

APPENDIX 5.1D

Health Risk Assessment Support Data

Appendix 5.1D

Health Risk Assessment Support Data

Health Risk Assessment Process, Goals, Assumptions, and Uses

“In recent years, the public has become increasingly aware of the presence of harmful chemicals in our environment. Many people express concerns about pesticides and other foreign substances in food, contaminants in drinking water, and toxic pollutants in the air. Others believe these concerns are exaggerated or unwarranted. How can we determine which of these potential hazards really deserve attention? How do we, as a society, decide where to focus our efforts and resources to control these hazards? When we hear about toxic threats that affect us personally, such as the discovery of industrial waste buried in our neighborhood or near our children’s school, how concerned should we be?

Health risk assessment is a scientific tool designed to help answer these questions. Government agencies rely on risk assessments to help them determine which potential hazards are the most significant. Risk assessments can also guide regulators in abating environmental hazards. Members of the public who learn the basics of risk assessment can improve their understanding of both real and perceived environmental hazards, and they can work more effectively with decision makers on solutions to environmental problems.

Chemicals can be either beneficial or harmful, depending on a number of factors, such as the amounts to which we are exposed. Low levels of some substances may be necessary for good health, but higher levels may be harmful. Health risk assessments are used to determine if a particular chemical poses a significant risk to human health and, if so, under what circumstances. Could exposure to a specific chemical cause significant health problems? How much of the chemical would someone have to be exposed to before it would be dangerous? How serious could the health risks be? What activities might put people at increased risk?

If it were possible to prevent all human exposure to all hazardous chemicals, there would be no need for risk assessment. However, the total removal of harmful pollutants from the environment is often infeasible or impossible, and many naturally occurring substances also pose health risks. Risk assessment helps scientists and regulators identify serious health hazards and determine realistic goals for reducing exposure to toxics so that there is no significant health threat to the public.

Estimating the hazards posed by toxic chemicals in the environment involves the compilation and evaluation of complex sets of data. Government regulators, therefore, turn to specialists to perform or assist with risk assessments. These specialists include scientists with degrees in toxicology (the study of the toxic effects of chemicals) and epidemiology (the study of disease or illness in populations) as well as physicians, biologists, chemists, and engineers.

The term “health risk assessment” is often misinterpreted. People sometimes think that a risk assessment will tell them whether a current health problem or symptom was caused by exposure

to a chemical. This is not the case. Scientists who are searching for links between chemical exposures and health problems in a community may conduct an epidemiologic study. These studies typically include a survey of health problems in a community and a comparison of health problems in that community with those in other cities, communities, or the population as a whole.

Although they are both important, health risk assessments and epidemiologic studies have different objectives. Most epidemiologic studies evaluate whether *past* chemical exposures may be responsible for documented health problems in a specific group of people. In contrast, health risk assessments are used to estimate whether current or future chemical exposures will pose health risks to a broad population, such as a city or a community. Scientific methods used in health risk assessment cannot be used to link individual illnesses to past chemical exposures, nor can health risk assessments and epidemiologic studies prove that a specific toxic substance caused an individual's illness.

The U.S. Environmental Protection Agency (U.S. EPA) is a leading risk assessment agency at the federal level. In California, the Office of Environmental Health Hazard Assessment (OEHHA) in the California Environmental Protection Agency (Cal/EPA) has the primary responsibility for developing procedures and practices for performing health risk assessments. Other agencies within Cal/EPA, such as the Department of Pesticide Regulation and the Department of Toxic Substances Control, have extensive risk assessment programs of their own but work closely with OEHHA.

The Department of Pesticide Regulation uses risk assessments to make regulatory decisions concerning safe pesticide uses. The Department of Toxic Substances Control uses risk assessments to determine requirements for the management and cleanup of hazardous wastes. OEHHA's health risk assessments are used by the Air Resources Board to develop regulations governing toxic air contaminants, and by the Department of Health Services to develop California's drinking water standards. These agencies' decisions take into account the seriousness of potential health effects along with the economic and technical feasibility of measures that can reduce the health risks.

Health risk assessment requires both sound science and professional judgment and is a constantly developing process. Cal/EPA is nationally recognized for developing new procedures that improve the accuracy of risk assessments. Cal/EPA also works closely with U.S. EPA in all phases of risk assessment.

The risk assessment process is typically described as consisting of four basic steps: hazard identification, exposure assessment, dose-response assessment, and risk characterization. Each of these steps will be explained in the following text.

Hazard Identification

In the first step, hazard identification, scientists determine the types of health problems a chemical could cause by reviewing studies of its effects in humans and laboratory animals. Depending on the chemical, these health effects may include short-term ailments, such as headaches; nausea; and eye, nose, and throat irritation; or chronic diseases, such as cancer. Effects on sensitive populations, such as pregnant women and their developing fetuses, the elderly, or those with health problems

(including those with weakened immune systems), must also be considered. Responses to toxic chemicals will vary depending on the amount and length of exposure. For example, short-term exposure to low concentrations of chemicals may produce no noticeable effect, but continued exposure to the same levels of chemicals over a long period of time may eventually cause harm. An important step in hazard identification is the selection of key research studies that can provide accurate, timely information on the hazards posed to humans by a particular chemical. The selection of a study is based upon factors such as whether the study has been peer reviewed by qualified scientists, whether the study's findings have been verified by other studies, and the species tested (human studies provide the best evidence). Some studies may involve humans that have been exposed to the chemical, while others may involve studies with laboratory animals.

Human data frequently are useful in evaluating human health risks associated with chemical exposures. Human epidemiologic studies typically examine the effects of chemical exposure on a large number of people, such as employees exposed to varying concentrations of chemicals in the workplace. In many cases, these exposures took place prior to the introduction of modern worker-safety measures.

One weakness of occupational studies is that they generally measure the effects of chemicals on healthy workers and do not consider children, the elderly, those with pre-existing medical conditions, or other sensitive groups. Since occupational studies are not controlled experiments, there may be uncertainties about the amount and duration of exposure or the influence of lifestyle choices, such as smoking or alcohol use, on the health of workers in the studies. Exposure of workers to other chemicals at the same time may also influence and complicate the results.

Laboratory studies using human volunteers are better able to gauge some health effects because chemical exposures can then be measured with precision. But these studies usually involve small numbers of people and, in conformance with ethical and legal requirements, use only adults who agree to participate in the studies. Moreover, laboratory studies often use simple measurements that identify immediate responses to the chemical but might miss significant, longer-term health effects. Scientists can also use physicians' case reports of an industrial or transportation accident in which individuals were unintentionally exposed to a chemical. However, these reports may involve very small numbers of people, and the level of exposure to the chemical could be greater than exposures to the same chemical in the environment. Nevertheless, human studies are preferred for risk assessment, so OEHHA makes every effort to use them when they are available.

Because the effects of the vast majority of chemicals have not been studied in humans, scientists must often rely on animal studies to evaluate a chemical's health effects. Animal studies have the advantage of being performed under controlled laboratory conditions that reduce much of the uncertainty related to human studies. If animal studies are used, scientists must determine whether a chemical's health effects in humans are likely to be similar to those in the animals tested. Although effects seen in animals can also occur in humans, there may be subtle or even significant differences in the ways humans and experimental animals react to a chemical. Comparison of human and animal metabolism may be useful in selecting the animal species that should be studied, but it is often not possible to determine which species is most like humans in its response to a chemical exposure. However, if similar effects were found in more than one species, the results would strengthen the evidence that humans may also be at risk.

Exposure Assessment

In exposure assessment, scientists attempt to determine how long people were exposed to a chemical; how much of the chemical they were exposed to; whether the exposure was continuous or intermittent; and how people were exposed – through eating, drinking water and other liquids, breathing, or skin contact. All of this information is combined with factors such as breathing rates, water consumption, and daily activity patterns to estimate how much of the chemical was taken into the bodies of those exposed.

People can be exposed to toxic chemicals in various ways. These substances can be present in the air we breathe, the food we eat, or the water we drink. Some chemicals, due to their particular characteristics, may be both inhaled and ingested. For example, airborne chemicals can settle on the surface of water, soil, leaves, fruits, vegetables, and forage crops used as animal feed. Cows, chickens, or other livestock can become contaminated when eating, drinking, or breathing the chemicals present in the air, water, feed, and soil. Fish can absorb the chemicals as they swim in contaminated water or ingest contaminated food. Chemicals can be absorbed through the skin, so infants and children can be exposed simply by crawling or playing in contaminated dirt. They can also ingest chemicals if they put their fingers or toys in their mouths after playing in contaminated dirt. Chemicals can also be passed on from nursing mothers to their children through breast milk.

To estimate exposure levels, scientists rely on air, water, and soil monitoring; human blood and urine samples; or computer modeling. Although monitoring of a pollutant provides excellent data, it is time consuming, costly, and typically limited to only a few locations. For those reasons, scientists often rely on computer modeling, which uses mathematical equations to describe how a chemical is released and to estimate the speed and direction of its movement through the surrounding environment. Modeling has the advantage of being relatively inexpensive and less time consuming, provided all necessary information is available and the accuracy of the model can be verified through testing.

Computer modeling is often used to assess chemical releases from industrial facilities. Such models require information on the type of chemicals released, facilities' hours of operation, industrial processes that release the chemicals, smokestack height and temperature, any pollution-control equipment that is used, surrounding land type (urban or rural), local topography and meteorology, and census data regarding the exposed population.

In all health risk assessments, scientists must make assumptions in order to estimate human exposure to a chemical. For example, scientists assessing the effects of air pollution may need to make assumptions about the time people spend outdoors, where they are more directly exposed to pollutants in the ambient air, or the time they spend in an area where the pollution is greatest. An assessment of soil contamination may require scientists to make assumptions about people's consumption of fruits and vegetables that may absorb soil contaminants.

To avoid underestimating actual human exposure to a chemical, scientists often look at the range of possible exposures. For example, people who jog in the afternoon, when urban air pollution levels are highest, would have much higher exposures to air pollutants than people who come home after work and relax indoors. Basing an exposure estimate on a value near the higher end of

a range of exposure levels (closer to the levels experienced by the jogger than by the person remaining indoors) provides a realistic worst-case estimate of exposure. These kinds of conservative assumptions, which presume that people are exposed to the highest amounts of a chemical that can be considered credible, are referred to as “health-protective” assumptions.

The exposure estimates for the project analysis were conducted using HarpExpress and HARP. HarpExpress is a MS Excel based data entry platform which allows for much faster input of data into the HARP model. HarpExpress allows for the generation of all HARP input and output files, with the exception of the transaction files (.tra files).

Dose-Response Assessment

In dose-response assessment, scientists evaluate the information obtained during the hazard identification step to estimate the amount of a chemical that is likely to result in a particular health effect in humans.

An established principle in toxicology is that “the dose makes the poison.” For example, a commonplace chemical like table salt is harmless in small quantities, but it can cause illness in large doses. Similarly, hydrochloric acid, a hazardous chemical, is produced naturally in our stomachs but can be quite harmful if taken in large doses.

Scientists perform a dose-response assessment to estimate how different levels of exposure to a chemical can impact the likelihood and severity of health effects. The dose-response relationship is often different for many chemicals that cause cancer than it is for those that cause other kinds of health problems.

The dose-response estimates for the project analysis were conducted using HarpExpress and HARP.

Cancer Effects

For chemicals that cause cancer, the general assumption in risk assessment has been that there are no exposures that have “zero risk” unless there is clear evidence otherwise. In other words, even a very low exposure to a cancer-causing chemical may result in cancer if the chemical happens to alter cellular functions in a way that causes cancer to develop. Thus, even very low exposures to carcinogens might increase the risk of cancer, if only by a very small amount.

Several factors make it difficult to estimate the risk of cancer. Cancer appears to be a progressive disease because a series of cellular transformations is thought to occur before cancer develops. In addition, cancer in humans often develops many years after exposure to a chemical. Also, the best information available on the ability of chemicals to cause cancer often comes from studies in which a limited number of laboratory animals are exposed to levels of chemicals that are much higher than the levels humans would normally be exposed to in the environment. As a result, scientists use mathematical models based on studies of animals exposed to high levels of a chemical to estimate the probability of cancer developing in a diverse population of humans exposed to much lower levels. The uncertainty in these estimates may be rather large. To reduce these uncertainties, risk assessors must stay informed of new scientific research. Data from new studies can be used to improve estimates of cancer risks.

Non-cancer Effects

Non-cancer health effects (such as asthma, nervous system disorders, birth defects, and developmental problems in children) typically become more severe as exposure to a chemical increases. One goal of dose-response assessment is to estimate levels of exposure that pose only a low or negligible risk for non-cancer health effects. Scientists analyze studies of the health effects of a chemical to develop this estimate. They take into account such factors as the quality of the scientific studies, whether humans or laboratory animals were studied, and the degree to which some people may be more sensitive to the chemical than others. The estimated level of exposure that poses no significant health risks can be reduced to reflect these factors.

Risk Characterization

The last step in risk assessment brings together the information developed in the previous three steps to estimate the risk of health effects in an exposed population. In the risk characterization step, scientists analyze the information developed during the exposure and dose-response assessments to describe the resulting health risks that are expected to occur in the exposed population. This information is presented in different ways for cancer and non-cancer health effects, as explained below.

Cancer Risk

Cancer risk is often expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime. For example, a cancer risk of one in one million means that in a population of one million people, not more than one additional person would be expected to develop cancer as the result of the exposure to the substance causing that risk.

An individual's actual risk of contracting cancer from exposure to a chemical is often less than the theoretical risk to the entire population calculated in the risk assessment. For example, the risk estimate for a drinking-water contaminant may be based on the health-protective assumption that the individual drinks two liters of water from a contaminated source daily over a 70-year lifetime. However, an individual's actual exposure to that contaminant would likely be lower due to a shorter time of residence in the area. Moreover, an individual's risk not only depends on the individual's exposure to a specific chemical but also on his or her genetic background (i.e., a family history of certain types of cancer); health; diet; and lifestyle choices, such as smoking or alcohol consumption.

Cancer risks presented in risk assessments are often compared to the overall risk of cancer in the general U.S. population (about 250,000 cases for every one million people) or to the risk posed by all harmful chemicals in a particular medium, such as the air. The cancer risk from breathing current levels of pollutants in California's ambient air over a 70-year lifetime is estimated to be 760 in one million.

Non-cancer Risk

Non-cancer risk is usually determined by comparing the actual level of exposure to a chemical to the level of exposure that is not expected to cause any adverse effects, even in the most susceptible people. Levels of exposure at which no adverse health effects are expected are called "health reference levels," and they generally are based on the results of animal studies. However, scientists usually set health reference levels much lower than the levels of exposure that were

found to have no adverse effects in the animals tested. This approach helps to ensure that real health risks are not underestimated by adjusting for possible differences in a chemical's effects on laboratory animals and humans; the possibility that some humans, such as children and the elderly, may be particularly sensitive to a chemical; and possible deficiencies in data from the animal studies.

Depending on the amount of uncertainty in the data, scientists may set a health reference level 100 to 10,000 times lower than the levels of exposure observed to have no adverse effects in animal studies. Exposures above the health reference level are not necessarily hazardous, but the risk of toxic effects increases as the dose increases. If an assessment determines that human exposure to a chemical exceeds the health reference level, further investigation is warranted.

Risk managers rely on risk assessments when making regulatory decisions, such as setting drinking water standards, or developing plans to clean up hazardous waste sites. Risk managers are responsible for protecting human health, but they must also consider public acceptance, as well as technological, economic, social, and political factors, when arriving at their decisions. For example, they may need to consider how much it would cost to remove a contaminant from drinking water supplies or how seriously the loss of jobs would affect a community if a factory were to close due to the challenge of meeting regulatory requirements that are set at the most stringent level.

Health risk assessments can help risk managers weigh the benefits and costs of various alternatives for reducing exposure to chemicals. For example, a health risk assessment of a hazardous waste site could help determine whether placing a clay cap over the waste to prevent exposure would offer the same health protection as the more costly option of removing the waste from the site.

One of the most difficult questions of risk management is: How much risk is acceptable? While it would be ideal to completely eliminate all exposure to hazardous chemicals, it is usually not possible or feasible to remove all traces of a chemical once it has been released into the environment. The goal of most regulators is to reduce the health risks associated with exposure to hazardous pollutants to a negligibly low level.

Regulators generally presume that a one-in-one million risk of cancer from life-long exposure to a hazardous chemical is an "acceptable risk" level because the risk is extremely low compared to the overall cancer rate. If a drinking water standard for a cancer-causing chemical were set at the level posing a "one-in-one million" risk, it would mean that not more than one additional cancer case (beyond what would normally occur in the population) would potentially occur in a population of one million people drinking water meeting that standard over a 70-year lifetime.

Actual regulatory standards for chemicals or hazardous waste cleanups may be set at less stringent risk levels, such as one in 100,000 (not more than one additional cancer case per 100,000 people) or one in 10,000 (not more than one additional cancer case per 10,000 people). These less stringent risk levels are often due to economic or technological considerations. Regulatory agencies generally view these higher risk levels to be acceptable if there is no feasible way to reduce the risks further."¹

¹ A Guide to Health Risk Assessment, CalEPA-Office of Environmental Health Hazard Assessment, 1001 I Street, Sacramento, Ca. 95812, (est. 2001).

The following tables summarize the results of the HRA performed by the proposed MMC facility.

TABLE 5.1D-1 CRITERIA AND AIR TOXIC POLLUTANTS EMITTED FROM MMC FACILITY	
NOx	Propylene Oxide
CO	Toluene
VOC*	Xylene
SOx	Diesel Particulate Matter/Organic Gases
PM10/PM2.5	Arsenic
Ammonia	Aluminum
PAHs	Cadmium
Acetaldehyde	Chromium VI
Acrolein	Copper
Benzene	Iron
1-3 Butadiene	Lead
Ethylbenzene	Mercury
Formaldehyde	Manganese
Hexane	Nickel
Naphthalene	Silver
Propylene	Zinc

TABLE 5.1D-2 HEALTH EFFECTS SIGNIFICANT THRESHOLD LEVELS		
Agency	Significance Thresholds	
	SDAPCD	State of California
Cancer Risk per million	<= 1.0 without T-BACT <= 10.0 with T-BACT	<= 1.0 without T-BACT <= 10.0 with T-BACT
Acute HI	1.0	1.0
Chronic HI	1.0	1.0
Cancer Burden	1.0	1.0

The other assumptions used in running the HARP program were as follows:

- Emission rates for non-criteria pollutants are taken from AFC Section 5.1, and from Appendix 5.1A.
- Number of residents affected is based upon the updated 2000 population data for those census tracts or portions of census tracts which lie within the maximum impact receptor radius of the proposed facility.
- All receptors were treated as residential receptors, which allows for the assumption that the MIR, if assumed residential, will represent the highest risk and no other receptor will show risks higher than the MIR. This deletes the need for running worker risks. The HARP risk run options as recommended by South Coast AQMD (Chico, 10-20-05) were

utilized (i.e., for cancer – 70-year and derived adjusted method; for chronic – 70-year and derived OEHHA method; for acute – no options).

- Deposition velocity is taken to be 0.02 m/s, as recommended by ARB for controlled emission sources.
- Fraction of residents with gardens is taken to be 0.05 which is likely conservatively high for the urban area near the project site.
- Fraction of produce grown at home is taken to be 0.05, which is also likely to be conservatively high.

The HARP program is a tool that assists with the programmatic requirements of the Air Toxics Hot Spots Program, and it can be used for preparing health risk assessments for other related programs such as air toxic control measure development or facility permitting applications. HARP is a computer based risk assessment program which combines the tools of emission inventory database, facility prioritization, air dispersion modeling, and risk assessment analysis. Use of HARP promotes statewide consistency in the area of risk assessment, increases the efficiency of evaluating potential health impacts, and provides a cost effective tool for developing facility health risk assessments. HARP may be used on single sources, facilities with multiple sources, or multiple facilities in close proximity to each other. The receptor grid used in HARP was a combination of the following:

1. All identified sensitive receptors within 2 miles (~3 km) of the site, and,
2. The highest 3 MIR locations for the 1-hour and annual averaging times as derived from the refined air quality modeling presented in Section 5.1. These receptors were identified for each of the following modeling scenarios: (1) combustion turbines, and (2) the emergency generator IC engine. These receptors were input into the HARP model as additional sensitive receptors, which negated the need for a large grid analysis.

The HARP program results for acute and chronic inhalation and chronic non-inhalation exposures, cancer burden and individual cancer risk (workplace and residential) for the combustion sources are included in this Appendix. Separate calculations are shown for each type of exposure and risk, and the results of the calculations are summarized below.

The modeling results show that the maximum modeled cancer risk from MMC (turbines) is expected to be 1.50×10^{-7} . This risk is well below the one in one million level, and the SDAPCD significance value of 10 per million with T-BACT. T-BACT for simple cycle combustion turbines is the use of clean fuels (natural gas) and the operation of a CO catalyst. These T-BACT technologies are proposed for MMC, and as such, the significant risk threshold for MMC is 10 in a million. The chronic and acute non-cancer hazard indices are 0.00687 and 0.0884, respectively. Both are well below the significant impact level of 1.0. The total cancer burden was calculated to be 0.051, which is also well below the state threshold value of 1.0, as well as being below the SDAPCD Rule 1200/1210 significance level of 1.0. Detailed calculations and results for each significant receptor are included in the modeling results, which are being submitted electronically.

TABLE 5.1D-3 HEALTH RISK ASSESSMENT SUMMARY (TURBINES AND IC ENGINE)		
Turbines		
Risk Category	Facility Values	Applicable Significance Threshold
Cancer Risk	1.50E - 07	<= 10.0 with T-BACT
Chronic Hazard Index	0.00687	1.0
Acute Hazard Index	0.0884	1.0
Cancer Burden	0.051	1.0
Turbine(s) MIR location coordinates are: Cancer and chronic MIR – 495977mE, 3605041mN Acute MIR – 494527mE, 3606041mN		
Emergency Generator		
Risk Category	HRA Values	Applicable Significance Threshold
Cancer Risk	1.92E - 08	<= 10.0 with T-BACT
Chronic Hazard Index	0.000012	1.0
Acute Hazard Index	0.0 ¹	1.0
EGS MIR location coordinates are: Cancer and chronic MIR – 494577mE, 3605891mN Acute MIR – n/a		

¹ No acute REL has been established for diesel PM.

The calculated health effects as summarized above do not exceed the district significance threshold values, therefore the health effects would be considered “not significant” and may even be “zero”. These results are also provided on the air modeling CD.

The following tables and figures are presented at the end of this appendix:

- Table 5.1D-4 Census Tract Numbers, Areas, and Population Data
- Table 5.1D-5a thru 5e SDAPCD TAC Summary
- Table 5.1D-6 Sensitive Receptor Listing for the 6-mile Radius
- Table 5.1D-7 OEHHA/CARB Risk Assessment Health Values
- Figure 5.1D-1 Sensitive Receptor Map for the 6-mile Radius Distance
- Figure 5.1D-2 Census Tracts within the 6-mile Radius Distance

Risk Assessment input and output files are included on the modeling CD.

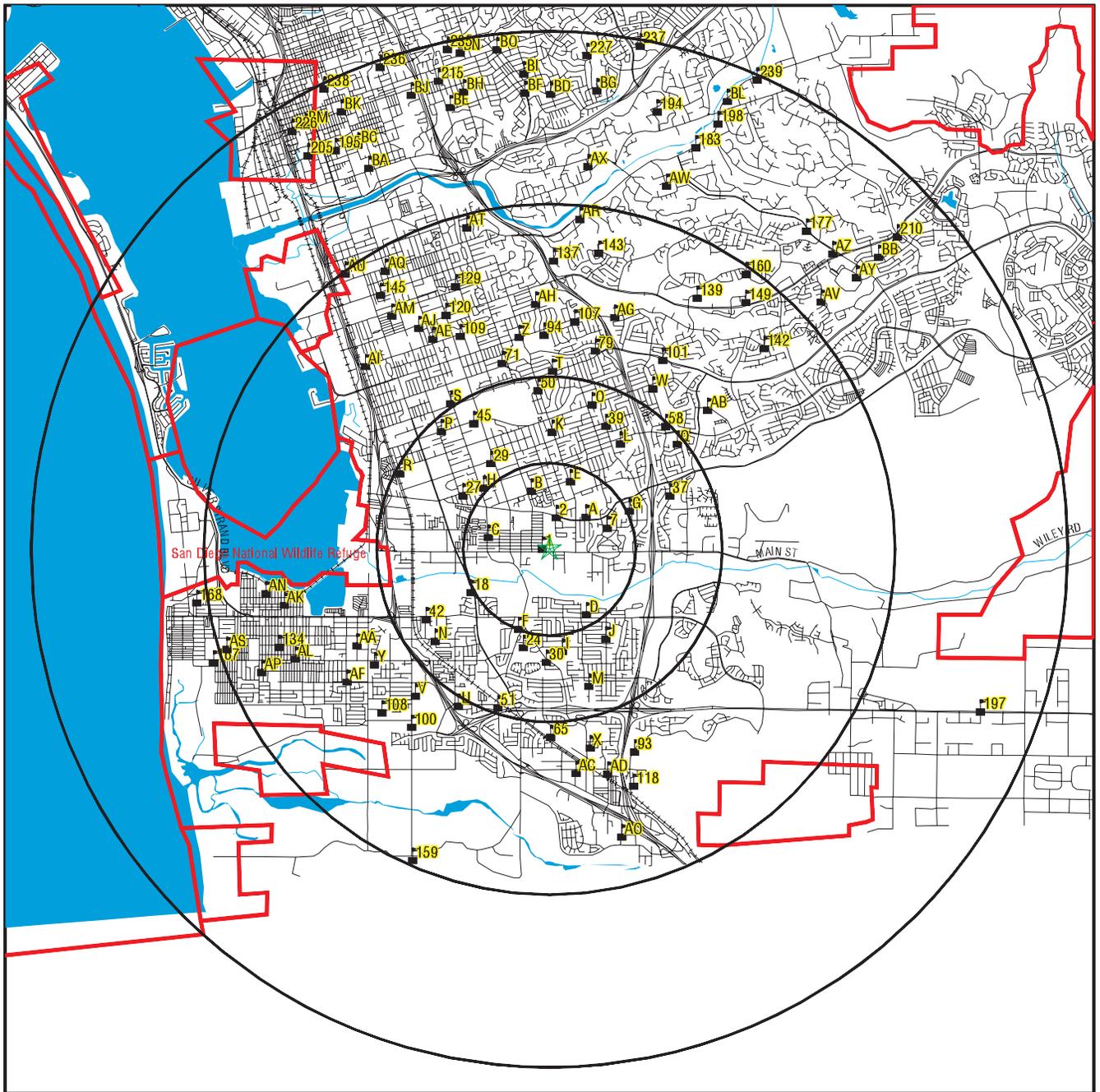


- ★ Target Property
- ∩ Roads
- ∩ Waterways
- ∩ Census Tracts



FIGURE 5.1-D1
CENSUS TRACTS WITHIN
6 MILES OF PROJECT SITE
 CHULA VISTA ENERGY UPGRADE PROJECT
 CITY OF CHULA VISTA, CALIFORNIA

Source: EDR Offsite Receptor Report, December 26, 2006



- ★ Target Property
- ∖ Roads
- ∕ Waterways
- Environmental or Public Receptor
- ∕ Federal Lands Linear Features
- ∕ Federal Lands Area



FIGURE 5.1-D2
SENSITIVE RECEPTORS WITHIN
6 MILES OF PROJECT SITE
 CHULA VISTA ENERGY UPGRADE PROJECT
 CITY OF CHULA VISTA, CALIFORNIA

Source: EDR Offsite Receptor Report, December 26, 2006

Table 5.1D-4

CENSUS FINDINGS

Map ID	Tract Number	Total Population	Population in Radius	Total Area(sq.mi.)	Area in Radius(sq.mi.)
	0099.02	63	2.9	9.42	0.43
	0099.01	1204	76.6	50.94	3.24
	0134.10	3492	184.6	8.60	0.45
	0106.02	2766	449.6	27.62	4.49
	0032.09	5376	1256.3	0.50	0.12
	0032.07	5689	4178.4	2.16	1.59
	0032.01	5457	1751.2	0.63	0.20
	0120.03	3104	1993.8	0.41	0.26
	0032.08	7218	5031.7	0.53	0.37
	0120.02	3439	265.3	0.22	0.02
	0032.11	3108	2790.9	0.33	0.30
	0114.00	4310	2055.2	2.82	1.34
	0120.01	2263	1557.4	0.16	0.11
	0117.00	6144	3764.6	0.63	0.38
	0032.02	4547	4547.0	0.50	0.50
	0032.12	4079	4079.0	0.49	0.49
	0121.02	3237	3237.0	0.41	0.41
	0121.01	2055	2055.0	0.28	0.28
	0134.11	5218	5218.0	1.86	1.86
	0122.00	2750	2750.0	0.71	0.71
	0116.01	5986	5986.0	0.28	0.28
	0115.00	268	268.0	1.29	1.29
	0134.17	2296	927.1	0.79	0.32
	0116.02	3403	3403.0	0.39	0.39
	0032.04	3168	3168.0	1.35	1.35
	0134.12	5112	5112.0	1.81	1.81
	0124.01	3332	3332.0	0.59	0.59
	0134.18	6037	3206.9	0.76	0.40
	0134.16	4133	4133.0	0.86	0.86
	0123.03	3514	3514.0	0.57	0.57
	0134.13	8339	8339.0	1.70	1.70
	0125.00	8175	8175.0	1.89	1.89
	0133.11	7849	575.8	1.30	0.10
	0123.04	3320	3320.0	0.48	0.48
	0124.02	5165	5165.0	0.35	0.35
	0134.01	4058	4058.0	0.87	0.87
	0133.13	1355	871.1	13.90	8.93
	0133.10	2212	2195.3	3.28	3.25
	0106.01	2206	2206.0	3.63	3.63
	0123.02	1482	1482.0	0.15	0.15
	0134.15	1639	1639.0	0.46	0.46
	0134.09	5477	5477.0	1.06	1.06
	0134.14	6623	6623.0	1.12	1.12
	0128.00	3656	3656.0	0.40	0.40
	0127.00	4745	4745.0	0.45	0.45
	0126.00	5013	5013.0	2.71	2.71
	0130.00	5235	5235.0	0.63	0.63
	0129.00	3009	3009.0	0.53	0.53
	0133.01	4769	4769.0	0.65	0.65
	0133.09	6471	6471.0	0.97	0.97
	0131.02	6172	6172.0	0.77	0.77
	0133.02	4751	4751.0	0.54	0.54
	0131.04	5495	5495.0	0.37	0.37
	0131.03	2272	2272.0	0.77	0.77
	0133.03	4893	4893.0	0.53	0.53
	0133.06	4512	4512.0	0.50	0.50
	0132.03	5976	5976.0	0.43	0.43
	0132.06	5713	5713.0	0.63	0.63

CENSUS FINDINGS

Map ID	Tract Number	Total Population	Population in Radius	Total Area(sq.mi.)	Area in Radius(sq. mi.)
T59	0133.12	2705	2705.0	0.34	0.34
T60	0101.03	5420	5420.0	2.25	2.25
T61	0133.07	3912	3912.0	0.51	0.51
T62	0132.05	2028	2028.0	0.70	0.70
T63	0132.04	3906	3906.0	0.31	0.31
T64	0100.14	8314	5446.4	11.25	7.37
T65	0133.08	3804	3804.0	0.66	0.66
T66	0100.01	3910	3910.0	0.73	0.73
T67	0105.02	5537	5537.0	0.43	0.43
T68	0101.07	6076	6076.0	0.89	0.89
T69	0105.01	1502	842.4	0.65	0.36
T70	0102.00	7199	7199.0	3.33	3.33
T71	0101.10	7322	7322.0	0.85	0.85
T72	0100.10	5638	5638.0	0.45	0.45
T73	0100.11	3777	3777.0	0.34	0.34
T74	0100.03	6129	6129.0	0.48	0.48
T75	0100.15	1062	489.5	15.38	7.09
T76	0103.00	4419	4419.0	0.44	0.44
T77	0104.01	2468	2468.0	0.16	0.16
T78	0101.06	5265	5265.0	0.51	0.51
T79	0104.02	5778	5778.0	0.27	0.27
T80	0101.04	3298	3298.0	0.63	0.63
T81	0101.12	4925	4925.0	0.31	0.31
T82	0100.04	4911	4911.0	0.51	0.51
T83	0101.11	3120	3120.0	0.24	0.24
T84	0100.05	7390	7390.0	0.60	0.60
T85	0100.12	4267	4267.0	0.24	0.24
T86	0101.09	4952	4952.0	4.95	4.95
T87	0100.13	5547	5547.0	0.34	0.34
T88	0100.09	5794	5794.0	1.60	1.60

Table 5.1D-5a

County Emissions (tons/year) for Ten Toxic Air Contaminants by Air Basin

San Diego Air Basin

TAC	San Diego
Acetaldehyde	497
Benzene	849
1,3-Butadiene	190
Carbon Tetrachloride	0.12
Chromium, Hexavalent	0.24
para-DiChlorobenzene	203
Formaldehyde	1240
Methylene Chloride	370
Perchloroethylene	657
Diesel PM	1798

Table 5.1D-5b (3 Pages)

Estimated Toxic Air Contaminant Emissions - All Sources

Toxic Air Contaminants	Most Recent Emissions from Industrial Sources Estimated for 2000- 2003 (lbs/year)	Most Recent Total Mobile, Area, Natural Source Emissions from ARB (lbs/year)	Total San Diego County Emissions (lbs/year)
Toluene	188,011	5,474,718 ⁽²⁾	5,662,729
	180,119	4,044,958 ⁽²⁾	4,225,077
Diesel Particulate Matter ⁽¹⁾	38,700 ⁽⁵⁾	3,346,000 ⁽³⁾	3,346,000
	615	3,045,028 ⁽²⁾	3,045,643
	64,113	2,898,000 ⁽³⁾	2,962,113
	22,122	2,842,000 ⁽³⁾	2,864,122
	8,694	1,088,000 ⁽³⁾	1,096,694
	72,271	1,013,482 ⁽²⁾	1,085,753
Methylene Chloride	59,938	620,000 ⁽³⁾	679,938
	184,819	364,000 ⁽³⁾	548,819
	1,055	526,000 ⁽³⁾	527,055
	24,712	425,286 ⁽²⁾	449,998
	2,160	447,532 ⁽²⁾	449,692
	27,110	219,297 ⁽²⁾	246,407
	88,698	157,580 ⁽⁴⁾	246,278
	911	145,640 ⁽⁴⁾	146,551
	2,197	87,713 ⁽²⁾	89,910
	612	79,580 ⁽³⁾	80,192
	1,855	58,780 ⁽²⁾	60,635
	210	7,753 ⁽²⁾	7,963
	1,812	1,690 ⁽⁴⁾	3,502
	22	426,033 ⁽²⁾	426,055
	389	300.000 ⁽³⁾	300,389

Toxic Air Contaminants	Most Recent Emissions from Industrial Sources Estimated for 2000 – 2003 (lbs/year)	Most Recent Total Mobile, Area, Natural Source Emissions from ARB (lbs/year)	Total San Diego County Emissions (lbs/year)
	211	1,290 ⁽⁴⁾	1,501
	986	281 ⁽⁴⁾	1,267
	182	800 ⁽⁴⁾	982
	161	717 ⁽²⁾	878
	29	400 ⁽³⁾	429
	55	81 ⁽⁴⁾	136
	78	6 ⁽⁴⁾	84
	567,356	no available data	Unknown
	282,868	no available data	Unknown
	261,024	no available data	Unknown
	175,355	no available data	Unknown
	175,327	no available data	Unknown
	145,428	no available data	Unknown
	100,043	no available data	Unknown
	76,285	no available data	Unknown
	56,508	no available data	Unknown
	43,887	no available data	Unknown
	34,155	no available data	Unknown
	24,531	no available data	Unknown
	24,173	no available data	Unknown
	22,442	no available data	Unknown
	14,248	no available data	Unknown
Phenol	7,370	no available data	Unknown
Trichloroethylene	6,935	no available data	Unknown
	6,455	no available data	Unknown
	5,219	no available data	Unknown
Vinyl Chloride	3,393	no available data	Unknown
1,1,1-Trichloroethane	3,234	no available data	Unknown
Methyl Methacrylate	3,035	no available data	Unknown
Chlorofluorocarbons	2,758	no available data	Unknown
Barium ⁽⁷⁾	2,556	no available data	Unknown
Ethylene Dichloride	2,521	no available data	Unknown
Acrylonitrile	2,480	no available data	Unknown
Dioxane, 1,4-	2,216	no available data	Unknown
Hydrogen Fluoride	2,122	no available data	Unknown
Nitric Acid	1,744	no available data	Unknown
	1,586	no available data	Unknown
	1,095	no available data	Unknown
	891	no available data	Unknown
	849	no available data	Unknown
	795	no available data	Unknown
	682	no available data	Unknown
Ethylene Glycol Methyl Ether Acetate	633	no available data	Unknown

Estimated Toxic Air Contaminant Emissions - All Sources - Continued

Toxic Air Contaminants	Most Recent Emissions from Industrial Sources Estimated for 2000 – 2003 (lbs/year)	Most Recent Total Mobile, Area, Natural Source Emissions from ARB (lbs/year)	Total San Diego County Emissions (lbs/year)
Ethylene Glycol Ethyl Ether	574	no available data	Unknown
Dibutyl Phthalate	476	no available data	Unknown
	460	no available data	Unknown
	409	no available data	Unknown
	312	no available data	Unknown
	234	no available data	Unknown
	217	no available data	Unknown
	138	no available data	Unknown
	92	no available data	Unknown
	62	no available data	Unknown
	52	no available data	Unknown
	52	no available data	Unknown
	45	no available data	Unknown
	14	no available data	Unknown
	10	no available data	Unknown
	6	no available data	Unknown
	4	no available data	Unknown
	4	no available data	Unknown
	3	no available data	Unknown
Totals:	3,038,000	27,623,000	30,661,000 ⁽⁶⁾

1. This compound is emitted as a particulate.
2. Emission data obtained from ARB's 1990 Report.
3. Emission data obtained from ARB's 2002 Almanac, Table 5-55, Emissions Inventory 2001.
4. Emission data obtained from ARB's 1996 California Toxics Inventory revised August 28, 2000.
5. Estimate of diesel particulate matter emissions from stationary internal combustion engines only. Individual toxins of diesel particulate matter (i.e., arsenic, cadmium, copper, hexavalent chromium, lead, nickel, selenium, and zinc) are also reported on the table.
6. Total of most recent available estimates for industrial, mobile, area and natural sources.

Table 5.1D-5c

ARB Estimated Toxic Air Contaminant Emissions - Non-Industrial Sources

Toxic Air Contaminants	Mobile Source Emissions (lbs/year)	Area Source Emissions (lbs/year)	Natural Source Emissions (lbs/year)	Total Non-Industrial Source Emissions (lbs/year)
Toluene ⁽¹⁾	4,954,347	520,371	0	5,474,718
Xylenes ⁽¹⁾	3,415,658	629,300	0	4,044,958
Diesel Particulate Matter ⁽²⁾	3,346,000	0	0	3,346,000
Propylene ⁽¹⁾	2,361,534	89,261	594,233	3,045,028
Formaldehyde ⁽²⁾	2,656,000	242,000	0	2,898,000
Benzene ⁽²⁾	2,776,000	66,000	0	2,842,000
Acetaldehyde ⁽²⁾	876,000	212,000	0	1,088,000
Glycol Ethers & Acetates ⁽¹⁾	0	1,013,482	0	1,013,482
Methylene Chloride ⁽²⁾	0	620,000	0	620,000
1,3-Butadiene ⁽²⁾	502,000	8,000	16,000	526,000
Zinc ⁽¹⁾	174,533	271,226	1,773	447,532
Phosphorous ⁽¹⁾	729	422,185	3,119	426,033
Ammonia ⁽¹⁾	19,692	35,914	369,680	425,286
Perchloroethylene ⁽²⁾	0	364,000	0	364,000
Dichlorobenzene ⁽²⁾	0	300,000	0	300,000
Methanol ⁽¹⁾	0	219,297	0	219,297
Styrene ⁽³⁾	150,930	6,650	0	157,580
Acrolein ⁽³⁾	136,420	9,220	0	145,640
Copper ⁽¹⁾	542	86,739	432	87,713
PAH, Unspecified ⁽¹⁾	0	79,580	0	79,580
Naphthalene ⁽¹⁾	4,858	53,922	0	58,780
Chlorobenzene ⁽¹⁾	5,511	2,242	0	7,753
Manganese ⁽³⁾	190	370	1,130	1,690
Lead ⁽³⁾	380	190	720	1,290
Arsenic ⁽³⁾	360	60	380	800
Selenium ⁽¹⁾	24	611	82	717
Chromium Hexavalent ⁽²⁾	360	< 20	< 20	400
Nickel ⁽³⁾	230	50	< 1	281
Cadmium ⁽³⁾	40	40	1	81
Mercury ⁽³⁾	0	5	< 1	6
Totals:	21,382,338	5,252,725	987,561	27,623,000

1. Emission data obtained from ARB's 1990 Report.
2. Emission data obtained from ARB's 2002 Almanac, Table 5-55, Emissions Inventory 2001.
3. Emission data obtained from ARB's 1996 California Toxics Inventory revised August 28, 2000.

San Diego Air Basin

Table 5.1D-5d

Air Basin Summary

TAC	Conc./Risk**	Annual Average Concentrations and Health Risks														
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Acetaldehyde	Annual Avg	1.33	1.5	1.22	1.41	1.48	0.64	1.03	1	0.86	1.04	0.84	0.95	0.97	0.89	0.89
	Health Risk	6	7	6	7	7	3	5	5	4	5	4	5	5	4	4
Benzene	Annual Avg	2.25	1.7	1.48	1.16	1.39	0.98	0.76	0.76	0.76	0.86	0.65	0.505	0.491	0.483	0.371
	Health Risk	208	158	137	107	129	90	71	70	70	79	60	47	45	45	34
1,3-Butadiene	Annual Avg	0.333	0.257	0.258	0.312	0.307	0.242	0.208	0.198	0.196	0.22	0.159	0.136	0.12	0.089	0.074
	Health Risk	125	97	97	117	115	91	78	75	74	83	60	51	45	33	28
Carbon Tetrachloride	Annual Avg	0.132	0.127		0.103		0.099	0.077				0.094	0.086	0.092	0.093	
	Health Risk	35	34		27		26	20				25	23	24	25	
Chromium, Hexavalent	Annual Avg			0.24	0.19	0.16	0.18	0.11	0.11	0.1	0.1	0.1		0.045	0.05	0.03
	Health Risk			36	28	23	27	16	16	15	15	15		7	8	5
<i>para</i> -Dichlorobenzene	Annual Avg		0.1	0.11	0.13	0.15	0.12	0.11	0.13				0.15	0.15	0.15	0.15
	Health Risk		7	8	8	10	8	7	8				10	10	10	10
Formaldehyde	Annual Avg	1.64	1.53	1.26	1.76	2.25	2.13	2.62	2.62	2.27	2.67	2.23	2.59	2.99	2.68	2.19
	Health Risk	12	11	9	13	17	16	19	19	17	20	16	19	22	20	16
Methylene Chloride	Annual Avg	0.59	0.83	1.34	1.13	0.73	0.63	0.59	0.57		0.53	0.76	0.17	0.16	0.16	0.13
	Health Risk	2	3	5	4	3	2	2	2		2	3	<1	<1	<1	<1
Perchloroethylene	Annual Avg	0.282	0.269	0.263	0.2	0.207	0.249	0.147	0.125			0.089	0.061	0.06	0.047	0.037
	Health Risk	11	11	11	8	8	10	6	5			4	2	2	2	1
Diesel PM***	Annual Avg	(2.9)					(1.9)					(1.4)				
	Health Risk	(870)					(570)					(420)				
Average Basin Health Risk		399	328	309	319	312	273	224	200	180	204	187	157	160	147	98

* Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

** Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

*** The Diesel PM concentrations are estimates based on receptor modeling. Because data are not available for all years, Diesel PM is not included in the Average Basin Health Risk number.

San Diego Air Basin

Table 5.1D-5e

San Diego County: Chula Vista

		Annual Average Concentrations and Health Risks														
TAC	Conc./Risk**	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Acetaldehyde	Annual Avg	1.1	1.21	0.99	1.16	1.32	0.64	0.83	0.91	0.7	0.91	0.75	0.78	0.75	0.72	0.74
	Health Risk	5	6	5	6	6	3	4	4	3	4	4	4	4	3	4
Benzene	Annual Avg	2	1.21	1.03	0.8	1.08	0.81		0.63	0.61		0.55	0.421	0.419		0.341
	Health Risk	186	112	95	74	100	75		58	56		51	39	39		32
1,3-Butadiene	Annual Avg	0.278	0.183	0.184	0.225	0.262	0.205		0.162	0.153		0.136	0.11	0.107		0.07
	Health Risk	105	69	69	85	98	77		61	57		51	41	40		26
Carbon Tetrachloride	Annual Avg	0.132	0.129		0.101		0.097					0.093	0.086	0.091		
	Health Risk	35	34		27		26					25	23	24		
Chromium, Hexavalent	Annual Avg			0.24	0.2	0.17	0.2	0.11	0.1	0.1	0.11	0.1		0.05	0.063	0.03
	Health Risk			37	30	25	29	16	15	15	16	16		8	9	5
<i>para</i> -Dichlorobenzene	Annual Avg		0.1	0.11	0.13	0.12	0.11		0.13				0.15	0.15		0.15
	Health Risk		7	7	8	8	7		8				10	10		10
Formaldehyde	Annual Avg	1.26	1.3	1.1	1.46	2.08	1.81	2.1	2.37	2	2.49	2.14	2.54	2.56	2.3	1.93
	Health Risk	9	10	8	11	15	13	15	17	15	18	16	19	19	17	14
Methylene Chloride	Annual Avg	0.58	0.59	0.81	1.01	0.57	0.57		0.62			0.65	0.16	0.13		0.12
	Health Risk	2	2	3	3	2	2		2			2	<1	<1		<1
Perchloroethylene	Annual Avg	0.236	0.229	0.208	0.144	0.132	0.146		0.103			0.078	0.057	0.048		0.031
	Health Risk	9	9	8	6	5	6		4			3	2	2		1
Diesel PM	Annual Avg	No Monitoring Data Available														
	Health Risk	No Monitoring Data Available														
Total Health Risk		351	249	232	250	259	238	35	169	146	38	168	138	146	29	92

* Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

** Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

MAP FINDINGS

Table 5.1D-6

Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database
1 WNW 0-1/8 mi 484 Higher	Name: OTAY ELEMENTARY NCES ID: 060861007680 Address: 1651 ALBANY AVE. CHULA VISTA, CA 91911 Telephone: 6194254311 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 007680 Public Schools
2 N N E 1/4-1/2 mi 2172 Higher	Name: ORANGE AVENUE PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042258 Daycare
A3 NE 1/2-1 mi 2987 Higher	Name: Loma Verde School ID: 245022 Site Type: school Latitude: 32.60100 Longitude: -117.00000	GNS0201 535 GNIS Schools
A4 NE 1/2-1 mi 3235 Higher	Name: LOMA VERDE ELEMENTARY NCES ID: 060861000866 Address: 1450 LOMA LANE CHULA VISTA, CA 91911 Telephone: 6194203940 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 000866 Public Schools
B5 NNW 1/2-1 mi 3631 Higher	Name: CASTLE PARK MIDDLE NCES ID: 063864006476 Address: 160 QUINTARD ST. CHULA VISTA, CA 91911 Telephone: 6196915490 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Middle	PBS063864006476 Public Schools
C6 WNW 1/2-1 mi 3775 Lower	Name: Montgomery School ID: 246149 Site Type: school Latitude: 32.59700 Longitude: -117.10000	GNS0208143 GNIS Schools

MAP FINDINGS

Lowest Grade: 07
Highest Grade:08

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

7
 ENE
 1/2-1 mi
 3813 Higher Schoolid: A9700668 Name: STRONG TOWER CHRISTIAN
 Address: 1581 SKYLARK WAY City: CHULA VISTA
 County num: 6073 County: SAN DIEGO
 State: CA Fips: 6
 Zip5: 91911 Zip4: Not Reported
 Phone: 619-422-7538 Low grade: Grade 1
 Hi grde: Grade 12 Gender: Coed
 Locale: Urban fringe of Large City
 School type: Regular elementary or secondary
 School level: Combined
 Affiliation: Christian (no specific denomination)
 Association: No Membership Association

PVTSCHA9700668
 Private Schools

B8
 NNW
 1/2-1 mi
 3924 Higher Name: Castle Park Junior High School
 ID: 240335
 Site Type: school
 Latitude: 32.60600
 Longitude: -117.10000

GNS01 69727
 GNIS Schools

C9
 WNW
 1/2-1 mi
 3929 Lower Name: MONTGOMERY (JOHN J.) ELEMENTAR
 NCES ID: 060861000868
 Address: 1601 4TH AVE.
 CHULA VISTA, CA 91911
 Telephone: 6194226131
 Local Code: Urban Fringe of Large City
 School Type: Regular Elementary and Secondary Schools
 School Level: Primary
 Lowest Grade: Kindergarten
 Highest Grade:06

PBS060861000868
 Public Schools

B10
 NNW
 1/2-1 mi
 4221 Higher Schoolid: 399461
 Name: ROP CAREER CENTER
 Address: 1355 2ND AVE
 City: CHULA VISTA
 State: CA Zip: 91911
 Telephone: 6196915611
 Sector: Less than 2-year public
 Level: Less than 2 years (below associate)
 Control: Public
 Affiliation: Public
 Has Hospital?: 2
 Open to Pub?: Insitution is open to the public
 Active?: Active - institution active and not a new institution

COL399461
 Colleges



Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database
D11 SSE 1/2-1 mi 4310 Higher	Name: Finney School ID: 242256 Site Type: school Latitude: 32.58500 Longitude: -117.00000	GNS01 82765 GNIS Schools
E12 NNE 1/2-1 mi 4411 Higher	Name: CASTLE PARK SENIOR HIGH NCES ID: 063864006477 Address: 1395 HILLTOP DR. CHULA VISTA, CA 91911 Telephone: 6196915600 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: High Lowest Grade: 09 Highest Grade:12	PBS063864006477 Public Schools
D13 SSE 1/2-1 mi 4463 Higher	Name: FINNEY STATE PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042260 Daycare
D14 SSE 1/2-1 mi 4522 Higher	Name: FINNEY (MYRTLE S.) ELEMENTARY NCES ID: 060861000859 Address: 3950 BYRD ST. SAN DIEGO, CA 92154 Telephone: 6196901334 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools	PBS060861 000859 Public Schools
School Level: Primary Lowest Grade: Kindergarten Highest Grade:06		
F15 SSW 1/2-1 mi 4548 Higher	Name: MONTGOMERY SENIOR HIGH NCES ID: 063864006488 Address: 3250 PALM AVE. SAN DIEGO, CA 92154 Telephone: 6196283007 Local Code: Large Central City	PBS063864006488 Public Schools
School Type: Regular Elementary and Secondary Schools School Level: High Lowest Grade: 09 Highest Grade:12		
Map ID Direction	Site	EDR ID Database
E 16 NNE 1/2-1 mi 4601 Higher	Name: Castle Park High School ID: 240334 Site Type: school Latitude: 32.60700 Longitude: -117.10000	GNS01 69726 GNIS Schools

MAP FINDINGS

Distance Distance (ft.) Elevation	Site	EDR ID Database
G17 ENE 1-2 mi 5346 Higher	Name: Rohr School ID: 248335 Site Type: school Latitude: 32.60200 Longitude: -117.00000	GNS0221 654 GNIS Schools
18 WSW 1-2 mi 5383 Lower	Name: BEYER PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042259 Daycare
H19 NW 1-2 mi 5574 Higher	Name: LAUDERBACH (J. CALVIN) ELEMENT NCES ID: 060861000865 Address: 390 PALOMAR ST. CHULA VISTA, CA 91911 Telephone: 6194221127 Local Code: Urban Fringe of Large City	PBS060861 000865 Public Schools
School Type: School Level: Lowest Grade: Kindergarten Highest Grade:06	Regular Elementary and Secondary Schools Primary	
F20 SSW 1-2 mi	Schoolid: 393977 Name: AVANCE BEAUTY COLLEGE Address: 750 BEYER WAY City: SAN DIEGO State: CA	COL393977 Colleges
5596 Higher	Zip: 92154 Telephone: 6195751511 Sector: Less than 2-year private, for-profit Level: Less than 2 years (below associate) Control: Private, for-profit Affiliation: Private, for-profit Has Hospital?: 2 Open to Pub?: Insitution is open to the public	
Active?:	Active - institution active and not a new institution	

Map ID
Direction
Distance

Distance (ft.)
Elevation

Site

EDR ID
Database

G21 ENE 1-2 mi 5656 Higher	Name: ROHR (FRED H.) ELEMENTARY NCES ID: 060861000875 Address: 1540 MALTA AVE. CHULA VISTA, CA 91911 Telephone: 6194205533 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 000875 Public Schools
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H22 NW 1-2 mi 5662 Higher	Name: Lauderbach School ID: 244648 Site Type: school Latitude: 32.60600 Longitude: -117.10000	GNS0199100 GNIS Schools
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I23 South 1-2 mi 6040 Higher	Name: SILVER WING ELEMENTARY NCES ID: 060861000877 Address: 3730 AREY DR. SAN DIEGO, CA 92154 Telephone: 6194233950 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 000877 Public Schools
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24 SSW 1-2 mi 6041 Higher	Name: PENCE (HOWARD) ELEMENTARY NCES ID: 063738006324 Address: 877 VIA TONGA COURT SAN DIEGO, CA 92154 Telephone: 6195755962 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS063738006324 Public Schools
---------------------------------------	--	-----------------------------------

I25 South 1-2 mi 6172 Higher	Name: BORDER VIEW YMCA - SILVERWING Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042263 Daycare
--	--	------------------------

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

J26 Name: JUAREZ-LINCOLN ELEMENTARY YR PBS060861 000863
 SSE NCES ID: 060861000863 Public Schools
 1-2 mi Address: 849 TWINING AVE.
 6297 SAN DIEGO, CA 92154
 Higher Telephone: 6196909222
 Local Code: Large Central City
 School Type: Regular Elementary and Secondary Schools
 School Level: Primary
 Lowest Grade: Kindergarten Highest Grade:06

~~27 Name: PALOMAR HIGH (CONT.) PBS063864006490
 WNW NCES ID: 063864006490 Public Schools
 1-2 mi Address: 480 PALOMAR ST.
 6318 CHULA VISTA, CA 91911
 Higher Telephone: 6196915480
 Local Code: Urban Fringe of Large City
 School Type: Other
 School Level: High
 Lowest Grade: 07 Highest Grade:12~~

J28 Name: BORDER VIEW YMCA - JUAREZ-LINCOLN DAY1 042261
 SSE Address: Not Reported Daycare
 1-2 mi City: Not Reported
 6329 State: CA
 Higher Zip: Not Reported

29 Name: SAN DIEGO COUNTY 4-H AM/PM CLUB PROGRAM DAY1 042256
 NNW Address: Not Reported Daycare
 1-2 mi City: Not Reported
 6516 State: CA
 Higher Zip: Not Reported

30 Name: MONTGOMERY MIDDLE PBS063864006487
 South NCES ID: 063864006487 Public Schools
 1-2 mi Address: 1051 PICADOR BLVD.
 6724 SAN DIEGO, CA 92154
 Higher Telephone: 6196624000
 Local Code: Large Central City
 School Type: Regular Elementary and Secondary Schools
 School Level: Middle
 Lowest Grade: 07 Highest Grade:08

K31 Name: Castle Park School GNS01 69728
 North ID: 240336 GNIS Schools
 1-2 mi Site Type: school
 7019 Latitude: 32.61400
 Higher Longitude: -117.10000

Map ID
Direction
Distance

Distance (ft.)

Elevation

Site

EDR ID

Database

<p>K32 North 1-2 mi 7296 Higher</p>	<p>Name: CASTLE PARK ELEMENTARY NCES ID: 060861000856 Address: 25 EMERSON ST. CHULA VISTA, CA 91910 Telephone: 6194225301 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06</p>	<p>PBS060861 000856 Public Schools</p>
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<p>K 3 3 North 1-2 mi 7304 Higher</p>	<p>Name: CASTLE PARK STATE PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported</p>	<p>DAY1 042253 Daycare</p>
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<p>K34 North 1-2 mi 7445 Higher</p>	<p>Schoolid: 00076841 Address: 37 E EMERSON STREET County num: 6073 State: CA Zip5: 91911 Phone: 619-422-2015 Hi grde: Grade 8 Locale: Urban fringe of Large City School type: Regular elementary or secondary School level: Elementary Affiliation: Roman Catholic Association: National Catholic Educational Association (NCEA)</p>	<p>Name: ST PIUS X ELEMENTARY SCHOOL City: CHULA VISTA County: SAN DIEGO Fips: 6 Zip4: Not Reported Low grade: Kindergarten Gender: Coed</p>	<p>PVTSCH00076841 Private Schools</p>
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<p>L35 NNE 1-2 mi 7662 Higher</p>	<p>Name: Palomar School ID: 247194 Site Type: school Latitude: 32.61300 Longitude: -117.00000</p>	<p>GNS0214040 GNIS Schools</p>
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<p>K36 North 1-2 mi 7744 Higher</p>	<p>Name: Saint Pius X School ID: 248717 Site Type: school Latitude: 32.61600 Longitude: -117.10000</p>	<p>GNS0223523 GNIS Schools</p>
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Map ID

Direction

Distance

Distance (ft.)

Elevation

Site

EDR ID
Database

37	Name:	VALLE LINDO ELEMENTARY	PBS060861 000880
ENE	NCES ID:	060861000880	Public Schools
1-2 mi	Address:	1515 OLEANDER AVE.	
8128		CHULA VISTA, CA 91911	
Higher	Telephone:	6194215151	
Local Code:		Urban Fringe of Large City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade:		Kindergarten	
Highest Grade:		06	

L38	Name:	PALOMAR ELEMENTARY	PBS060861 000871
NNE	NCES ID:	060861000871	Public Schools
1-2 mi	Address:	300 E. PALOMAR ST.	
8183		CHULA VISTA, CA 91911	
Higher	Telephone:	6194200134	
Local Code:		Urban Fringe of Large City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade:		Kindergarten	
Highest Grade:		06	

39	Name:	ECS - OXFORD HEAD START	DAY1 042251
NNE	Address:	Not Reported	Daycare
1-2 mi	City:	Not Reported	
8435	State:	CA	
Higher	Zip:	Not Reported	

M40	Name:	LOS ALTOS STATE PRESCHOOL	DAY1 042269
SSE	Address:	Not Reported	Daycare
1-2 mi	City:	Not Reported	
8504	State:	CA	
Higher	Zip:	Not Reported	

M41	Name:	LOS ALTOS ELEMENTARY	PBS060861 000867
SSE	NCES ID:	060861000867	Public Schools
1-2 mi	Address:	1332 KENALAN DR.	
8546		SAN DIEGO, CA 92154	
Higher	Telephone:	6196905880	
Local Code:		Large Central City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade:		Kindergarten	
Highest Grade:		06	

Map ID

Direction

Distance

Distance (ft.)

Elevation

Site

EDR ID

Database

42					PVTSCH01900055
WSW					Private Schools
1-2 mi					
8577	Schoolid:	01900055	Name:	MIDWAY BAPTIST SCHOOL	
Higher	Address:	2460 PALM AVENUE	City:	SAN DIEGO	
	County num:	6073	County:	SAN DIEGO	
	State:	CA	Fips:	6	
	Zip5:	92154	Zip4:	Not Reported	
	Phone:	619-424-7875	Low grade:	Kindergarten	
	Hi grde:	Grade 12	Gender:	Coed	
	Locale:	Large Central City			
	School type:	Regular elementary or secondary			
	School level:	Combined			
	Affiliation:	Baptist			
	Association:	Association of Christian Schools International (ACSI)			

N43	Name:	Sunnyslope School	GNS023231 8
SW	ID:	250113	GNIS Schools
1-2 mi	Site Type:	school	
8851	Latitude:	32.58000	
Lower	Longitude:	-117.10000	

N44	Name:	SUNNYSLOPE ELEMENTARY	PBS063738006325
SW	NCES ID:	063738006325	Public Schools
1-2 mi	Address:	2500 ELM AVE.	
8865		SAN DIEGO, CA 92154	
Lower	Telephone:	6195755959	
Local Code:		Large Central City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade:		Kindergarten	
		Highest Grade:06	

45	Name:	SOUTHWOOD TREATMENT CENTERS	HOS1 001853
NNW	ID:	5960	AHA Hospitals
1-2 mi	Site Type:	Hospital	
9127			
Higher			

O46	Name:	KELLOGG (KARL H.) ELEMENTARY	PBS060861 000864
NNE	NCES ID:	060861000864	Public Schools
1-2 mi	Address:	229 E. NAPLES ST.	
9285		CHULA VISTA, CA 91911	
Higher	Telephone:	6194204151	
Local Code:		Urban Fringe of Large City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade:		Kindergarten	
		Highest Grade:06	

Map ID

Direction

Distance

Distance (ft.)

Elevation

Site

EDR ID
Database

O47	Name:	Kellogg School	GNS01 96686
NNE	ID:	244223	GNIS Schools
1-2 mi	Site Type:	school	
9496	Latitude:	32.62000	
Higher	Longitude:	-117.00000	

P48	Name:	OPTIONS SECONDARY (ALT)	PBS063864007709
NW	NCES ID:	063864007709	Public Schools
1-2 mi	Address:	467 1/2 MOSS ST.	
9659		CHULA VISTA, CA 91911	
Lower	Telephone:	6196915575	
Local Code:		Urban Fringe of Large City	
School Type:		Other	
School Level:		High	
Lowest Grade: 07	Highest Grade: 12		

P49	Name:	BUILDING BLOCKS PRESCHOOL SCHOOL AGE PROGRAM	DAY1 042254
NW	Address:	Not Reported	Daycare
1-2 mi	City:	Not Reported	
9748	State:	CA	
Lower	Zip:	Not Reported	

NA	Name1:	San Diego National Wildlife Refuge	CUSA045783
West	Name2:	Not Reported	FED_LAND
1-2 mi	Name3:	Not Reported	
9843	Feature1:	National Wildlife Refuge FWS	
NA	Feature2:	Not Reported	
	Feature3:	Not Reported	
	URL:	http://refuges.fws.gov/profiles/index.cfm?id=11720	

50	Name:	CHULA VISTA PRESBYTERIAN PRESCHOOL	DAY1 042250
North	Address:	Not Reported	Daycare
1-2 mi	City:	Not Reported	
9911	State:	CA	
Higher	Zip:	Not Reported	

51	Name:	PEPPERTREE FARM SCHOOL AGE PROGRAM	DAY1 042270
SSW	Address:	Not Reported	Daycare
1-2 mi	City:	Not Reported	
10022	State:	CA	
Lower	Zip:	Not Reported	



Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database	
Q52 NE 1-2 mi 10182 Higher	Name: PARKVIEW ELEMENTARY NCES ID: 060861000872 Address: 575 JUNIPER ST. CHULA VISTA, CA 91911 Telephone: 6194215483 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 000872 Public Schools	
R53 WNW 1-2 mi 10207 Lower	Name: Harborside School ID: 243210 Site Type: school Latitude: 32.60800 Longitude: -117.10000	GNS01891 11 GNIS Schools	
Q54 NE 1-2 mi 10307 Higher	Name: PARKVIEW STATE PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042255 Daycare	
P55 N W 1-2 mi 10314 Lower	Schoolid: 01897084 Address: 960 5TH AVE County num: 6073 State: CA Zip5: 91911 Phone: 619-425-0132 Hi grde: Grade 6 Locale: Urban fringe of Large City School type: Regular elementary or secondary School level: Elementary Affiliation: Christian (no specific denomination) Association: Association of Christian Schools International (ACSI)	Name: CHULA VISTA CHR ELEM SCHOOL City: CHULA VISTA County: SAN DIEGO Fips: 6 Zip4: Not Reported Low grade: Kindergarten Gender: Coed	PVTSCH01897084 Private Schools
S56 NNW 1-2 mi 10439 Higher	Name: Rice School ID: 248163 Site Type: school Latitude: 32.61900 Longitude: -117.10000	GNS0220447 GNIS Schools	

Map ID
Direction
Distance

Distance (ft.)

Elevation

Site

EDR ID
Database

U62 SSW 2-4 mi 11055 Lower	Name: SOUTHWEST JUNIOR HIGH NCES ID: 063864006491 Address: 2710 IRIS ST. SAN DIEGO, CA 92154 Telephone: 6196283052 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Middle Lowest Grade: 07 Highest Grade: 09	PBS063864006491 Public Schools
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T63 North 2-4 mi 11164 Higher	Name: Cook School ID: 240877 Site Type: school Latitude: 32.62600 Longitude: -117.10000	GNS01 73632 GNIS Schools
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T64 North 2-4 mi 11250 Higher	Name: SO. BAY FAM. YMCA - COOK ELEM. Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042248 Daycare
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65 South 2-4 mi 11305 Higher	Name: MAOF CHILD CARE CENTER-SAN YSIDRO (INFANTS) Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042271 Daycare
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V66 SW 2-4 mi 11332 Lower	Name: ECS - NESTOR HEAD START Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042268 Daycare
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S67 NNW 2-4 mi 11618 Higher	Name: Chula Vista High School ID: 240613 Site Type: school Latitude: 32.62200 Longitude: -117.10000	GNS01 71639 GNIS Schools
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Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database
W68 NNE 2-4 mi 11797 Higher	Name: ROGERS (GREG) ELEMENTARY NCES ID: 060861000874 Address: 510 E. NAPLES ST. CHULA VISTA, CA 91911 Telephone: 6196562082 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 000874 Public Schools
W69 NNE 2-4 mi 11806 Higher	Name: ROGERS STATE PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042249 Daycare
W70 NE 2-4 mi 11894 Higher	Name: Rogers School ID: 248331 Site Type: school Latitude: 32.62200 Longitude: -117.00000	GNS0221631 GNIS Schools
71 NNW 2-4 mi 11924 Higher	Name: Saint Johns School ID: 248641 Site Type: school Latitude: 32.62700 Longitude: -117.10000	GNS0223201 GNIS Schools
X72 South 2-4 mi 11971 Higher	Name: SMYTHE AVE. PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042273 Daycare
X73 South 2-4 mi 12122 Higher	Name: SMYTHE ELEMENTARY NCES ID: 063522005965 Address: 1880 SMYTHE ST. SAN YSIDRO, CA 92173 Telephone: 6194284447 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Primary	PBS063522005965 Public Schools
X74 SSE 2-4 mi 12150 Higher	Name: LA MIRADA PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042272 Daycare

MAP FINDINGS

Lowest Grade: Kindergarten
Highest Grade:05

Map ID
Direction
Distance

Distance (ft.)
Elevation

Site

EDR ID
Database

Y75 SW 2-4 mi 12192 Lower	Name: MENDOZA (TEOFILO) SCHOOL NCES ID: 063738008308 Address: 2050 CORONADO AVE. SAN DIEGO, CA 92154 Telephone: 6195755818 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS063738008308 Public Schools
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X76 SSE 2-4 mi 12228 Higher	Name: LA MIRADA ELEMENTARY NCES ID: 063522005963 Address: 222 AVENIDA DE LA MADRID SAN YSIDRO, CA 92173 Telephone: 6194284424 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:05	PBS063522005963 Public Schools
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V77 SW 2-4 mi 12286 Lower	Name: Nestor School ID: 246477 Site Type: school Latitude: 32.57000 Longitude: -117.10000	GNS0210120 GNIS Schools
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V78 SW 2-4 mi 12423 Lower	Name: NESTOR ELEMENTARY NCES ID: 063738006321 Address: 1455 HOLLISTER ST. SAN DIEGO, CA 92154 Telephone: 6195755952 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS06373800632 1 Public Schools
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79 NNE 2-4 mi 12630 Higher	Name: CHILDREN'S COMPANY (THE) Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042246 Daycare
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Z80 North 2-4 mi 12657 Higher	Name: LOVE N LEARN PRESCHOOL/SCHOOL AGE PROGRAM Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042245 Daycare
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Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database	
X81 South 2-4 mi 12693 Higher	Name: CAMPEINOS UNIDOS SAN YSIDRO DAY CARE CENTER Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042274 Daycare	
AA82 WSW 2-4 mi 12825 Lower	Name: Saint Charles School ID: 248576 Site Type: school Latitude: 32.58000 Longitude: -117.10000	GNS0222970 GNIS Schools	
AB83 NE 2-4 mi 12855 Higher	Name: VISTA HILL HOSPITAL ID: 5962 Site Type: Hospital	HOS1001 851 AHA Hospitals	
Y84 WSW 2-4 mi 12930 Lower	Name: EMORY ELEMENTARY NCES ID: 063738006318 Address: 1915 CORONADO AVE. SAN DIEGO, CA 92154 Telephone: 6195755953 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS06373800631 8 Public Schools	
Z 8 5 North 2-4 mi 12937 Higher	Name: Hilltop Junior High School ID: 243485 Site Type: school Latitude: 32.631 00 Longitude: -117.10000	GNS01 90899 GNIS Schools	
AA86 WSW 2-4 mi 12976 Lower	Schoolid: 00077299 Address: 929 18TH STREET County num: 6073 State: CA Zip5: 92154 Phone: 619-423-3701 Hi grde: Grade 8 Locale: Large Central City School type: Regular elementary or secondary School level: Elementary Affiliation: Roman Catholic Association: National Catholic Educational Association (NCEA)	Name: ST CHARLES ELEMENTARY SCHOOL City: SAN DIEGO County: SAN DIEGO Fips: 6 Zip4: Not Reported Low grade: Kindergarten Gender: Coed	PVTSCH00077299 Private Schools

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

AA92				PVTSCH00077357
WSW				Private Schools
2-4 mi				
13251	Schoolid:	00077357	Name:	MARIAN CATHOLIC HIGH SCHOOL
Lower	Address:	1002 18TH STREET	City:	SAN DIEGO
	County num:	6073	County:	SAN DIEGO
	State:	CA	Fips:	6
	Zip5:	92154	Zip4:	1999
	Phone:	619-453-2121	Low grade:	Grade 9
	Hi grde:	Grade 12		
	Locale:	Large Central City	Gender:	Coed
	School type:	Regular elementary or secondary		
	School level:	Secondary		
	Affiliation:	Roman Catholic		
	Association:	National Catholic Educational Association (NCEA)		

93	Name:	SAN YSIDRO MIDDLE	PBS063522005964
SSE	NCES ID:	063522005964	Public Schools
2-4 mi	Address:	4345 OTAY MESA ROAD	
13261		SAN YSIDRO, CA 92173	
Higher	Telephone:	6194285551	
	Local Code:	Large Central City	
School Type:		Regular Elementary and Secondary Schools	
	School Level:	Middle	
	Lowest Grade:	06	
	Highest Grade:	08	

94	Name:	Daly Center Educational Center	GNS01 75862
North	ID:	241238	GNIS Schools
2-4 mi	Site Type:	school	
13290	Latitude:	32.63200	
Higher	Longitude:	-117.10000	

AA95	Name:	Marian High School	GNS0204289
WSW	ID:	245506	GNIS Schools
2-4 mi	Site Type:	school	
13307	Latitude:	32.57900	
Lower	Longitude:	-117.10000	

Z96	Name:	Hilltop Drive School	GNS01 90896
North	ID:	243483	GNIS Schools
2-4 mi	Site Type:	school	
13499	Latitude:	32.63200	
Higher	Longitude:	-117.10000	

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

AC97
 South
 2-4 mi
 13508
 Higher

Schoolid: A9500663
 Address: 3747 SUNSET LANE
 County num: 6073
 State: CA
 Zip5: 92173
 Phone: 619-428-0967
 Hi grde: Grade 12
 Locale: Large Central City
 School type: Regular elementary or secondary
 School level: Combined
 Affiliation: Christian (no specific denomination)
 Association: Accelerated Christian Education (ACE) or (School of Tomorrow)

Name: NEW LIFE CHRISTIAN ACADEMY
 City: SAN YSIDRO
 County: SAN DIEGO
 Fips: 6
 Zip4: Not Reported
 Low grade: Kindergarten
 Gender: Coed

PVTSCHA9500663
 Private Schools

AC98
 South
 2-4 mi
 13574
 Higher

Name: SUNSET ELEMENTARY
 NCES ID: 063522005966
 Address: 3825 SUNSET AVE.
 SAN YSIDRO, CA 92173
 Telephone: 6194281148
 Local Code: Large Central City

School Type: Regular Elementary and Secondary Schools
 School Level: Primary
 Lowest Grade: Kindergarten
 Highest Grade:05

PBS063522005966
 Public Schools

AC99
 South
 2-4 mi
 13583
 Higher

Name: SUNSET PRESCHOOL
 Address: Not Reported
 City: Not Reported
 State: CA
 Zip: Not Reported

DAY1 042275
 Daycare

100
 SW
 2-4 mi
 13619
 Lower

Name: SOUTHWEST SENIOR HIGH
 NCES ID: 063864006492
 Address: 1685 HOLLISTER ST.
 SAN DIEGO, CA 92154
 Telephone: 6196283023
 Local Code: Large Central City
 School Type: Regular Elementary and Secondary Schools

School Level: High
 Lowest Grade: 09
 Highest Grade:12

PBS063864006492
 Public Schools

~~401
 NNE
 2-4 mi
 13637
 Higher~~

~~Name: CHILDREN'S WORLD SCHOOL AGE PROGRAM
 Address: Not Reported
 City: Not Reported
 State: CA
 Zip: Not Reported~~

~~DAY1 042247
 Daycare~~



Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

Z1 02 Name: HILLTOP DRIVE ELEMENTARY PBS060861 000862
 North NCES ID: 060861000862 Public Schools
 2-4 mi Address: 30 MURRAY ST.
 13676 CHULA VISTA, CA 91910
 Higher Telephone: 6194228323
 Local Code: Urban Fringe of Large City
 School Type: Regular Elementary and Secondary Schools
 School Level: Primary
 Lowest Grade: Kindergarten Highest Grade:06

~~Z103 Name: SO. BAY FAM. YMCA HILLTOP ELEM. DAY4 042241
 North Address: Not Reported Daycare
 2-4 mi City: Not Reported
 13740 State: CA
 Higher Zip: Not Reported~~

~~AC1 04 Name: Sunset School GNS0232446
 South ID: 250130 GNIS Schools
 2-4 mi Site Type: school
 13795 Latitude: 32.55700
 Higher Longitude: -117.10000~~

AD1 05
 S S E
 2-4 mi
 13886
 Higher

Schoolid: 00077426 Name: OUR LADY OF MOUNT CARMEL SCHOO
 Address: 4141 BEYER BLVD City: SAN YSIDRO
 County 6073 County: SAN DIEGO
 num: State: CA Fips: 6
 Zip 5 : 92173 Zip4: Not Reported
 Phone: 619-428-2091 Low grade: Kindergarten
 Hi grde: Grade 8 Gender: Coed
 Locale: Large Central City
 School Regular elementary or secondary
 type: Elementary
 School Roman Catholic
 level: National Catholic Educational Association (NCEA)
 Affiliation:
 Association:

PVTSCH00077426
 Private Schools

AD1 06 Name: San Ysidro Academy GNS0224764
 SSE ID: 248979 GNIS Schools
 2-4 mi Site Type: school
 14152 Latitude: 32.55700
 Higher Longitude: -117.00000

107 Name: CHULA VISTA COMM CHURCH PRE-SCHOOL & DAY CARE CTRDAY1 042240
 North Address: Not Reported Daycare
 2-4 mi City: Not Reported
 14182 State: CA
 Higher Zip: Not Reported

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

108	Name:	BERRY (GODFREY G.) ELEMENTARY	PBS06373800631 6
SW	NCES ID:	063738006316	Public Schools
2-4 mi	Address:	2001 RIMBEY ST.	
14185		SAN DIEGO, CA 92154	
Lower	Telephone:	6195755950	
Local Code:		Large Central City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade: Kindergarten		Highest Grade:06	
NA	Name1:	San Diego National Wildlife Refuge	CUSA045745
WNW	Name2:	Not Reported	FED_LAND
2-4 mi	Name3:	Not Reported	
14227	Feature1:	National Wildlife Refuge FWS	
NA	Feature2:	Open Water	
	Feature3:	Not Reported	
	URL:	http://refuges.fws.gov/profiles/index.cfm?id=11720	
109	Name:	FOUR SEASONS PRESCHOOL	DAY1 042243
NNW	Address:	Not Reported	Daycare
2-4 mi	City:	Not Reported	
14293	State:	CA	
Higher	Zip:	Not Reported	
AF1 10	Name:	I CORNER EDUCARE CHILDREN'S CENTER	DAY1 042244
NNW	Address:	Not Reported	Daycare
2-4 mi	City:	Not Reported	
14560	State:	CA	
Lower	Zip:	Not Reported	
AF1 11	Name:	Mar Vista Junior High School	
WSW	ID:	245484	GNS02041 72
2-4 mi	Site Type:	school	GNIS Schools
14648	Latitude:	32.57300	
Lower	Longitude:	-117.10000	
AF1 12	Name:	MAR VISTA MIDDLE	PBS063864006485
WSW	NCES ID:	063864006485	Public Schools
2-4 mi	Address:	1267 THERMAL ST.	
14749		SAN DIEGO, CA 92154	
Lower	Telephone:	6196283086	
Local Code:		Large Central City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Middle	
Lowest Grade: 07		Highest Grade:08	

Map ID	Direction	Distance	Distance (ft.)	Elevation	Site	EDR ID Database
AG 113					Name: HALECREST ELEMENTARY	PBS060861 000860
NNE					NCES ID: 060861000860	Public Schools
2-4 mi					Address: 475 EAST J ST.	
14841					CHULA VISTA, CA 91910	
Higher					Telephone: 6194210771	
Local Code:					Urban Fringe of Large City	
School Type:					Regular Elementary and Secondary Schools	
School Level:					Primary	
Lowest Grade:					Kindergarten	
					Highest Grade:06	
AG 114					Name: Halecrest School	GNS01 88647
NNE					ID: 243116	GNIS Schools
2-4 mi					Site Type: school	
14858					Latitude: 32.63500	
Higher					Longitude: -117.00000	
AG 115					Name: SO. BAY FAM. YMCA - HALECREST ELEM.	DAY1 042239
NNE					Address: Not Reported	Daycare
2-4 mi					City: Not Reported	
15024					State: CA	
Higher					Zip: Not Reported	
AE1 16					Name: ROCKING HORSE NURSERY SCHOOL OF CHULA VISTA	DAY1042242
NNW					Address: Not Reported	Daycare
2-4 mi					City: Not Reported	
15153					State: CA	
Higher					Zip: Not Reported	
AH1 17					Name: HILLTOP SENIOR HIGH	PBS063864006484
North					NCES ID: 063864006484	Public Schools
2-4 mi					Address: 555 CLAIRE AVE.	
15177					CHULA VISTA, CA 91910	
Higher					Telephone: 6196915640	
Local Code:					Urban Fringe of Large City	
School Type:					Regular Elementary and Secondary Schools	
School Level:					High	
Lowest Grade:					09	
					Highest Grade:12	
118					Name: Beyer School	GNS01 62700
SSE					ID: 239273	GNIS Schools
2-4 mi					Site Type: school	
15189					Latitude: 32.55600	
Higher					Longitude: -117.00000	

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

AH1 19 North 2-4 mi 15218 Higher	Name: ID: Site Type: Latitude: Longitude:	Hilltop High School 243484 school 32.63700 -117.10000	GNS01 90898 GNIS Schools
NA SW 2-4 mi 15637 NA	Name1: Name2: Name3: Feature1: Feature2: Feature3: URL:	Imperial Beach Naval Air Station Not Reported Not Reported Navy DOD Not Reported Not Reported Not Reported	CUSA045871 FED_LAND
120 NNW 2-4 mi 15817 Higher	Name: ID: Site Type: Latitude: Longitude:	Saint Rose of Lima School 248724 school 32.63500 -117.10000	GNS0223547 GNIS Schools
AI121 NW 2-4 mi 15831 Lower	Name: NCES ID: Address: Telephone: Local Code: School Type: School Level: Lowest Grade: Highest Grade:	MUELLER (ROBERT L.) ELEMENTARY 060861000869 715 I ST. 6194226192 Urban Fringe of Large City Regular Elementary and Secondary Schools Primary Kindergarten 06	PBS060861 000869 Public Schools
AJ122 NNW 2-4 mi 15863 Lower	Name: ID: Address: City: Zip: State: Telephone:	SCRIPPS MEM HOSPITAL CHULA VISTA 050270 435 H STREET CHULA VISTA 92010 CA 6196917000	HOSP000491 Medical Centers
AJ123 NNW 2-4 mi 15867 Lower	Name: ID: Site Type:	SCRIPPS MEM HOSP-CHULA VISTA 5961 Hospital	HOS1 001850 AHA Hospitals
AI124 NW 2-4 mi 16150 Lower	Name: ID: Site Type: Latitude: Longitude:	Mueller School 246335 school 32.62700 -117.10000	GNS0209294 GNIS Schools

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

AK125
 WSW
 2-4 mi
 16259
 Lower

Schoolid: A91 00932
 Address: 631 12TH ST
 County num: 6073
 State: CA
 Zip5: 91932
 Phone: 619-424-9784
 Hi grde: Grade 12
 Locale: Urban fringe of Large City
 School type: Regular elementary or secondary
 School level: Combined
 Affiliation: Pentecostal
 Association: No Membership Association

Name: IMPERIAL BEACH CHRISTIAN SCHOOL
 City: IMPERIAL BEACH
 County: SAN DIEGO
 Fips: 6
 Zip4: Not Reported
 Low grade: Prekindergarten
 Gender: Coed

PVTSCHA91 00932
 Private Schools

AL1 26
 WSW
 2-4 mi
 16454
 Lower

Name: CENTRAL ELEMENTARY
 NCES ID: 063738006317
 Address: 1290 EBONY AVE.
 IMPERIAL BEACH, CA 91932
 Telephone: 6195755956
 Local Code: Urban Fringe of Large City

School Type: Regular Elementary and Secondary Schools
 School Level: Primary
 Lowest Grade: Kindergarten Highest Grade:06

PBS06373800631 7
 Public Schools

AL1 27
 WSW
 2-4 mi
 16715
 Lower

Name: Central School
 ID: 240427
 Site Type: school
 Latitude: 32.57800
 Longitude: -117.10000

GNS01 70405
 GNIS Schools

AK128
 West
 2-4 mi
 16816
 Lower

Schoolid: 395210
 Name: COMPREHENSIVE TRAINING SYSTEMS INC
 497 11TH ST STE 4
 Address: IMPERIAL BEACH
 City: CA
 State: 6194246650
 Telephone: Less than 2-year private, not-for-profit
 Sector: Less than 2 years (below associate)
 Level: Private, nonprofit
 Control: Private, not for-profit, no religious affiliation
 Affiliation:
 Has Hospital?: 2
 Open to Pub?: Insitution is open to the public
 Active?: Active - institution active and not a new institution

Zip: 91932

COL3952 10
 Colleges

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

129	Name:	TEMPLE BETH SHOLOM PRESCHOOL	DAY1 042237
NNW	Address:	Not Reported	Daycare
2-4 mi	City:	Not Reported	
17239	State:	CA	
Higher	Zip:	Not Reported	

AM130	Name:	Vista Square School	GNS02381 57
NNW	ID:	251108	GNIS Schools
2-4 mi	Site Type:	school	
17243	Latitude:	32.63500	
Lower	Longitude:	-117.10000	

AL1 31	Name:	IMPERIAL BEACH PRESCHOOL-SOUTH/SCHOOL AGE PROG.	DAY1 042266
WSW	Address:	Not Reported	Daycare
2-4 mi	City:	Not Reported	
17414	State:	CA	
Lower	Zip:	Not Reported	

AN 132	Name:	Bayside School	GNS01 61240
West	ID:	239059	GNIS Schools
2-4 mi	Site Type:	school	
17422	Latitude:	32.58900	
Lower	Longitude:	-117.10000	

AM133	Name:	VISTA SQUARE ELEMENTARY YR	PBS060861 000882
NW	NCES ID:	060861000882	Public Schools
2-4 mi	Address:	540 G ST.	
17486		CHULA VISTA, CA 91910	
Lower	Telephone:	6194228374	
	Local Code:	Urban Fringe of Large City	
	School Type:	Regular Elementary and Secondary Schools	
	School Level:	Primary	
	Lowest Grade:	Kindergarten	
	Highest Grade:	06	

134	Name:	IMPERIAL BEACH KID'S COLLEGE-INFANT PROGRAM	DAY1 042262
WSW	Address:	Not Reported	Daycare
2-4 mi	City:	Not Reported	
17500	State:	CA	
Lower	Zip:	Not Reported	



Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database
AN 135 West 2-4 mi 17568 Lower	Name: BAYSIDE ELEMENTARY NCES ID: 063738006315 Address: 490 EMORY ST. IMPERIAL BEACH, CA 91932 Telephone: 6195755951 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS06373800631 5 Public Schools
NA SE 2-4 mi 17632 NA	Name1: San Diego National Wildlife Refuge Name2: Not Reported Name3: Not Reported Feature1: National Wildlife Refuge FWS Feature2: Not Reported Feature3: Not Reported URL: http://refuges.fws.gov/profiles/index.cfm?id=11720	CUSA045883 FED_LAND
AO136 SSE 2-4 mi 17767 Lower	Name: WILLOW SCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042276 Daycare
137 North 2-4 mi 17825 Higher	Schoolid: A9100615 Address: 4378 LYNNDALE LN County num: 6073 State: CA Zip5: CA Phone: 619-585-4884 Hi grde: Grade 6 Locale: Urban fringe of Large City School type: Regular elementary or secondary School level: Elementary Affiliation: Christian (no specific denomination) Association: Association of Christian Schools International (ACSI)	Name: CALVARY CHRISTIAN ACADEMY City: CHULA VISTA County: SAN DIEGO Fips: 6 91910 Low grade: Gender: Coed Zip4: 3219 Kindergarten



Map ID
Direction

Distance
Distance (ft.)
Elevation

Site

EDR ID
Database

143 Name: CLEAR VIEW ELEMENTARY (CHAR) PBS060861 010307
North NCES ID: 060861010307 Public Schools
2-4 mi Address: 455 WINDROSE WAY
18549 CHULA VISTA, CA 91910
Higher Telephone: 6194983000
Local Code: Urban Fringe of Large City
School Type: Regular Elementary and Secondary Schools
School Level: Primary
Lowest Grade: Kindergarten Highest Grade:06

~~AP144 Name: V.I.P. VILLAGE STATE PRESCHOOL DAY1 042267
WSW Address: Not Reported Daycare
2-4 mi City: Not Reported
18725 State: CA
Lower Zip: Not Reported~~

~~NA Name1: Sweetwater Marsh National Wildlife Refuge CUSA045730
NW Name2: Not Reported FED_LAND
2-4 mi Name3: Not Reported
18780 Feature1: National Wildlife Refuge FWS
NA Feature2: Not Reported
 Feature3: Not Reported
 URL: <http://refuges.fws.gov/profiles/index.cfm?id=11682>~~

SRNH05E135
Nursing Homes

145
NNW Provnum: 05E135 Name: COLLINGWOOD MANOR
2-4 mi Street: 553 F STREET City: CHULA VISTA
18799 State: CA Zipcode: 91910
Lower Phone: 6194268611 Last Insp: 20020716
 Num Beds: 100 Num Residents: 80
 Occupied %: 80 Description: Participating in Medicaid Only
 Owner Type: For profit - Partnership Within Hosp?: NO
 Multi Nursing home ownership?: NO
 Has Resident and Family Councils?: RESIDENT

AP1 46 Name: Oneonta School GNS02 12826
WSW ID: 246915 GNIS Schools
2-4 mi Site Type: school
18827 Latitude: 32.57200
Lower Longitude: -117.10000

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

EDR ID
 Database

AP1 47
 WSW
 2-4 mi
 19310
 Lower

Schoolid: K9300431
 Address: 866 IMPERIAL BEACH BLVD
 County num: 6073
 State: CA
 Zip5: 91932
 Phone: 619-423-8648
 Hi grde: Kindergarten
 Locale: Urban fringe of Large City
 School type: Early Childhood Program/Day Care Center
 School level: Elementary
 Affiliation: Lutheran Church - Missouri Synod
 Association: No Membership Association

Name: ST JAMES LUTHERAN PRESCH & KDG
 City: IMPERIAL BEACH
 County: SAN DIEGO
 Fips: 6
 Zip4: Not Reported
 Low grade: Prekindergarten
 Gender: Coed

PVTSCHK9300431
 Private Schools

AP1 48
 WSW
 2-4 mi
 19360
 Lower

Name: ST JAMES LUTHERAN PRESCHOOL & CHILD CARE CENTER
 Address: Not Reported
 City: Not Reported
 State: CA
 Zip: Not Reported

DAY1 042265
 Daycare

149
 NE
 2-4 mi
 19429
 Higher

Schoolid: 427195
 Address: PACIFIC SOUTHWEST SCHOOL ASSOCIATION OF REALTORS
 City: 880 CANARIOS CT
 State: CHULA VISTA
 Telephone: CA
 Sector: 6194217811
 Level: Less than 2-year private, not-for-profit
 Control: Less than 2 years (below associate)
 Affiliation: Private, nonprofit
 Private, not for-profit, no religious affiliation

Zip: 91910

Has Hospital?: 2
 Open to Pub?: Insitution is open to the public
 Active?: Active - institution active and not a new institution

COL4271 95
 Colleges

AQ150
 NNW
 2-4 mi
 19913
 Lower

Schoolid: A91 00675
 Address: 494 E ST
 County num: CA
 State: 91910
 Zip5: 619-422-7167
 Phone: grade:
 Hi grde: Grade 6
 Locale: Urban fringe of Large City
 School type: Regular elementary or secondary
 School level: Elementary
 Affiliation: Baptist
 Association: Association of Christian Schools International (ACSI)

Name: CHRISTIAN ACADEMY OF CHULA VIS
 City: CHULA VISTA
 County: SAN DIEGO
 Fips: 6
 Zip4: Not Reported
 Low: Kindergarten
 Gender: Coed

PVTSCHA91 00675
 Private Schools

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

AQ1 51
 NNW 2-4 mi
 19919 Lower

PVTSCH00082491
 Private Schools

Schoolid:		Name:	PILGRIM LUTHERAN SCHOOL
Address:		City:	CHULA VISTA
County num:	00082491	County:	SAN DIEGO
State:	497 E STREET	Fips:	6
Zip5:	6073	Zip4:	Not Reported
Phone:	CA	Low grade:	Kindergarten
Hi grde:	91910	Gender:	Coed
Locale:	619-420-6233		
School type:	Grade 8		
School level:	Urban fringe of Large City		
Affiliation:	Regular elementary or secondary		
Association:	Elementary		
	Lutheran Church - Missouri Synod		
	Other School Association(s)		

AR152
 North 2-4 mi
 20066 Lower

Name: BONITA VALLEY EDUCATIONAL CTR
 Address: Not Reported
 City: Not Reported
 State: CA
 Zip: Not Reported

DAY1 042231
 Daycare

AS1 53
 WSW 2-4 mi
 20300 Lower

Name: Harbor View School
 ID: 243208
 Site Type: school
 Latitude: 32.57800
 Longitude: -117.10000

GNS0189108
 GNIS Schools

AS1 54
 WSW 2-4 mi
 20365 Lower

Name: SOUTH BAY CHARTER
 NCES ID: 063738008604
 Address: 601 ELM AVE.
 IMPERIAL BEACH, CA 91932
 Telephone: M
 Local Code: Urban Fringe of Large City
 School Type: Regular Elementary and Secondary Schools
 School Level: Primary
 Lowest Grade: Kindergarten
 Highest Grade:06

PBS063738008604
 Public Schools

AT155
 NNW 2-4 mi
 20364 Higher

Name: Rosebank School
 ID: 248391
 Site Type: school
 Latitude: 32.64900
 Longitude: -117.10000

GNS0221 906
 GNIS Schools



Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database
AT156 NNW 2-4 mi 20517 Higher	Name: ROSEBANK ELEMENTARY NCES ID: 060861000876 Address: 80 FLOWER ST. CHULA VISTA, CA 91911 Telephone: 6194228329 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 000876 Public Schools
AS1 57 WSW 2-4 mi 20538 Lower	Name: IMPERIAL BEACH ELEMENTARY NCES ID: 063738006320 Address: 650 IMPERIAL BEACH BLVD. IMPERIAL BEACH, CA 91932 Telephone: 6195755954 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS063738006320 Public Schools
AT158 NNW 2-4 mi 20563 Higher	Name: SO. BAY FAM. YMCA _ ROSEBANK ELEM. Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042232 Daycare
159 SSW 2-4 mi 20618 Lower	Name: Monument School (historical) ID: 1666556 Site Type: school Latitude: 32.54300 Longitude: -117.10000	GNS02081 88 GNIS Schools
160 NE 2-4 mi 20816 Higher	Name: DISCOVERY ELEMENTARY (CHAR) NCES ID: 060861002633 Address: 1100 CAMINO BISCAY CHULA VISTA, CA 91910 Telephone: 6196560797 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 002633 Public Schools
AS161 WSW 2-4 mi 20836 Lower	Name: Mar Vista High School ID: 245483 Site Type: school Latitude: 32.57900 Longitude: -117.10000	GNS02041 70 GNIS Schools

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

AR1 62 North 2-4 mi 20840 Lower	Schoolid: K9300427 Address: 3604 BONITA RD County num: 6073 State: CA Zip5: 91910 Phone: 619-422-1220 Hi grde: Kindergarten	Name: THE MONTESSORI AMERICAN SCHOOL City: CHULA VISTA County: SAN DIEGO Fips: 6 Zip4: Not Reported Low grade: Prekindergarten Gender: Coed	PVTSCHK9300427 Private Schools
	Locale: Urban fringe of Large Cit School type: Montessori School level: Elementary Affiliation: Nonsectarian Association: Other Montessori Association(s),National Association for the Education of Young Children (NAEYC)		

AS1 63 WSW 2-4 mi 20913 Lower	Name: MAR VISTA SENIOR HIGH NCES ID: 063864006486 Address: 505 ELM AVE. IMPERIAL BEACH, CA 91932 Telephone: 6196283074 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: High Lowest Grade: 09 Highest Grade:12	PBS063864006486 Public Schools
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AU 164 NW 2-4 mi 20950 Lower	Name: Feaster School ID: 242189 Site Type: school Latitude: 32.641 00 Longitude: -117.10000	GNS01 82389 GNIS Schools
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AU 165 NW 4-6 mi 21156 Lower	Name: FEASTER-EDISON CHARTER NCES ID: 060861000858 Address: 670 FLOWER ST. CHULA VISTA, CA 91910 Telephone: 6194228397 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 000858 Public Schools
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AU 166 NW 4-6 mi 21217 Lower	Name: SO. BAY FAM. YMCA - FEASTER ELEM. Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042236 Daycare
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Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

167 WSW 4-6 mi 21600 Lower	Name: Address: City: State: Zip:	ECS - IMPERIAL BEACH HEAD START Not Reported Not Reported CA Not Reported	DAY1 042264 Daycare
168 West 4-6 mi 21768 Lower	Name: ID: Site Type: Latitude: Longitude:	West View School 251386 school 32.58700 -117.10000	GNS0239782 GNIS Schools
AV1 69 NE 4-6 mi 22578 Higher	Name: NCES ID: Address: Telephone: Local Code: School Type: School Level: Lowest Grade: Highest Grade:	CHULA VISTA HILLS ELEMENTARY 060861009350 980 BUENA VISTA WAY CHULA VISTA, CA 91910 6194827066 Urban Fringe of Large City Regular Elementary and Secondary Schools Primary Kindergarten 06	PBS060861 009350 Public Schools
AV1 70 NE 4-6 mi 22587 Higher	Name: Address: City: State: Zip:	SOUTH BAY FAMILY YMCA - CHULA VISTA HILLS ELEM. Not Reported Not Reported CA Not Reported	DAY1 042238 Daycare
AW1 71 NNE 4-6 mi 23490 Higher	Name: Address: City: State: Zip:	SO. BAY FAMILY YMCA - ALLEN/DALY ELEM. Not Reported Not Reported CA Not Reported	DAY1 042230 Daycare
AW1 72 NNE 4-6 mi 23510 Higher	Name: NCES ID: Address: Telephone: Local Code: School Type: School Level: Lowest Grade: Highest Grade:	ALLEN (ELLA B.)/DALY (ANN) ELE 060861000855 4300 ALLEN SCHOOL ROAD BONITA, CA 91902 6194793662 Urban Fringe of Large City Regular Elementary and Secondary Schools Primary Kindergarten 06	PBS060861 000855 Public Schools

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

AW1 73 NNE 4-6 mi 23533 Higher	Name: ID: Site Type: Latitude: Longitude:	Allen School 238534 school 32.65700 -117.00000	GNS01 58082 GNIS Schools
AX1 74 North 4-6 mi 23637 Higher Local Code: School Type: School Level: Lowest Grade: Kindergarten Highest Grade:06	Name: NCES ID: Address: Telephone:	VALLEY VISTA ELEMENTARY 060861000881 3724 VALLEY VISTA WAY BONITA, CA 91902 6194797171	PBS060861 000881 Public Schools
NA West 4-6 mi 23769 NA	Name1: Name2: Name3: Feature1: Feature2: Feature3: URL:	California Coastal National Monument Not Reported Not Reported National Monument BLM Not Reported Not Reported http://www.ca.blm.gov/hollister/coastal_monument.html	CUSA01 2447 FED_LAND
AX175 North 4-6 mi 23789 Higher	Name: Address: City: State: Zip:	SO. BAY FAM. YMCA - VALLEY VISTA ELEM. Not Reported Not Reported CA Not Reported	DAY1 042229 Daycare
NA SW 4-6 mi 23925 NA	Name1: Name2: Name3: Feature1: Feature2: Feature3: URL:	Tijuana Slough National Wildlife Refuge Not Reported Not Reported National Wildlife Refuge FWS Not Reported Not Reported http://refuges.fws.gov/profiles/index.cfm?id=11681	CUSA045894 FED_LAND
NA East 4-6 mi 24137 NA	Name1: Name2: Name3: Feature1: Feature2: Feature3: URL:	San Diego National Wildlife Refuge Not Reported Not Reported National Wildlife Refuge FWS Not Reported Not Reported http://refuges.fws.gov/profiles/index.cfm?id=11720	CUSA045569 FED_LAND

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

AY1 76
 NE
 4-6 mi
 24655
 Higher
 Name: Southwestern College
 ID: 249780
 Site Type: school
 Latitude: 32.641 00
 Longitude: -117.00000
 GNS0229987
 GNIS Schools

177
 NE
 4-6 mi
 25153
 Higher
 Name: BONITA VISTA MIDDLE
 NCES ID: 063864006474
 Address: 650 OTAY LAKES ROAD
 CHULA VISTA, CA 91910
 Telephone: 6192165030
 Local Code: Urban Fringe of Large City
 School Type: Regular Elementary and Secondary Schools
 School Level: Middle
 Lowest Grade: 07
 Highest Grade: 08
 PBS063864006474
 Public Schools

AZ178
 NE
 4-6 mi
 25163
 Higher
 Name: CHILD DEVELOPMENT CENTER-SOUTH WESTERN COLLEGE
 Address: Not Reported
 City: Not Reported
 State: CA
 Zip: Not Reported
 DAY1042235
 Daycare

AZ179
 NE
 4-6 mi
 25171
 Higher
 Name: BONITA VISTA SENIOR HIGH
 NCES ID: 063864006475
 Address: 751 OTAY LAKES ROAD
 CHULA VISTA, CA 91913
 Telephone: 6192165000
 Local Code: Urban Fringe of Large City
 School Type: Regular Elementary and Secondary Schools
 School Level: High
 Lowest Grade: 09
 Highest Grade: 12
 PBS063864006475
 Public Schools

AY1 80
 NE
 4-6 mi
 25711
 Higher
 Schoolid: 123800
 Name: SOUTHWESTERN COLLEGE
 Address: 900 OTAY LAKES RD
 City: CHULA VISTA
 State: CA
 Telephone: 6194826550
 Sector: 2-year public
 Level: At least 2 but less than 4 years
 Control: Public
 Affiliation: Public
 Has Hospital?: 2
 Open to Pub?: Insitution is open to the public
 Active?: Active - institution active and not a new institution
 Zip: 91910
 COL1 23800
 Colleges



Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database
BA181 NNW 4-6 mi 25932 Lower	Name: SWEETWATER HIGH NCES ID: 063864006495 Address: 2900 HIGHLAND AVE. NATIONAL CITY, CA 91950 Telephone: 6193367009 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: High Lowest Grade: 09 Highest Grade:12	PBS063864006495 Public Schools
BA182 NNW 4-6 mi 25972 Lower	Name: Sweetwater Union High School ID: 250185 Site Type: school Latitude: 32.65900 Longitude: -117.10000	GNS0232803 GNIS Schools
183 NNE 4-6 mi 26309 Higher	Name: HAPPY LITTLE PEOPLE SCHOOL AGE PROG. Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042227 Daycare
NA NNW 4-6 mi 26758 NA	Name1: San Diego Naval Station Name2: Not Reported Name3: Not Reported Feature1: Navy DOD Feature2: Not Reported Feature3: Not Reported URL: Not Reported	CUSA045682 FED_LAND
BB 184 NE 4-6 mi 26991 Higher	Name: SO. BAY FAM. YMCA - TIFFANY ELEM. Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042234 Daycare
BB 185 NE 4-6 mi 27055 Higher	Name: TIFFANY (BURTON C.) ELEMENTARY NCES ID: 060861000879 Address: 1691 ELM HURST ST. CHULA VISTA, CA 91913 Telephone: 6194216300 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 000879 Public Schools

Map ID

Direction

Distance

Distance (ft.)

Elevation

Site

EDR ID

Database

BC186	Name:	Olivewood School	GNS02 12704
NNW	ID:	246895	GNIS Schools
4-6 mi	Site Type:	school	
27252	Latitude:	32.66300	
Lower	Longitude:	-117.10000	

BC187	Name:	CDA-OLIVEWOOD CHILDREN'S CLUB	DAY1 042228
NNW	Address:	Not Reported	Daycare
4-6 mi	City:	Not Reported	
27293	State:	CA	
Lower	Zip:	Not Reported	

BC188	Name:	OLIVEWOOD ELEMENTARY	PBS062667004048
NNW	NCES ID:	062667004048	Public Schools
4-6 mi	Address:	2505 F AVE.	
27304		NATIONAL CITY, CA 91950	
Lower	Telephone:	6193368700	
	Local Code:	Urban Fringe of Large City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade:	Kindergarten	Highest Grade:06	

BD1 89	Name:	LEE ELEMENTARY	PBS063432005498
North	NCES ID:	063432005498	Public Schools
4-6 mi	Address:	6196 CHILDS AVE.	
27404		SAN DIEGO, CA 92139	
Higher	Telephone:	6194752020	
	Local Code:	Large Central City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade:	Kindergarten	Highest Grade:06	

BE190	Name:	NATIONAL SCHOOL DISTRICT CHILD DEVELOPMENT CENTER	DAY1 042222
NNW	Address:	Not Reported	Daycare
4-6 mi	City:	Not Reported	
27421	State:	CA	
Lower	Zip:	Not Reported	

BD191	Name:	Lee School	GNS01 99431
North	ID:	244709	GNIS Schools
4-6 mi	Site Type:	school	
27538	Latitude:	32.67100	
Higher	Longitude:	-117.10000	

Map ID	Direction	Distance	Distance (ft.)	Elevation	Site	EDR ID	Database
BE1 92	NNW	4-6 mi	27546	Higher	Schoolid: A91 00873 Address: 2400 EUCLID AVE County num: 6073 State: CA Zip5: 91950 Phone: 619-267-5560 Hi grde: Grade 12 Locale: Urban fringe of Large City School type: Regular elementary or secondary School level: Combined Affiliation: Christian (no specific denomination) Association: Accelerated Christian Education (ACE) or (School of Tomorrow)	PVTSCHA91 00873	Private Schools
BF193	North	4-6 mi	27665	Higher	Provnum: 056330 Street: 6061 BANBURY ST State: CA Phone: 6194752211 Num Beds: 162 Occupied %: 86 Owner Type: For profit - Corporation Multi Nursing home ownership?: NO Has Resident and Family Councils?: BOTH	SRNH056330	Nursing Homes
194	NNE	4-6 mi	27726	Higher	Name: Bonita School (historical) ID: 1666535 Site Type: school Latitude: 32.66900 Longitude: -117.00000	GNS01 64961	GNIS Schools
195	NNW	4-6 mi	27832	Lower	Provnum: 055954 Street: 220 EAST 24TH STREET State: CA Phone: 6194746741 Num Beds: 98 Occupied %: 90 Owner Type: For profit - Corporation Multi Nursing home ownership?: YES Has Resident and Family Councils?: RESIDENT	SRNH055954	Nursing Homes

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

BF196	Name:	ST. TIMOTHY LUTHERAN COMMUNITY PRESCHOOL	DAY1 042219
North	Address:	Not Reported	Daycare
4-6 mi	City:	Not Reported	
27968	State:	CA	
Higher	Zip:	Not Reported	

197	Name:	Alta School	GNS01 58276
ESE	ID:	238559	GNIS Schools
4-6 mi	Site Type:	school	
28090	Latitude:	32.56800	
Higher	Longitude:	-117.00000	

198	Name:	LIL' BIT OF HEAVEN CHRISTIAN PRESCHOOL	DAY1 042223
NNE	Address:	Not Reported	Daycare
4-6 mi	City:	Not Reported	
28157	State:	CA	
Higher	Zip:	Not Reported	

BC199	Name:	NATIONAL CITY KID'S COLLEGE- INFANT	DAY1 042225
NNW	Address:	Not Reported	Daycare
4-6 mi	City:	Not Reported	
28254	State:	CA	
Higher	Zip:	Not Reported	

BG200	Name:	PENN ELEMENTARY	PBS063432005534
North	NCES ID:	063432005534	Public Schools
4-6 mi	Address:	2797 UTICA DR.	
28255		SAN DIEGO, CA 92139	
Higher	Telephone:	6194795638	
Local Code:		Large Central City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade:		Kindergarten	
Highest Grade:		06	

BE201	Name:	LINCOLN ACRES ELEMENTARY	PBS062667004047
NNW	NCES ID:	062667004047	Public Schools
4-6 mi	Address:	2200 LANOITAN AVE.	
28264		NATIONAL CITY, CA 91950	
Higher	Telephone:	6193368600	
Local Code:		Urban Fringe of Large City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Primary	
Lowest Grade:		Kindergarten	
Highest Grade:		06	

BE202	Name:	LINCOLN ACRES ELEMENTARY PRESCHOOL	DAY1 042220
NNW	Address:	Not Reported	Daycare
4-6 mi	City:	Not Reported	
28265	State:	CA	
Higher	Zip:	Not Reported	

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

BD203
 North
 4-6 mi
 28349
 Higher

Name: Saint Michaels Academy
 ID: 248690
 Site Type: school
 Latitude: 32.67300
 Longitude: -117.10000

GNS022341 0
 GNIS Schools

BD204
 North
 4-6 mi
 28361
 Higher

Schoolid: 00076976
 Address: 2637 HOMEDALE STREET
 County num: 6073
 State: CA
 Zip5: 92139
 Phone: 619-470-4880
 Hi grde: Grade 8
 Locale: Large Central City
 School type: Regular elementary or secondary
 School level: Elementary
 Affiliation: Roman Catholic
 Association: National Catholic Educational Association (NCEA)

Name: ST MICHAEL ACADEMY
 City: SAN DIEGO
 County: SAN DIEGO
 Fips: 6
 Zip4: Not Reported
 Low grade: Prekindergarten
 Gender: Coed

PVTSCH00076976
 Private Schools

205
 NNW
 4-6 mi
 28400
 Lower

Schoolid: 110945
 Name: CALIFORNIA COLLEGE FOR HEALTH SCIENCES
 Address: 2324 Hoover Ave
 City: NATIONAL CITY
 State: CA
 Telephone: 6194774800324
 Sector: 2-year private, for-profit
 Level: At least 2 but less than 4 years
 Control: Private, for-profit
 Affiliation: Private, for-profit
 Has Hospital?: 2
 Open to Pub?: Insitution is open to the public
 Active?: Active - institution active and not a new institution

Zip: 91950

COL1 10945
 Colleges

BD206
 North
 4-6 mi
 28457
 Higher

Name: SAINT MICHAEL PRESCHOOL
 Address: Not Reported
 City: Not Reported
 State: CA
 Zip: Not Reported

DAY1 042217
 Daycare

BG207
 North
 4-6 mi
 28517
 Higher

Name: SAY-PENN EXTENDED DAY PROGRAM
 Address: Not Reported
 City: Not Reported
 State: CA
 Zip: Not Reported

DAY1 042218
 Daycare

Map ID

Direction

Distance

Distance (ft.)

Elevation

Site

EDR ID
Database

BH208	Name:	Granger Junior High School	GNS01871 15
North	ID:	242904	GNIS Schools
4-6 mi	Site Type:	school	
28623	Latitude:	32.67200	
Higher	Longitude:	-117.10000	

BH209	Name:	GRANGER JUNIOR HIGH	PBS063864006482
North	NCES ID:	063864006482	Public Schools
4-6 mi	Address:	2101 GRANGER AVE.	
28675		NATIONAL CITY, CA 91950	
Higher	Telephone:	6194276000	
Local Code:		Urban Fringe of Large City	
School Type:		Regular Elementary and Secondary Schools	
School Level:		Middle	
Lowest Grade: 07	Site Grade: 09		

210	Name:	LA PETITE ACADEMY INCORPORATED	DAY1 042233
NE	Address:	Not Reported	Daycare
4-6 mi	City:	Not Reported	
28718	State:	CA	
Higher	Zip:	Not Reported	

BF21 1	Schoolid:	Large Central City	Gender:	
North	Address:	K9300494	Name:	INTERNATIONAL ELEM
4-6 mi	County num:	5940 WINCHESTER ST	City:	S A N D I E G O
28747	State:	6073	County:	S A N D I E G O
Higher	Zip5:	CA	Fips:	6
	Phone:	92139	Zip4:	Not Reported
	Hi grde:	615-479-2410	Low grade:	Kindergarten
	Locale:	Kindergarten		
	School type:	Early Childhood Program/Day Care Center	Coed	
	School level:	Elementary		
	Affiliation:	Nonsectarian		
	Association:	No Membership Association		

PVTSCHK9300494
Private Schools

RI212	Name:	INTERNATIONAL PRE-SCHOOL /EXTENDED DAY PROGRAM	DAY1042215
North	Address:	Not Reported	Daycare
4-6 mi	City:	Not Reported	
28850	State:	CA	
Higher	Zip:	Not Reported	

BJ213	Name:	Las Palmas School	GNS01 98955
NNW	ID:	244622	GNIS Schools
4-6 mi	Site Type:	school	
29002	Latitude:	32.671 00	
Higher	Longitude:	-117.10000	

Map ID

Direction

Distance

Distance (ft.)

Elevation

Site

EDR ID
Database

BM219
NNW
4-6 mi
29693
Lower

Provnum: 055975
Street: 1889 NATIONAL CITY BLVD.
State: CA
Phone: 6194771176
Num Beds: 75
Occupied %: 80
Owner Type: For profit - Corporation
Multi Nursing home ownership?: NO
Has Resident and Family Councils?: RESIDENT

Name: HILLCREST MANOR SANITARIUM
City: NATIONAL CITY
Zipcode: 91950
Last Insp: 20020130
Num Residents: 60
Description: Participating in Medicare and Medicaid
Within Hosp?: NO

SRNH055975
Nursing Homes

BK220
NNW
4-6 mi
29738
Lower

Name: Highland School
ID: 243451
Site Type: school
Latitude: 32.66900
Longitude: -117.10000

GNS01 90737
GNIS Schools

BI221
North
4-6 mi
29759
Higher

Name: CHILDREN'S PARADISE, THE
Address: Not Reported
City: Not Reported
State: CA
Zip: Not Reported

DAY1042211
Daycare

BM222
NNW
4-6 mi
29927
Lower

Name: Kimball School
ID: 244302
Site Type: school
Latitude: 32.66600
Longitude: -117.10000

GNS0197174
GNIS Schools

BK223
NNW
4-6 mi
30032
Lower
Local Code:
School Type:
School Level:
Lowest Grade: Kindergarten Highest Grade:08

Name: NATIONAL CITY MIDDLE
NCES ID: 063864006489
Address: 1701 D AVE.
NATIONAL CITY, CA 91950
Telephone: 6193367030
Urban Fringe of Large City
Regular Elementary and Secondary Schools
Primary

PBS063864006489
Public Schools



Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

EDR ID
 Database

BM224 Name: KIMBALL ELEMENTARY PBS062667004045
 NNW NCES ID: 062667004045 Public Schools
 4-6 mi Address: 302 W. 18TH ST.
 30108 NATIONAL CITY, CA 91950
 Lower Telephone: 6193368300
 Local Code: Urban Fringe of Large City
 School Type: Regular Elementary and Secondary Schools
 School Level: Primary
 Lowest Grade: Kindergarten Highest Grade:06

~~BM225 Name: KIMBALL STATE PRESCHOOL DAY1 042224
 NNW Address: Not Reported Daycare
 4-6 mi City: Not Reported
 30177 State: CA
 Lower Zip: Not Reported~~

~~226 Name: ECS - HARDING HEAD START DAY1 042226
 NNW Address: Not Reported Daycare
 4-6 mi City: Not Reported
 30186 State: CA
 Lower Zip: Not Reported~~

~~227 Name: SAN DIEGO SCHOOL OF CREATIVE & PBS063432008962
 North NCES ID: 063432008962 Public Schools
 4-6 mi Address: 2425 DUSK DR.
 30472 SAN DIEGO, CA 92139
 Higher Telephone: 6194700555
 Local Code: Large Central City
 School Type: Regular Elementary and Secondary Schools
 School Level: Other
 Lowest Grade: 06 Highest Grade:12~~

PVTSCH0201 1542
 Private Schools

BM228 02011542 Name: SOUTHPORT CHRISTIAN ACADEMY
 NNW 4- 142 E 16TH STREET City:
 6 mi County: SAN DIEGO
 30486 Schoolid: CA Fips: 6
 Lower Address: NATIONAL CITY
 County num: 6073 919 Zip4: Not
 State: Reported 50
 Zip5: 619-474-2834 Low grade: Prekindergarten
 Phone: Grade 12 Gender: Coed
 Hi grde: Urban fringe of Large City
 Locale: Regular elementary or secondary
 School type: Combined
 School level: Christian (no specific denomination)
 Affiliation: Association of Christian Schools International (ACSI)
 Association:



Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database
NA WNW 4-6 mi 30621 NA	Name1: Coronado Naval Amphibious Base Name2: Not Reported Name3: Not Reported Feature1: Navy DOD Feature2: Not Reported Feature3: Not Reported URL: Not Reported	CUSA045684 FED_LAND
BN229 North 4-6 mi 30722 Higher	Name: KIDDIE KOLLEGE LEARNING CENTER-INFANT PROGRAM Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042208 Daycare
BO230 North 4-6 mi 30825 Higher	Name: PARADISE HILLS ELEMENTARY NCES ID: 063432005533 Address: 5816 ALLEGHANY ST. SAN DIEGO, CA 92139 Telephone: 6194793145 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS063432005533 Public Schools
BO231 North 4-6 mi 30916 Higher	Name: PARADISE HILLS STATE PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042205 Daycare
BO232 North 4-6 mi 30971 Higher	Name: Paradise Hills School ID: 247230 Site Type: school Latitude: 32.68000 Longitude: -117.10000	GNS0214279 GNIS Schools
BN233 North 4-6 mi 31154 Higher	Name: PALMER WAY STATE PRESCHOOL Address: Not Reported City: Not Reported State: CA Zip: Not Reported	DAY1 042207 Daycare



Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database
BN234 North 4-6 mi 31208 Higher	Name: PALMER WAY ELEMENTARY NCES ID: 062667004050 Address: 2900 PALMER ST. NATIONAL CITY, CA 91950 Telephone: 6193368900 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS062667004050 Public Schools
235 NNW 4-6 mi 31398 Higher	Name: Palmer Way School ID: 247153 Site Type: school Latitude: 32.68000 Longitude: -117.10000	GNS02 13948 GNIS Schools
236 NNW 4-6 mi 31433 Lower	Schoolid: 109934 Name: BAY VISTA COLLEGE OF BEAUTY Address: 1520 PLAZA BLVD City: NATIONAL CITY State: CA Zip: 91950 Telephone: 6194746607 Sector: Less than 2-year private, for-profit Level: Less than 2 years (below associate) Control: Private, for-profit Affiliation: Private, for-profit Has Hospital?: 2 Open to Pub?: Insitution is open to the public Active?: Active - institution active and not a new institution	COL1 09934 Colleges
237 North 4-6 mi 31464 Higher	Name: ZAMORANO (AGUSTIN VINCENTE) EL NCES ID: 063432008965 Address: 2655 CASEY ST. SAN DIEGO, CA 92139 Telephone: 6192678007 Local Code: Large Central City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS063432008965 Public Schools
238 NNW 4-6 mi 31515 Lower	Name: Saint Marys School ID: 248679 Site Type: school Latitude: 32.67300 Longitude: -117.10000	GNS0223388 GNIS Schools



Map ID Direction Distance Distance (ft.) Elevation	Site	EDR ID Database
239 NNE 4-6 mi 31560 Higher	Name: SUNNYSIDE ELEMENTARY NCES ID: 060861000878 Address: 5430 SAN MIGUEL ROAD BONITA, CA 91902 Telephone: 6194790571 Local Code: Urban Fringe of Large City School Type: Regular Elementary and Secondary Schools School Level: Primary Lowest Grade: Kindergarten Highest Grade:06	PBS060861 000878 Public Schools
NA NE 6-8 mi 32634 NA	Name1: San Diego National Wildlife Refuge Name2: Not Reported Name3: Not Reported Feature1: National Wildlife Refuge FWS Feature2: Not Reported Feature3: Not Reported URL: http://refuges.fws.gov/profiles/index.cfm?id=11720	CUSA045569 FED_LAND
NA ENE 6-8 mi 36014 NA	Name1: San Diego National Wildlife Refuge Name2: Not Reported Name3: Not Reported Feature1: National Wildlife Refuge FWS Feature2: Not Reported Feature3: Not Reported URL: http://refuges.fws.gov/profiles/index.cfm?id=11720	CUSA045569 FED_LAND

Table 5.1D-7 (14 Pages)

CONSOLIDATED TABLE OF OEHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES^b

Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation ($\mu\text{g}/\text{m}^3$)	Date • Value Reviewed [Added]	Chronic Inhalation ($\mu\text{g}/\text{m}^3$)	Date • Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date • Value Reviewed [Added]	Inhalation ϵ Unit Risk ($\mu\text{g}/\text{m}^3$) ⁻¹	Inhalation ^d Cancer Potency Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	Oral Slope Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	M W A F
ACETALDEHYDE	75-07-0			9.0E+00	5/93			2.7E-06	1.0E-02	4/99 [5/93]			1
ACETAMIDE	60-35-5							2.0E-05	7.0E-02	4/99			1
ACROLEIN	107-02-8	1.9E-01	4/99	6.0E-02	1/01								1
ACRYLAMIDE	79-06-1			7.0E-01	1/91			1.3E-03	4.5E+00	4/99 [7/90]			1
ACRYLIC ACID	79-10-7	6.0E+03	4/99	1.0E+00 RfC	1996								1
ACRYLONITRILE	107-13-1			5.0E+00	12/01			2.9E-04	1.0E+00	4/99 [1/91]			1
ALLYL CHLORIDE	107-05-1			1.0E+00 RfC	1996			6.0E-06	2.1E-02	4/99			1
2-AMINOANTHRAQUINONE	117-79-3							9.4E-06	3.3E-02	4/99			1
AMMONIA	7664-41-7	3.2E+03	4/99	2.0E+02	2/00								1
ANILINE	62-53-3			1.0E+00 RfC	1996			1.6E-06	5.7E-03	4/99			1
<i>Antimony Compounds</i>	7440-36-0			2.0E-01 RfC	1996								1
ANTIMONY TRIOXIDE	1309-64-4			2.0E-01 RfC	1996								1
ARSENIC AND COMPOUNDS (INORGANIC) ^{TAC}	7440-38-2 1016 [1015]	1.9E-01 AveP	4/99	3.0E-02	1/01	3.0E-04	10/00	3.3E-03 TAC	1.2E+01	7/90	1.5E+00	10/00	1
ARSINE	7784-42-1	1.6E+02	4/99	5.0E-02 RfC	1996								1
ASBESTOS ^{TAC} 1Z	1332-21-4							1.9E-04 TAC1Z	2.2E+02	3/86			333.33
BENZENE ^{TAC}	71-43-2	1.3E+03 AveP	4/99	6.0E+01	2/00			2.9E-05 ^{TAC}	1.0E-01	1/85			1
BENZIDINE (AND ITS SALTS) <i>values also apply to:</i>	92-87-5			1.0E+01	1/91			1.4E-01	5.0E+02	4/99 [1/91]			1
<i>Benzidine based dyes</i>	1020			1.0E+01	1/91			1.4E-01	5.0E+02	4/99 [1/91]			1
<i>Direct Black 38</i>	1937-37-7			1.0E+01	1/91			1.4E-01	5.0E+02	4/99 [1/91]			1
<i>Direct Blue 6</i>	2602-46-2			1.0E+01	1/91			1.4E-01	5.0E+02	4/99 [1/91]			1
<i>Direct Brown 95 (technical grade)</i>	16071-86-6			1.0E+01	1/91			1.4E-01	5.0E+02	4/99 [1/91]			1
BENZYL CHLORIDE	100-44-7	2.4E+02	4/99	1.2E+01	1/92			4.9E-05	1.7E-01	4/99			1
BERYLLIUM AND COMPOUNDS	7440-41-7 [1021]			7.0E-03	12/01	2.0E-03	12/01	2.4E-03	8.4E+00	4/99 [7/90]			1
BIS(2-CHLOROETHYL)ETHER (Dichloroethyl ether)	111-44-4							7.1E-04	2.5E+00	4/99			1
BIS(CHLOROMETHYL)ETHER	542-88-1							1.3E-02	4.6E+01	4/99 [1/91]			1

CONSOLIDATED TABLE OF OEHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES^b

Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date • Value Reviewed [Added]	Inhalation Unit Risk (µg/m ³) ⁻¹	Inhalation ^c Cancer Potency Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	Oral Slope Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	M W A F
BROMINE AND COMPOUNDS	7726-95-6 [1040]			1.7E+00	1/92								1
BROMINE PENTAFLUORIDE	7789-30-2			1.7E+00	1/92								1
HYDROGEN BROMIDE	10035-10-6			2.4E+01	1/92								1
POTASSIUM BROMATE	7758-01-2			1.7E+00	1/92			1.4E-04	4.9E-01	4/99 [10/93]			1
1,3-BUTADIENE ^{TAC}	106-99-0			2.0E+01	1/01			1.7E-04 ^{TAC}	6.0E-01	7/92			1
CADMIUM AND COMPOUNDS ^{TAC}	7440-43-9 [1045]			2.0E-02	1/01	5.0E-04	10/00	4.2E-03 ^{TAC}	1.5E+01	1/87			1
CARBON DISULFIDE	75-15-0	6.2E+03 AveP	4/99	8.0E+02	5/02								1
CARBON MONOXIDE	630-08-0	2.3E+04	4/99										1
CARBON TETRACHLORIDE ^{TAC} (Tetrachloromethane)	56-23-5	1.9E+03 AveP	4/99	4.0E+01	1/01			4.2E-05 ^{TAC}	1.5E-01	9/87			1
CHLORINATED PARAFFINS	108171-26-2							2.5E-05	8.9E-02	4/99			1
CHLORINE	7782-50-5	2.1E+02	4/99	2.0E-01	2/00								1
CHLORINE DIOXIDE	10049-04-4			6.0E-01	1/01								1
4-CHLORO-O-PHENYLENEDIAMINE	95-83-0							4.6E-06	1.6E-02	4/99			1
2-CHLOROACETOPHENONE	532-27-4			3.0E-02 ^{RIC}	1996								1
CHLOROBENZENE	108-90-7			1.0E+03	1/01								1
CHLORODIFLUOROMETHANE ... (see Fluorocarbons)													
CHLOROFORM ^{TAC}	67-66-3	1.5E+02 AveP	4/99	3.0E+02	4/00			5.3E-06 ^{TAC}	1.9E-02	12/90			1
<i>Chlorophenols</i>	<i>1060</i>												<i>1</i>
2-CHLOROPHENOL	95-57-8			1.8E+01	1/91								1
PENTACHLOROPHENOL	87-86-5			2.0E-01	1/92			5.1E-06	1.8E-02	4/99			1
TETRACHLOROPHENOLS	25167-83-3			8.8E+01	1/92								1
<i>2,3,4,6-Tetrachlorophenol</i>	<i>58-90-2</i>			<i>8.8E+01</i>	<i>1/92</i>								<i>1</i>
2,4,6-TRICHLOROPHENOL	88-06-2							2.0E-05	7.0E-02	4/99 [1/91]			1
CHLOROPICRIN	76-06-2	2.9E+01	4/99	4.0E-01	12/01								1
CHLOROPRENE	126-99-8			1.0E+00	1/92								1
p-CHLORO-o-TOLUIDINE	95-69-2							7.7E-05	2.7E-01	4/99			1
CHROMIUM 6 ^{+TAC} values also apply to:	18540-29-9			2.0E-01	1/01	2.0E-02	10/00	1.5E-01 ^{TAC}	5.1E+02	1/86			1
<i>Barium chromate</i>	<i>10294-40-3</i>			<i>2.0E-01</i>	<i>1/01</i>	<i>2.0E-02</i>	<i>10/00</i>	<i>1.5E-01^{TAC}</i>	<i>5.1E+02</i>	<i>1/86</i>			<i>0.2053</i>
<i>Calcium chromate</i>	<i>13765-19-0</i>			<i>2.0E-01</i>	<i>1/01</i>	<i>2.0E-02</i>	<i>10/00</i>	<i>1.5E-01^{TAC}</i>	<i>5.1E+02</i>	<i>1/86</i>			<i>0.3332</i>

CONSOLIDATED TABLE OF OEHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES ^b

Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date • Value Reviewed [Added]	Inhalation Unit Risk (µg/m ³) ⁻¹	Inhalation ^c Cancer Potency Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	Oral Slope Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	M W A F
<i>Lead chromate</i>	7758-97-6			2.0E-01	1/01	2.0E-02	10/00	1.5E-01 TAG	5.1E+02	1/86			0.1609
<i>Sodium dichromate</i>	10588-01-9			2.0E-01	1/01	2.0E-02	10/00	1.5E-01 TAG	5.1E+02	1/86			0.397
<i>Strontium chromate</i>	7789-06-2			2.0E-01	1/01	2.0E-02	10/00	1.5E-01 TAG	5.1E+02	1/86			0.2554
CHROMIUM TRIOXIDE (as chromic acid mist)	1333-82-0			2.0E-03	1/01	2.0E-02	10/00	1.5E-01 TAC	5.1E+02	1/86			0.52
COPPER AND COMPOUNDS	7440-50-8 [1067]	1.0E+02	4/99	2.4E+00	1/92								1
p-CRESIDINE	120-71-8							4.3E-05	1.5E-01	4/99			1
CRESOLS (mixtures of)	1319-77-3			6.0E+02	1/01								1
m-CRESOL	108-39-4			6.0E+02	1/01								1
o-CRESOL	95-48-7			6.0E+02	1/01								1
p-CRESOL	106-44-5			6.0E+02	1/01								1
CUPFERRON	135-20-6							6.3E-05	2.2E-01	4/99			1
<i>Gyanide Gompounds (inorganic)</i>	57-12-5 1073	3.4E+02	4/99	9.0E+00	4/00								1
HYDROGEN CYANIDE (Hydrocyanic acid)	74-90-8	3.4E+02	4/99	9.0E+00	4/00								1
2,4-DIAMINOANISOLE	615-05-4							6.6E-06	2.3E-02	4/99			1
2,4-DIAMINOTOLUENE	95-80-7							1.1E-03	4.0E+00	4/99			1
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	96-12-8			2.0E-01	1/92			2.0E-03	7.0E+00	4/99 [1/92]			1
p-DICHLOROBENZENE	106-46-7			8.0E+02	1/01			1.1E-05	4.0E-02	4/99 [1/91]			1
3,3 -DICHLOROBENZIDINE	91-94-1							3.4E-04	1.2E+00	4/99 [1/91]			1
1, 1,-DICHLOROETHANE (Ethylidene dichloride)	75-34-3							1.6E-06	5.7E-03	4/99			1
1,1 -DICHLOROETHYLENE ... (see Vinylidene Chloride)													
DI(2-ETHYLHEXYL)PHTHALATE (DEHP)	117-81-7			7.0E+01	1/91			2.4E-06	8.4E-03	4/99 [1/92]	8.4E-03	10/00	1
DIESEL EXHAUST ... (see Particulate Emissions from Diesel-Fueled Engines)													
DIETHANOLAMINE	111-42-2			3.0E+00	12/01								
p-DIMETHYLAMINOAZOBENZENE	60-11-7							1.3E-03	4.6E+00	4/99			1
N,N-DIMETHYL FORMAMIDE	68-12-2			8.0E+01	1/01								1
2,4-DINITROTOLUENE	121-14-2							8.9E-05	3.1E-01	4/99			1
1,4-DIOXANE ^d (1,4-Diethylene dioxide)	123-91-1	3.0E+03	4/99	3.0E+03	4/00			7.7E-06	2.7E-02	4/99 [1/91]			1

CONSOLIDATED TABLE OF OEHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES ^b

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EPICHLOROHYDRIN (1-Chloro-2,3 -epoxypropane)	106-89-8	1.3E+03	4/99	3.0E+00	1/01			2.3E-05	8.0E-02	4/99 [1/92]			1
1,2-EPOXYBUTANE	106-88-7			2.0E+01	1/01								1
ETHYL ACRYLATE	140-88-5			4.8E+01	1/92								1
ETHYL BENZENE	100-41-4			2.0E+03	2/00								1
ETHYL CHLORIDE (Chloroethane)	75-00-3			3.0E+04	4/00								1
ETHYLENE DIBROMIDE ^{TAC} (1,2-Dibromoethane)	106-93-4			8.0E-01	12/01			7.1E-05 TAC	2.5E-01	7/85			1
ETHYLENE DICHLORIDE ^{TAC} (1,2-Dichloroethane)	107-06-2			4.0E+02	1/01			2.1E-05 TAC	7.2E-02	9/85			1
ETHYLENE GLYCOL	107-21-1			4.0E+02	4/00								1
ETHYLENE GLYCOL BUTYL ETHER ... (see Glycol ethers)													
ETHYLENE OXIDE ^{TAC} (1,2-Epoxyethane)	75-21-8			3.0E+01	1/01			8.8E-05 TAC	3.1E-01	11/87			1
ETHYLENE THIOUREA	96-45-7							1.3E-05	4.5E-02	4/99			1
Fluorides	1101	2.4E+02	4/99	1.3E+01	8/03	4.0E-02	8/03						1
HYDROGEN FLUORIDE (Hydrofluoric acid)	7664-39-3	2.4E+02	4/99	1.4E+01	8/03	4.0E-02	8/03						1
FLUOROCARBONS (chlorinated) <i>values also apply to:</i>	1104 [1105]			7.0E+02	1/91								1
<i>Chlorinated fluorocarbon (CFC-113)</i>	76-13-1			7.0E+02	1/91								1
CHLORODIFLUOROMETHANE (Freon 22)	75-45 -6			5.0E+04 RfC	1996								1
<i>Dichlorofluoromethane (Freon 12)</i>	75-43-4			7.0E+02	1/91								1
<i>Trichlorofluoromethane (Freon 11)</i>	75-69-4			7.0E+ 02	1/91								1
<i>Fluorocarbons (brominated)</i>	1103			7.0E+ 02	1/91								1
FORMALDEHYDE ^{TAC}	50-00-0	9.4E+01	4/99	3.0E+00	2/00			6.0E-06 TAC	2.1E-02	3/92			1
GASOLINE VAPORS	1110			2. 1E+03	1/91								1
GLUTARALDEHYDE	111-30-8			8.0E-02	1/01								1
GLYCOL ETHERS	1115												1
ETHYLENE GLYCOL BUTYL ETHER – EGBE	111-76-2	1.4E+04	4/99	2.0E+01	1/92								1
ETHYLENE GLYCOL ETHYL ETHER – EGEE	110-80-5	3.7E+02 AveP	4/99[1/92]	7.0E+01	2/00								1
ETHYLENE GLYCOL ETHYL ETHER ACETATE – EGEEA	111-15-9	1.4E+02 AveP	4/99	3.0E+02	2/00								1

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ETHYLENE GLYCOL METHYL 4 ETHER ACETATE – EGMEA	109-86-	9.3E+01 AveP	4/99	6.0E+01	2/00								1
ETHYLENE GLYCOL METHYL ETHER ACETATE – EGMEA	110-49-6			9.0E+01	2/00								1
HEXACHLOROBENZENE	118-74-1			2.8E+00	7/90			5.1E-04	1.8E+00	4/99 [1/91]			1
HEXACHLOROCYCLOHEXANES (mixed or technical grade)	608-73-1 1120			1.0E+00	1/91	3.0E-04	1/91	1.1E-03	4.0E+00	4/99 [1/91]	4.0E+00	10/00 [1/92]	1
alpha-HEXACHLOROCYCLOHEXANE	319-84-6			1.0E+00	1/91	3.0E-04	1/91	1.1E-03	4.0E+00	4/99 [1/91]	4.0E+00	10/00 [1/92]	1
beta-HEXACHLOROCYCLOHEXANE	319-85-7			1.0E+00	1/91	3.0E-04	1/91	1.1E-03	4.0E+00	4/99 [1/91]	4.0E+00	10/00 [1/92]	1
gamma-HEXACHLOROCYCLOHEXANE (Lindane)	58-89-9			1.0E+00	1/91	3.0E-04	1/91	3.1E-04	1.1E+00	4/99	1.1E+00	10/00	1
HEXACHLOROCYCLOPENTADIENE	77-47-4			2.4E-01	1/91								1
n-HEXANE	110-54-3			7.0E+03	4/00								1
HYDRAZINE	302-01-2			2.0E-01	1/01			4.9E-03	1.7E+01	4/99 [7/90]			1
HYDROCHLORIC ACID (Hydrogen chloride)	7647-01-0	2.1E+03	4/99	9.0E+00	2/00								1
HYDROGEN BROMIDE ... (see Bromine & Compounds)													
HYDROGEN CYANIDE ... (see Cyanide & Compounds)													
HYDROGEN FLUORIDE ... (see Fluorides & Compounds)													
HYDROGEN SELENIDE ... (see Selenium & Compounds)													
HYDROGEN SULFIDE	7783-06-4	4.2E+01	4/99[7/90]	1.0E+01	4/00								1
ISOPHORONE	78-59-1			2.0E+03	12/01								
ISOPROPYL ALCOHOL (Isopropanol)	67-63-0	3.2E+03	4/99	7.0E+03	2/00								1
LEAD AND COMPOUNDS ^{TAC} (inorganic)	7439-92-1 1128							1.2E-05 ^{TAC}	4.2E-02	4/97	8.5E-03	10/00	1
Lead acetate	301-04-2							1.2E-05 ^{TAG}	4.2E-02	4/97	8.5E-03	10/00	0.637
Lead phosphate	7446-27-7							1.2E-05 ^{TAG}	4.2E-02	4/97	8.5E-03	10/00	0.7659
Lead subacetate	1335-32-6							1.2E-05 ^{TAG}	4.2E-02	4/97	8.5E-03	10/00	0.7696
LINDANE ... (see gamma-Hexachlorocyclohexane)													
MALEIC ANHYDRIDE	108-31-6			7.0E-01	12/01								1

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MANGANESE AND COMPOUNDS	7439-96-5 [1132]			2.0E-01	4/00									1
MERCURY AND COMPOUNDS (INORGANIC)	7439-97-6 [1133]	1.8E+00	4/99	9.0E-02	2/00	3.0E-04	10/00 [1/92]							1
<i>Mercuric chloride</i>	7487-94-7	1.8E+00	4/99	9.0E-02	2/00	3.0E-04	10/00 [1/92]							1
MERCURY AND COMPOUNDS (ORGANIC) values also apply to:	N/A													1
METHYL MERCURY	593-74-8			1.0E+00	1/91									1
METHANOL	67-56-1	2.8E+04	4/99	4.0E+03	4/00									1
METHYL BROMIDE (Bromomethane)	74-83-9	3.9E+03	4/99	5.0E+00	2/00									1
METHYL tertiary-BUTYL ETHER	1634-04-4			8.0E+03	2/00			2.6E-07	1.8E-03	11/99				1
METHYL CHLOROFORM (1,1, 1-Trichloroethane)	71-55-6	6.8E+04	4/99	1.0E+03	2/00									1
METHYL ETHYL KETONE (2-Butanone)	78-93-3	1.3E+04	4/99	1.0E+03 RfC	1996									1
METHYL ISOCYANATE	624-83-9			1.0E+00	12/01									1
METHYL MERCURY ... (see Mercury & Compounds)														
METHYL METHACRYLATE	80-62-6			9.8E+02	1/92									1
4,4'-METHYLENE BIS (2-CHLOROANILINE) (MOCA)	101-14-4							4.3E-04	1.5E+00	4/99				1
METHYLENE CHLORIDE TAC (Dichloromethane)	75-09-2	1.4E+04	4/99	4.0E+02	2/00			1.0E-06 TAC	3.5E-03	7/89				1
4,4'-METHYLENE DIANILINE (AND ITS DICHLORIDE)	101-77-9			2.0E+01	12/01			4.6E-04	1.6E+00	4/99	1.6E+00	10/00		1
METHYLENE DIPHENYL ISOCYANATE	101-68-8			7.0E-01	1/01									1
MICHLER'S KETONE (4,4' -Bis(dimethylamino)benzophenone)	90-94-8							2.5E-04	8.6E-01	4/99				1
MINERAL FIBERS (<1% FREE SILICA)	N/A			2.4E+01	1/92									1
<i>Ceramic fibers (man-made)</i>	1056			2.4E+01	1/92									1
<i>Glasswool (man-made fibers)</i>	1111			2.4E+01	1/92									1
<i>Mineral fibers (fine: man-made)</i>	1136			2.4E+01	1/92									1
<i>Rockwool (man-made fibers)</i>	1168			2.4E+01	1/92									1
<i>Slagwool (man-made fibers)</i>	1181			2.4E+01	1/92									1
N-NITROSODI-n-BUTYLAMINE	924-16-3							3.1E-03	1.1E+01	4/99 [1/92]				1
N-NITROSODI-n-PROPYLAMINE	621-64-7							2.0E-03	7.0E+00	4/99 [1/91]				1
N-NITROSODIETHYLAMINE	55-18-5							1.0E-02	3.6E+01	4/99 [1/91]				1

CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES ^b

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N-NITROSODIMETHYLAMINE	62-75-9							4.6E-03	1.6E+01	4/99 [1/91]			1
N-NITROSODIPHENYLAMINE	86-30-6							2.6E-06	9.0E-03	4/99			1
N-NITROSO-N-METHYLETHYLAMINE	10595-95-6							6.3E-03	2.2E+01	4/99 [7/90]			1
N-NITROSOMORPHOLINE	59-89-2							1.9E-03	6.7E+00	4/99 [7/92]			1
N-NITROSOPIPERIDINE	100-75-4							2.7E-03	9.4E+00	4/99 [7/92]			1
N-NITROSOPYRROLIDINE	930-55-2							6.0E-04	2.1E+00	4/99 [7/90]			1
NAPHTHALENE ... (see Polycyclic aromatic hydrocarbons)													
NICKEL AND COMPOUNDS ^{TAC} <i>values also</i>	7440-02-0 [1145]	6.0E+00	4/99	5.0E-02	2/00	5.0E-02	10/00	2.6E-04 TAC	9.1E-01	8/91			1
<i>Nickel acetate</i>	373-02-4	6.0E+00	4/99	5.0E-02	2/00	5.0E-02	10/00	2.6E-04 TAG	9.1E-01	8/91			0.3321
<i>Nickel carbonate</i>	3333-67-3	6.0E+00	4/99	5.0E-02	2/00	5.0E-02	10/00	2.6E-04 TAG	9.1E-01	8/91			0.4945
<i>Nickel carbonyl</i>	13463-39-3	6.0E+00	4/99	5.0E-02	2/00	5.0E-02	10/00	2.6E-04 TAG	9.1E-01	8/91			0.3438
<i>Nickel hydroxide</i>	12054-48-7	6.0E+00	4/99	5.0E-02	2/00	5.0E-02	10/00	2.6E-04 TAG	9.1E-01	8/91			0.6332
<i>Nickelocene</i>	1271-28-9	6.0E+00	4/99	5.0E-02	2/00	5.0E-02	10/00	2.6E-04 TAG	9.1E-01	8/91			0.4937
NICKEL OXIDE	1313-99-1	6.0E+00	4/99	1.0E-01	2/00	5.0E-02	10/00	2.6E-04 TAC	9.1E-01	8/91			0.7859
<i>Nickel refinery dust from the pyrometallurgical process</i>	1146	6.0E+00	4/99	5.0E-02	2/00	5.0E-02	10/00	2.6E-04 TAG	9.1E-01	8/91			1
<i>Nickel subsulfide</i>	12035-72-2	6.0E+00	4/99	5.0E-02	2/00	5.0E-02	10/00	2.6E-04 TAG	9.1E-01	8/91			0.2443
NITRIC ACID	7697-37-2	8.6E+01	4/99										1
NITROBENZENE	98-95-3			1.7E+00	1/91								1
NITROGEN DIOXIDE	10102-44-0	4.7E+02	4/99[1/92]	4.7E+02	1/92								1
2-NITROPROPANE	79-46-9			2.0E+01	1/92								1
p-NITROSODIPHENYLAMINE	156-10-5							6.3E-06	2.2E-02	4/99			1
OZONE	10028-15-6	1.8E+02	4/99[1/92]	1.8E+02	1/92								1
PARTICULATE EMISSIONS FROM DIESEL-FUELED ENGINES ^{TAC} η	9901			5.0E+00 TAC	8/98			3.0E-04 TAC	1.1E+00	8/98			1
PENTACHLOROPHENOL ... (see Chlorophenols)													
PERCHLOROETHYLENE ^{TAC} (Tetrachloroethylene)	127-18-4	2.0E+04	4/99	3.5E+01 TAC	10/91			5.9E-06 TAC	2.1E-02	10/91			1
PHENOL	108-95-2	5.8E+03	4/99	2.0E+02	4/00								1

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PHOSGENE	75-44-5	4.0E+00	4/99										1
PHOSPHINE	7803-51-2			8.0E-01	9/02								1
PHOSPHORIC ACID	7664-38-2			7.0E+00	2/00								1
PHOSPHORUS (WHITE)	7723-14-0			7.0E-02	1/91								1
PHTHALIC ANHYDRIDE	85-44-9			2.0E+01	1/01								1
PCB (POLYCHLORINATED BIPHENYLS) (unspeciated mixture) [lowest risk] *	1336-36-3			1.2E+00	1/91	2.0E-05 RD	1996	2.0E-05	7.0E-02	4/99	7.0E-02	10/00	1
PCB (POLYCHLORINATED BIPHENYLS) (unspeciated mixture) [low risk] *	1336-36-3			1.2E+00	1/91	2.0E-05 RD	1996	1.1E-04	4.0E-01*		4.0E-01*		1
PCB (POLYCHLORINATED BIPHENYLS) (unspeciated mixture) [high risk] *	1336-36-3			1.2E+00	1/91	2.0E-05 RD	1996	5.7E-04	2.0E+00	4/99	2.0E+00	10/00	1
PCB (POLYCHLORINATED BIPHENYLS) (speciated)													
3,3',4,4'-TETRACHLOROBIPHENYL (PCB 77)	32598-13-3			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
3,4,4',5 -TETRACHLOROBIPHENYL (PCB 81)	70362-50-4			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
2,3,3',4,4'-PENTACHLOROBIPHENYL (PCB 105)	32598-14-4			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
2,3,4,4',5 -PENTACHLOROBIPHENYL (PCB 114)	74472-37-0			8.0E-02	8/03	2.0E-05	8/03	1.9E-02	6.5E+01	8/03	6.5E+01	8/03	1
2,3',4,4',5 -PENTACHLOROBIPHENYL (PCB 118)	31508-00-6			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
2,3',4,4',5'-PENTACHLOROBIPHENYL (PCB 123)	65510-44-3			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
3,3',4,4',5 -PENTACHLOROBIPHENYL (PCB 126)	57465-28-8			4.0E-04	8/03	1.0E-07	8/03	3.8E+00	1.3E+04	8/03	1.3E+04	8/03	1
2,3,3',4,4',5 -HEXACHLOROBIPHENYL (PCB 156)	38380-08-4			8.0E-02	8/03	2.0E-05	8/03	1.9E-02	6.5E+01	8/03	6.5E+01	8/03	1
2,3,3',4,4',5'-HEXACHLOROBIPHENYL (PCB 157)	69782-90-7			8.0E-02	8/03	2.0E-05	8/03	1.9E-02	6.5E+01	8/03	6.5E+01	8/03	1
2,3',4,4',5,5'-HEXACHLOROBIPHENYL (PCB 167)	52663-72-6			4.0E+00	8/03	1.0E-03	8/03	3.8E-04	1.3E+00	8/03	1.3E+00	8/03	1
3,3',4,4',5,5'-HEXACHLOROBIPHENYL (PCB 169)	32774-16-6			4.0E-03	8/03	1.0E-06	8/03	3.8E-01	1.3E+03	8/03	1.3E+03	8/03	1
2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (PCB 189)	39635-31-9			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1

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Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date • Value Reviewed [Added]	Inhalation Unit Risk (µg/m ³) ⁻¹	Inhalation ^c Cancer Potency Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	Oral Slope Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	M W A F
POLYCHLORINATED DIBENZO-P-DIOXINS (PCDD) (Treated as 2,3,7,8-TCDD for HRA) _{TAC •}	1085 1086			4.0E-05	2/00	1.0E-08	10/00	3.8E+01 TAC	1.3E+05	8/86	1.3E+05 TAC	8/86	1
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN ^{TAC}	1746-01-6			4.0E-05	2/00	1.0E-08	10/00	3.8E+01 TAC	1.3E+05	8/86	1.3E+05 TAC	8/86	1
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	40321-76-4			4.0E-05	8/03	1.0E-08	8/03	3.8E+01	1.3E+05	8/03	1.3E+05	8/03	1
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	39227-28-6			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	57653-85-7			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	19408-74-3			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	35822-46-9			4.0E-03	2/00	1.0E-06	10/00	3.8E-01	1.3E+03	4/99	1.3E+03	10/00	1
1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN	3268-87-9			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
POLYCHLORINATED DIBENZOFURANS (PCDF) _{TAC •} (Treated as 2,3,7,8-TCDD for HRA)	1080			4.0E-05	2/00	1.0E-08	10/00	3.8E+01 TAC	1.3E+05	8/86	1.3E+05 TAC	8/86	1
2,3,7,8-TETRACHLORODIBENZOFURAN	5120-73-19			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,7,8-PENTACHLORODIBENZOFURAN	57117-41-6			8.0E-04	2/00	2.0E-07	10/00	1.9E+00	6.5E+03	4/99	6.5E+03	10/00	1
2,3,4,7,8-PENTACHLORODIBENZOFURAN	57117-31-4			8.0E-05	2/00	2.0E-08	10/00	1.9E+01	6.5E+04	4/99	6.5E+04	10/00	1
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	70648-26-9			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	57117-44-9			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	72918-21-9			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	60851-34-5			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	67562-39-4			4.0E-03	2/00	1.0E-06	10/00	3.8E-01	1.3E+03	4/99	1.3E+03	10/00	1
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	55673-89-7			4.0E-03	2/00	1.0E-06	10/00	3.8E-01	1.3E+03	4/99	1.3E+03	10/00	1
1,2,3,4,6,7,8,9-OCTACHLORODIBENZOFURAN	39001-02-0			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1

CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES ^b

Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date • Value Reviewed [Added]	Inhalation Unit Risk (µg/m ³) ⁻¹	Inhalation ^c Cancer Potency Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	Oral Slope Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	M W A F
POLYCYCLIC AROMATIC HYDROCARBON (PAH) [Treated as B(a)P for HRA] ^c	1150 1151							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
BENZ(A)ANTHRACENE ^c	56-55-3							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
BENZO(A)PYRENE ^c	50-32-8							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
BENZO(B)FLUORANTHENE ^c	205-99-2							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
BENZO(J)FLUORANTHENE ^c	205-82-3							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
BENZO(K)FLUORANTHENE ^c	207-08-9							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
CHRYSENE ^c	218-01-9							1.1E-05	3.9E-02	4/99 [4/94]	1.2E-01	10/00 [4/94]	1
DIBENZ(A,H)ACRIDINE ^c	226-36-8							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
DIBENZ(A,H)ANTHRACENE ^c	53-70-3							1.2E-03	4.1E+00	4/99 [4/94]	4.1E+00	10/00 [4/94]	1
DIBENZ(A,J)ACRIDINE ^c	224-42-0							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
DIBENZO(A,E)PYRENE ^c	192-65-4							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
DIBENZO(A,H)PYRENE ^c	189-64-0							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
DIBENZO(A,I)PYRENE ^c	189-55-9							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
DIBENZO(A,L)PYRENE ^c	191-30-0							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
7H-DIBENZO(C,G)CARBAZOLE ^c	194-59-2							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
⁷¹² DIMETHYLBENZ(A)ANTHRACENE ^c	57-97-6							7.1E-02	2.5E+02	4/99 [4/94]	2.5E+02	10/00 [4/94]	1
1,6-DINITROPYRENE ^c	42397-64-8							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
1,8-DINITROPYRENE ^c	42397-65-9							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
INDENO(1,2,3-C,D)PYRENE ^c	193-39-5							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
3-METHYLCHOLANTHRENE ^c	56-49-5							6.3E-03	2.2E+01	4/99 [4/94]	2.2E+01	10/00 [4/94]	1
5-METHYLCHRYSENE ^c	3697-24-3							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
NAPHTHALENE	91-20-3			9.0E+00	4/00			3.4E-05	1.2E-01	8/04			1

CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES ^b

Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date • Value Reviewed [Added]	Inhalation Unit Risk (µg/m ³) ⁻¹	Inhalation ^c Cancer Potency Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	Oral Slope Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	M W A F
5-NITROACENAPHTHENE'	602-87-9							3.7E-05	1.3E-01	4/99 [4/94]	1.3E-01	10/00 [4/94]	1
6-NITROCHRYSENE'	7496-02-8							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
2-NITROFLUORENE'	607-57-8							1.1E-05	3.9E-02	4/99 [4/94]	1.2E-01	10/00 [4/94]	1
1-NITROPYRENE '	5522-43-0							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
4-NITROPYRENE'	57835-92-4							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
POTASSIUM BROMATE.... ... (see Bromine & Compounds)													
1,3-PROPANE SULTONE	1120-71-4							6.9E-04	2.4E+00	4/99			1
PROPYLENE (PROPENE)	115-07-1			3.0E+03	4/00								1
PROPYLENE GLYCOL MONOMETHYL 2	107-98-			7.0E+03	2/00								1
PROPYLENE OXIDE	75-56-9	3.1E+03	4/99	3.0E+01	2/00			3.7E-06	1.3E-02	4/99 [7/90]			1
SELENIUM AND COMPOUNDS	7782-49-2 [1170]			2.0E+01	12/01								1
HYDROGEN SELENIDE	7783-07-5	5.0E+00	4/99										1
<i>Selenium sulfide</i>	7446-34-6			2.0E+01	12/01								1
SILICA [CRYSTALLINE, RESPIRABLE]	7631 -86-9			3.0E+00	2/05								1
SODIUM HYDROXIDE	1310-73-2	8.0E+00	4/99	4.8E+00	7/90								1
STYRENE	100-42-5	2.1E+04	4/99	9.0E+02	4/00								1
SULFATES	9960	1.2E+02	4/99	2.5E+01	1/92								1
SULFUR DIOXIDE	7446-09-5	6.6E+02	4/99[1/92]	6.6E+02	1/92								1
SULFURIC ACID AND OLEUM	7664-93-9	1.2E+02	4/99	1.0E+00	12/01								1
<i>SULFURIC ACID</i>	7664 -93-9	1.2E+ 02	4/99	1.0E+00	12/0 1								1
<i>SULFUR TRIOXIDE</i>	7446-71-9	1.2E+02	4/99										1
<i>OLEUM</i>	8014-95-7	1.2E+02	4/99	1.0E+00	12/01								1
1,1,2,2-TETRACHLOROETHANE	79-34-5							5.8E-05	2.0E-01	4/99			1
TETRACHLOROPHENOLS ... (see Chlorophenols)													
2,4,5 -TRICHLOROPHENOL ... (see Chlorophenols)													
2,4,6-TRICHLOROPHENOL ... (see Chlorophenols)													
THIOACETAMIDE	62-55-5							1.7E-03	6.1E+00	4/99			1
TOLUENE	108-88-3	3.7E+04	4/99	3.0E+02	4/00								1

CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES ^b

Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					M W A F
		Acute Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Inhalation (µg/m ³)	Date • Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date • Value Reviewed [Added]	Inhalation Unit Risk (µg/m ³) ⁻¹	Inhalation ^c Cancer Potency Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	Oral Slope Factor (mg/kg-d) ⁻¹	Date • Value Reviewed [Added]	
<i>Toluene diisocyanates</i>	264 71-62-5 1204			7.0E-02	1/01			1.1E-05	3.9E-02	4/99			1
TOLUENE-2,4-DIISOCYANATE	584-84-9			7.0E-02	1/01			1.1E-05	3.9E-02	4/99			1
TOLUENE-2,6-DIISOCYANATE	91-08-7			7.0E-02	1/01			1.1E-05	3.9E-02	4/99			1
1,1,2-TRICHLOROETHANE (Vinyl trichloride)	79-00-5							1.6E-05	5.7E-02	4/99			1
TRICHLOROETHYLENE ^{TAC}	79-01-6			6.0E+02	4/00			2.0E-06 TAC	7.0E-03	10/90			1
TRIETHYLAMINE	121-44-8	2.8E+03	4/99	2.0E+02	9/02								1
URETHANE (Ethyl carbamate)	51-79-6							2.9E-04	1.0E+00	4/99 [7/90]			1
<i>Vanadium Compounds</i>	<i>N/A</i>												1
<i>Vanadium (fume or dust)</i>	7440-62-2	3.0E+01	4/99										1
VANADIUM PENTOXIDE	1314-62-1	3.0E+01	4/99										1
VINYL ACETATE	108-05-4			2.0E+02	12/01								1
VINYL BROMIDE	593-60-2			7.0E+00 RfC	1996								1
VINYL CHLORIDE ^{TAC} (Chloroethylene)	75-01-4	1.8E+05	4/99	2.6E+01	7/90			7.8E-05 TAC	2.7E-01	12/90			1
VINYLDENE CHLORIDE (1, 1-Dichloroethylene)	75-35-4			7.0E+01	1/01								1
XYLENES (mixed isomers)	1330 -20-7 1210	2.2E+04	4/99	7.0E+02	4/00								1
m-XYLENE	108-38-3	2.2E+04	4/99	7.0E+02	4/00								1
o-XYLENE	95-47-6	2.2E+04	4/99	7.0E+02	4/00								1
p-XYLENE	106-42-3	2.2E+04	4/99	7.0E+02	4/00								1
ZINC AND COMPOUNDS	7440-66-6 [1211]			3.5E+01	7/90								1
<i>Zinc oxide</i>	1314-13-2			3.5E+01	7/90								0.8034

CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES ^b

Purpose:	<p>The purpose of this reference table is to provide a quick list of all health values that have been approved by the Office of Environmental Health Hazard Assessment (OEHHA) and the Air Resources Board (ARB) for use in facility health risk assessments conducted for the AB 2588 Air Toxics Hot Spots Program. The OEHHA has developed and adopted new risk assessment guidelines that update and replace the California Air Pollution Control Officers Association's (CAPCOA) <i>Air Toxics "Hot Spots" Program Revised 1992 Risk Assessment Guidelines, October 1993</i>. The OEHHA has adopted five technical support documents for these guidelines.</p> <p>This table lists the OEHHA adopted inhalation and oral cancer slope factors, noncancer acute Reference Exposure Levels (RELs), and inhalation and oral noncancer chronic RELs. In addition, it lists the substances in Appendix A-I (<i>Substances For Which Emissions Must Be Quantified</i>) and Appendix F (<i>Criteria For Inputs For Risk Assessment Using Screening Air Dispersion Modeling</i>) of the ARB's <i>Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines (EICG) (July 1997)</i>. OEHHA is still in the process of adopting new noncancer chronic RELs. Therefore, new health values will periodically be added to, or deleted from, this table. Users of this table are advised to monitor the OEHHA website (www.oehha.ca.gov) for any updates to the health values.</p>
b	Substances written in <i>italics</i> do not have explicit OEHHA approved health values, but are included in this table to clarify applicability of OEHHA adopted health effects values to individual or grouped substances listed in the <i>Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines</i> , Appendix A-I list of " <i>Substances For Which Emissions Must Be Quantified</i> ".
V	Chemical Abstract Service Number (CAS): For chemical groupings and mixtures where a CAS number is not applicable, the 4-digit code used in the <i>Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines (EICG) Report</i> is listed. The 4-digit codes enclosed in brackets [] are codes that have been phased out, but may still appear on previously reported Hot Spots emissions. For information on the origin and use of the 4-digit code, see the EICG report.
u	<p>Date Value Reviewed [Added]: These columns list the date that the health value was last reviewed by OEHHA and the Scientific Review Panel, and/or approved for use in the AB 2588 Air Toxics Hot Spots Program. If the health value is unchanged since it was first approved for use in the Hot Spots Program, then the date that the value was first approved for use by CAPCOA is listed within the brackets [].</p> <ul style="list-style-type: none"> • April 1999 is listed for the cancer potency values and noncancer acute RELs, which have been adopted by the OEHHA as part of the AB 2588 Hot Spot Risk Assessment Guidelines. • February 2000, April 2000, January 2001, and December 2001 are listed for the first set of 22, the second set of 16, the third set of 22, and the fourth set of 12 noncancer chronic RELs, respectively. The chronic REL for carbon disulfide was adopted in May 2002. Chronic RELs for phosphine and triethylamine were adopted in September 2002. Chronic RELs for fluorides including hydrogen fluoride were adopted August 2003. Chronic REL for silica [crystalline respirable] was adopted February 2005. • October 2000 is listed for the oral chronic RELs and oral cancer slope factors. 1996 is listed for the U.S. EPA Reference Concentrations. Dates of 1990-1992 and 1996 are listed for chronic RELs that may eventually be dropped or replaced. • Cancer potency value adopted for naphthalene in August 2004. • For the substances identified as Toxic Air Contaminants, the Air Resources Board hearing date is listed. The dates for acetaldehyde, benzo[a]pyrene, and methyl tertiary-butyl ether represent the dates the values were approved by the Scientific Review Panel.
c	Inhalation cancer potency factor: The "unit risk factor" has been replaced in the new risk assessment algorithms by a factor called the "inhalation cancer potency factor". Inhalation cancer potency factors are expressed as units of inverse dose [i.e., (mg/kg-day) ⁻¹]. They were derived from unit risk factors [units = (ug/m ³ -h) ⁻¹] by assuming that a receptor weighs 70 kilograms and breathes 20 cubic meters of air per day. The inhalation potency factor is used to calculate a potential inhalation cancer risk using the new risk assessment algorithms defined in the OEHHA, <i>Air Toxics Hot Spots Program; Part IV; Technical Support Document for Exposure Assessment and Stochastic Analysis (September 2000)</i> .
*	<p>Molecular Weight Adjustment Factor: Molecular weight adjustment factors (MWF) are only to be used when a toxic metal has a cancer potency factor. For most of the Hot Spots toxic metals, the OEHHA cancer potency factor applies to the weight of the toxic metal atom contained in the overall compound. Some of the Hot Spots compounds contain various elements along with the toxic metal atom (e.g., "Nickel hydroxide", CAS number 12054-48-7, has a formula of H₂NiO₂). Therefore, an adjustment to the reported pounds of the overall compound is needed before applying the OEHHA cancer potency factor for "Nickel and compounds" to such a compound. This ensures that the cancer potency factor is applied only to the fraction of the overall weight of the emissions that are associated with health effects of the metal. In other cases, the Hot Spots metals are already reported as the metal atom equivalent (e.g., CAS 7440-02-0, "Nickel"), and these cases do not use any further molecular weight adjustment. (Refer to Note [7] in Appendix A, List of Substances in the EICG Report for further information on how the emissions of various Hot Spots metal compounds are reported.) The appropriate molecular weight adjustment factors (MWF) to be used along with the OEHHA cancer potency factors for Hot Spots metals can be found in the MWF column of this table.</p> <p>So, for example, assume 100 pounds of "Nickel hydroxide" emissions are reported under CAS number 12054-48-7. To get the Nickel atom equivalent of these emissions, multiply by the listed MWF (0.6332) for Nickel hydroxide:</p> <ul style="list-style-type: none"> • 100 pounds x 0.6332 = 63.32 pounds of Nickel atom equivalent <p><i>This step should be completed prior to applying the OEHHA cancer potency factor for "Nickel and compounds" in a calculation for a prioritization score or risk assessment calculation. (For more information see Chapter 8 of OEHHA's document, <i>The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments</i>.)</i></p> <p>Note: The value listed in the MWF column for Asbestos is not a molecular weight adjustment. This is a conversion factor for adjusting mass to fibers or structures. See Appendix C of OEHHA's document <i>The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments</i> for more information on Asbestos, or see the EICG report for reporting guidance. Also see the Asbestos footnote (designated by the symbol 1Z)</p>

CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES^b

N/A	Not Applicable
RfC/RfD	United States Environmental Protection Agency (U.S. EPA) Reference Concentrations (RfCs) and oral Reference Doses (RfDs) from the U.S. EPA Integrated Risk Information System (1996) have been added if the U.S. EPA health value and/or endpoint was different from the 1993 CAPCOA value or endpoint and OEHHA has not adopted a new value as part of the Hot Spot Risk Assessment Guidelines. The RfCs and RfDs listed meet the criteria of Appendix F of the Air Resources Board's Emission Inventory Criteria and Guidelines Report effective July 1, 1997. These RfC/RfDs may be replaced by new OEHHA values in the future.
TAC	Toxic Air Contaminant: The Air Resources Board has identified this substance as a Toxic Air Contaminant.
AveP	The averaging period of noncancer acute RELs is generally a one-hour exposure. However, some are based on several hour exposure for reproductive/developmental endpoints (see section 1.6 of OEHHA's technical support document for <i>The Determination of Acute Reference Exposure Levels for Airborne Toxicants, March 1999</i>). Typically the RELs for the following substances are compared to modeled emission concentrations of the same duration rather than maximum one-hour concentrations (e.g., a 4-hour REL should be compared to the maximum 4-hour average concentration from the air dispersion model). 4-Hour: Arsenic and Inorganic Arsenic Compounds 6-Hour: Benzene, Carbon disulfide, Ethylene glycol monoethyl ether, Ethylene glycol monoethyl ether acetate, Ethylene glycol monomethyl ether 7-Hour: Carbon tetrachloride, Chloroform
I	Asbestos: The units for the Inhalation Cancer Potency factor for asbestos are (100 PCM fibers/m ³) ⁻¹ . A conversion factor of 100 fibers/0.003 µg can be multiplied by a receptor concentration of asbestos expressed in µg/m ³ . Unless other information necessary to estimate the concentration (fibers/m ³) of asbestos at receptors of interest is available. A unit risk factor of 1.9 E 10 ⁻⁴ (1g/m ³) ⁻¹ and an inhalation cancer potency factor of 2.2 E 10 ⁻² (mg/kg BW * day) ⁻¹ are available. For more information on asbestos quantity conversion factors, see Appendix C of OEHHA's <i>The Air Toxics Hot Spots Program Risk Assessment Guidelines; Part II; Technical Support Document for Describing Available Cancer Potency Factors</i> , and Appendix C of OEHHA's document <i>The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments</i> .
Ø	Hexavalent Chromium: The oral cancer slope factor for chromium 6+ and compounds has been withdrawn by the Office of Environmental Health Hazard Assessment.
W	Inorganic Lead: Inorganic Lead was identified by the Air Resources Board as a Toxic Air Contaminant in April 1997. Since information on noncancer health effects show no identified threshold, no Reference Exposure Level has been developed. The document, <i>Risk Management Guidelines for New, Modified, and Existing Sources of Lead, March 2001</i> , has been developed by ARB and OEHHA staff for assessing noncancer health impacts from sources of lead. See Appendix F of OEHHA's document <i>The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments</i> for an overview of how to evaluate noncancer impacts from exposure to lead using these risk management guidelines.
V	Polycyclic Aromatic Hydrocarbons (PAHs): These substances are PAH or PAH-derivatives that have OEHHA-developed Potency Equivalency Factors (PEFs) which were approved by the Scientific Review Panel in April 1994 (see ARB document entitled <i>Benzo[a]pyrene as a Toxic Air Contaminant</i>). PAH inhalation slope factors listed here have been adjusted by the PEFs. See Appendix G of OEHHA's document <i>The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments</i> for more information. See section 8.2.3 of OEHHA's <i>The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments</i> for conducting health risks when total (unspeciated) PAHs are reported.
H	Polychlorinated Biphenyls: (unspeciated mixtures) Lowest Risk: For use in cases where congeners with more than four chlorines comprise less than one-half percent of total polychlorinated biphenyls. High Risk: For use in cases where congeners with more than four chlorines do not comprise less than one-half percent of total polychlorinated biphenyls. Low Risk: This number would not ordinarily be used in the Hot Spots program. Chronic Oral: The chronic oral value is U.S. EPA's 1996 oral Reference Dose for Aroclor-1 254. Polychlorinated Biphenyls (speciated): Values calculated using WHO ₉₇ TEF procedure. See OEHHA memo dated August 29, 2003.
•	Polychlorinated Dibenzo- <i>p</i> -dioxins and Polychlorinated Dibenzofurans (also referred to as chlorinated dioxins and dibenzofurans): The OEHHA has adopted the World Health Organization 1997 (WHO-97) Toxicity Equivalency Factor scheme for evaluating the cancer risk due to exposure to samples containing mixtures of polychlorinated dibenzo- <i>p</i> -dioxins (PCDD) and polychlorinated dibenzofurans (PCDF) and determining cancer risks for a number of specific PCB congeners. See Appendix A of OEHHA's <i>Technical Support Document For Describing Available Cancer Potency Factors</i> for more information about the scheme. See Appendix E of OEHHA's <i>The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments</i> for the methodology for calculating 2,3,7,8-equivalents for PCDD, PCDFs and a number of specific PCB congeners. See section 8.2.3 of OEHHA's <i>The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments</i> for conducting health risks when total (unspeciated) chlorinated dioxins and furans are reported.
n	Particulate Emissions from Diesel-Fueled Engines: The inhalation cancer potency factor and chronic REL were derived from whole diesel exhaust and should be used only for impacts from the inhalation pathway. The inhalation impacts from speciated emissions from diesel-fueled engines are already accounted for in the inhalation cancer potency factor and REL. However, at the discretion of the risk assessor, speciated emissions from diesel-fueled engines may be used to estimate acute noncancer health impacts or the contribution to cancer risk or chronic noncancer health impacts for the non-inhalation exposure pathway. See Appendix D of OEHHA's document <i>The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments</i> for more information.

Table last updated: April 25, 2005