La Jolla SHORES ASSOCIATION

La Jolla, July 2, 2020

Dear Mayor Faulconer:

We urge the City of San Diego to take immediate action to limit bonfires and outdoor cooking at La Jolla Shores Beach and Kellogg Park to the use of propane fuel in order to reduce the health risk stemming from smoke pollution.

The closure of La Jolla Shores Beach and Kellogg Park during the Covid-19 crisis brought a co-incidental, but substantial, health benefit to the La Jolla Shores community: It eliminated the daily bonfires and charcoal burning in the park and beach, whose smoke had before resulted in large amounts of particulate air pollution (usually referred to as PM2.5 and expressed in units of micrograms per cubic meter air, $\mu g/m^3$). Particulate air pollution is well known to be a leading cause of human illness and death by way of cardiovascular, respiratory, and other diseases, associated with an estimated 8 million premature deaths annually worldwide.

At present, this is of particular concern, since a study by the Harvard School of Public Health has shown that PM2.5 pollution very strongly increases the death rate from Covid-19. To quote the study: “We found that an increase of only 1 $\mu g/m^3$ in PM2.5 is associated with an 8% increase in the COVID-19 death rate (95% confidence interval [CI]: 2%, 15%). The results were statistically significant and robust to secondary and sensitivity analyses.” [1].

With the reopening of the beaches and park in early June 2020, wood and charcoal fires have returned and with them daily particulate air pollution events. Over the last couple of weeks, the return of the beach fires resulted in sharp increases of PM 2.5 pollution, with peak PM2.5 concentrations exceeding 40 $\mu g/m^3$ at sites in the La Jolla Shores community, and even higher levels in the park. Such strongly elevated concentrations often lasted several hours. This is likely the beginning of an increasing trend, as in the same period last year values went up to 200 $\mu g/m^3$. For reference, EPA and WHO guidelines call for average PM2.5 values to be below 12 and 10 $\mu g/m^3$, respectively. These increased pollution levels can be expected to have negative health impacts on the La Jolla Shores community as well as on beach and park users. Both include especially vulnerable populations, such as children and elderly persons. Even an increase of the average PM2.5 by 10 $\mu g/m^3$, would result in an 80% increase in the COVID-19 death rate, based on the Harvard study cited above.

In view of the serious health hazards from particulate pollution and particularly its interaction with Covid-19, smoke pollution from beach fires is of serious and immediate concern. Limiting fires to the use of propane fuel would provide much of the same social benefits as wood or charcoal fires, but at very much reduced health impact. Such limits are, in fact, already current practice at most California beaches.

Sincerely,

Janie Emerson, President, La Jolla Shores Association

Prof. M. O. Andreae, Ph.D., Director, La Jolla Shores Association

1. Wu X, Nethery RC, Sabath BM, Braun D, Dominici F. Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study. medRxiv. 2020. doi: 10.1101/2020.04.05.20054502.