Proposed Ambient Air Toxics Monitoring at: Kelly Elementary School Carlsbad, California

The San Diego Air Pollution Control District (District) will conduct this proposed ambient air toxics study. A total of 18 ambient (outdoor) air samples will be collected at two sites within the perimeter of the Kelly Elementary School in Carlsbad. Samples will be collected for 24-hours on three separate days over a two week period. Air samples will be collected using three separate collection methods. One set of air samples will be collected in specially coated 6-liter stainless steel Summa® polished canisters and will be analyzed for selected toxic volatile organic compounds (VOC). Additional air samples will also be collected on absorbent tubes for detection of selected carbonyl compounds. Particulates present in ambient air will be collected on 37 mm filters and will be analyzed for selected metals. The analytical methodologies proposed for this study are capable of identifying and quantifying the air toxics listed in Appendix A.

District staff will deploy all necessary samplers, collect the samples, and analyze the samples for toxic volatile organic compounds (including carbonyls) at the District laboratory. The particulate filters will be analyzed by the California Air Resources Board (CARB) at their Sacramento laboratory. For this special study, these agencies will use sampling and analytical methodologies currently being used in their respective monitoring programs. The District will also install a portable meteorological tower to continuously monitor wind speed and wind direction at the school compound to characterize the wind patterns in this area. The wind data will be used to create wind roses; graphical charts that summarize wind flow patterns for the test area.

Air toxics data collected at Kelly Elementary School will be compared with similar data collected during 2009 at Chula Vista, El Cajon, and Escondido, to determine if abnormal levels of any air toxics compounds are present at this school.