Appendix C

SMAQMD Minor Project Health Effects Screening Tool

Minor Project Health Effects Tool

Latitude	38.294597	**<-- Step 1: Input latitude (Please chose a value between 38.0 and 39.7)**
Longitude	-121.282772	**<-- Step 2: Input longitude (Please chose a value between -122.5 and -120.0)**

PM2.5 Health Endpoint	Age Range[1]	Incidences (per year)[2] (Mean)	Percent of Background Health Incidence[3] (%)
Emergency Room Visits, Asthma	0 - 99	0.70	0.00088
Mortality, All Cause	30 - 99	1.32	0.00071
Hospital Admissions, Asthma	0 - 64	0.045	0.00051
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.112	0.00011
Hospital Admissions, All Respiratory	65 - 99	0.22	0.00024
Acute Myocardial Infarction, Nonfatal	18 - 24	0.000055	0.00032
Acute Myocardial Infarction, Nonfatal	25 - 44	0.005	0.00044
Acute Myocardial Infarction, Nonfatal	45 - 54	0.0122	0.00042
Acute Myocardial Infarction, Nonfatal	55 - 64	0.0197	0.00041
Acute Myocardial Infarction, Nonfatal	65 - 99	0.070	0.00034

Ozone Health Endpoint	Age Range[1]	Incidences (per year)[2] (Mean)	Percent of Background Health Incidence[3] (%)
Hospital Admissions, All Respiratory	65 - 99	0.036	0.00004
Mortality, Non-Accidental	0 - 99	0.021	0.00002
Emergency Room Visits, Asthma	0 - 17	0.180	0.00075
Emergency Room Visits, Asthma	18 - 99	0.266	0.00048

1. Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.

2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or “background health incidence”) values. Health effects and background health incidences are across the Northern California model domain.

3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, these background incidence rates cover the modeled domain. Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

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