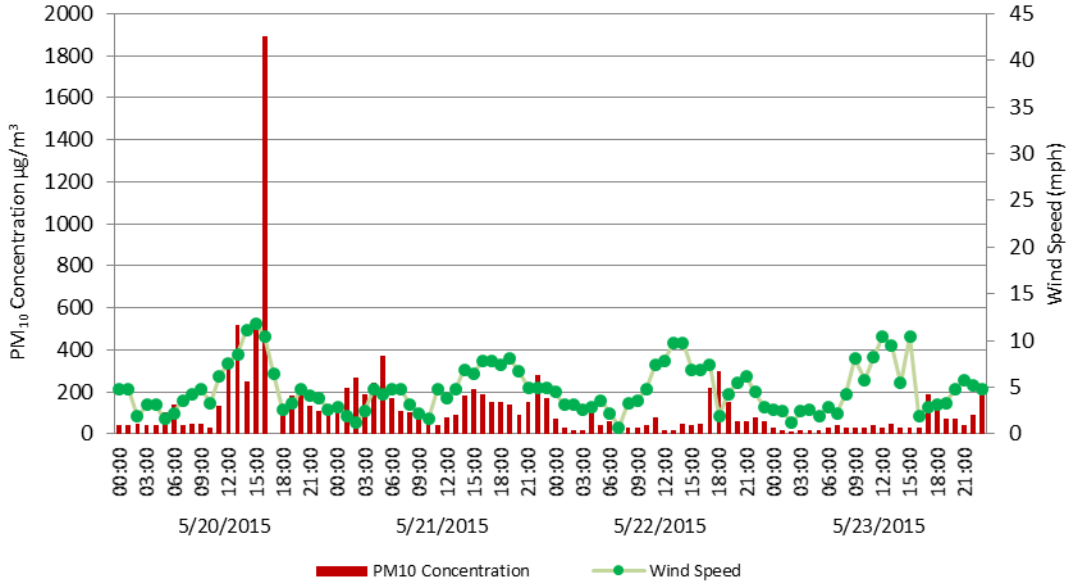


Fig C-6: Torres-Martinez Tribal air quality and wind data from the EPA's AQS data bank

FIGURE C-7
INDIO (JACKSON ST) PM_{10} CONCENTRATION & WIND SPEED CORRELATION
MAY 20, 2015 THROUGH MAY 23, 2015

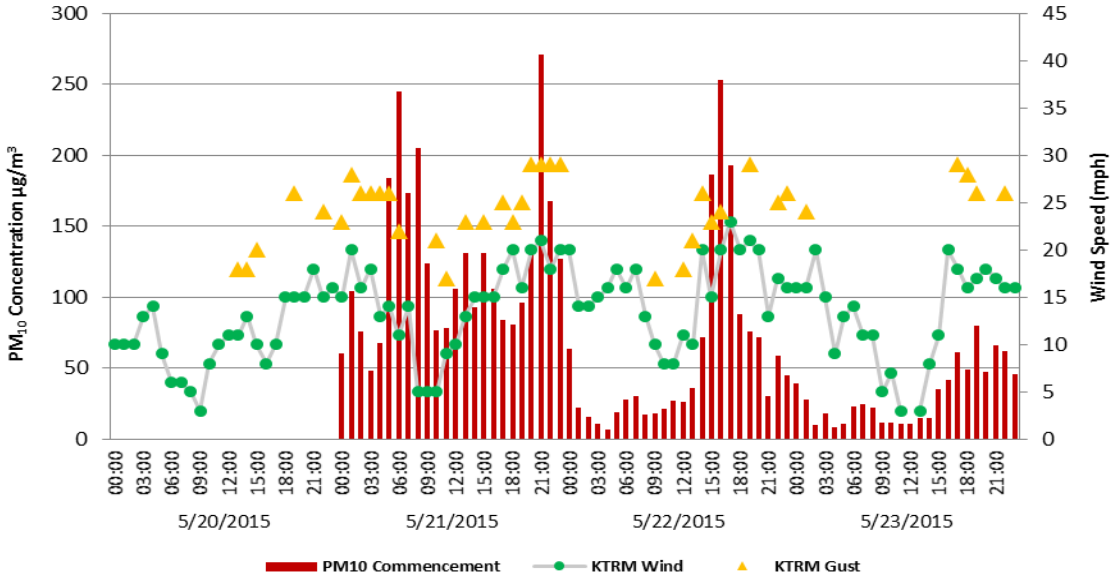


Fig C-7: Indio (Jackson St) uses Jacqueline Cochran Regional Airport wind data

YUMA, ARIZONA MONITORING SITES

FIGURE C-8
YUMA, ARIZONA SUPERSITE PM_{10} CONCENTRATION & WIND SPEED CORRELATION
MAY 20, 2015 THROUGH MAY 23, 2015

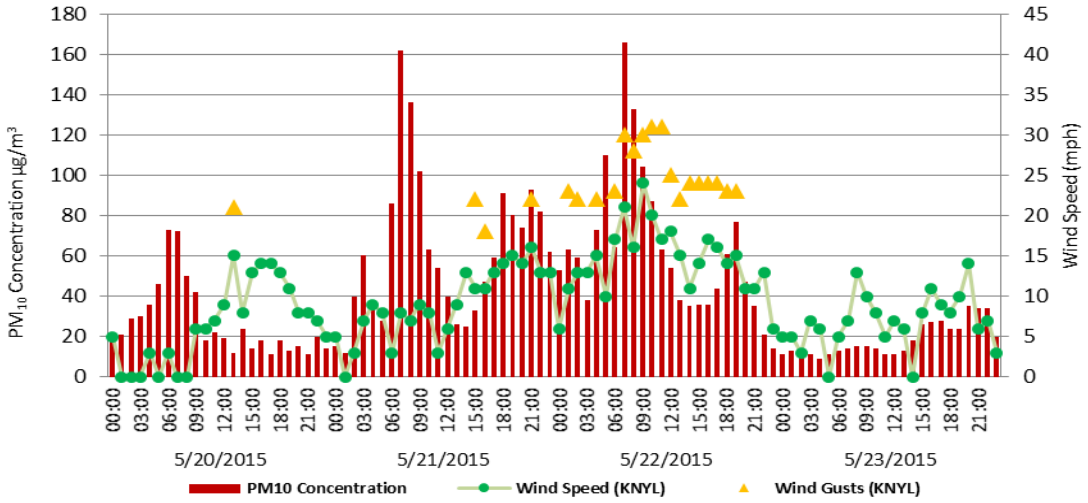


Fig C-8: The Yuma Supersite in southwestern Arizona near the Imperial County border experienced increases in particulate matter as wind speed increased May 21, 2015 to May 22, 2015. Wind data uses Yuma MCAS