

Bay Area Air Quality Management District
Risk Screening Assessment, A# 7160
San Jose Civic Center, P# 15267
April 7, 2003

This document summarizes the results of the health risk screening assessment prepared for San Jose Civic Center of San Jose, California. The Civic Center wishes to install a 2847.5 BHP stand-by emergency diesel fired generator at their facility. In order to do this, the facility must get a permit from the Bay Area Air Quality Management District (BAAQMD). The BAAQMD, as a routine part of the evaluation of a permit application, prepares a screening risk assessment. Very small quantities of toxic air contaminants (TACs) will be emitted during operation of the facility. The TACs of concern at this facility is the particulate emissions at the exhaust stack resulting from the combustion of diesel fuel whenever the emergency generator is operated.

In the preparation of the risk screening assessment the results from the ISCST3 air dispersion computer model are used in the calculations. This model uses information about the facility and the TAC emission rate to estimate what concentrations would be expected in the air around the site. The estimated concentrations of TACs are used to calculate the possible risks that might be expected to arise from these exposures. The potential risk values were calculated using standard risk assessment methodology. They include the assumptions that exposures are continuous for 24 hours per day, 7 days per week for 70-years. The risk values are based in part on the "best estimates" of plausible cancer potencies as determined by the California Office of Environmental Health Hazard Assessment (OEHHA). The actual value of risk, which cannot be determined, may approach zero.

The TACs impact is expressed in terms of the increased risk of contracting cancer by individuals who live in the impact area. The proposed operation would result in a maximum risk of 3 chances in a million for the industrial area and 3.4 in a million for residents near the facility. For the students who attend nearby schools, the increased maximum risk is 0.36 chances in a million at Mann (Horace) Elementary School. These results are presented in the table below.

The screening methods used by BAAQMD to estimate risk are based on a "worst-possible" estimate of the operating conditions for the facility.

Increased Maximum Cancer Risk and Hazard Index

Receptor	Risk (Chances in a Million)	Hazard Index
Residential	3.40	0.0023
Industrial	3.00	0.003
Mann (Horace) Elementary School	0.36	0.0014

School address:

Mann (Horace) Elementary School
55 North Seventh Street
San Jose, CA 95112-5429