

# San Diego Hazardous Material Commodity Flow Study



# **San Diego:**

# **Hazardous Material Commodity Flow Study**

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US/Mexico Border Program  
Chemical Emergency Prevention and Preparedness Office  
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## Preface

This study was conducted by the U.S. Environmental Protection Agency, Region 9, in order to assist in chemical emergency planning and prevention efforts at the US/Mexico border. The cities of San Diego, California and Tijuana, Baja California are one of the six Sister City pairs on Region 9's border with Mexico under USEPA's Border XXI Program. More details about USEPA's Border XXI Program are available at <http://www.epa.gov/usmexicoborder/ef.htm>.

A better understanding of the chemical safety risks posed by transportation in San Diego County would enable federal, state and local officials to make more informed decisions on the allocation of resources and the management of hazardous substances in the community. Decisions on zoning, traffic lights, traffic routes, and traffic schedules could be more tailored to actual chemical risks. Emergency responder work schedules, staff levels and training could be adjusted to address specific chemical risks. Federal financial and technical assistance could be targeted to address specific concerns.

The study identifies the nature, quantities and routes of hazardous substances transported in or near San Diego County. Imports and exports, including hazardous waste, are taken into account. The study draws upon all major sources of relevant data at all levels of government. This kind of information is valuable to emergency planners and responders, but is not readily available to them. The study brings together all available information into one place. USEPA desires to have the study serve as a useful tool and an ongoing reference document for emergency planning and response purposes.

## Acknowledgements

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# 1 Introduction

USEPA Region 9 has placed high priority on improving chemical safety in the US/Mexico Border area and contracted SAIC to study the commodity flow of hazardous materials through the San Diego/Tijuana border region.

What is a commodity flow study?

A commodity is any physical good moving, or any good being transported. A commodity flow study is a report on the goods that are moving through a particular area. Everyday, the nation's roads, railways, airports and seaports are filled with goods moving to market. These goods range from packaged retail goods moving from manufacturers to stores, to industrial products moving from producer to user, to farm products and foodstuffs moving to distribution centers. A little over 3% of the U.S. gross domestic product was spent on transportation in 1997. That is \$255 billion to move goods from one place to another. This amount of transportation puts an enormous amount of pressure on the nation's transportation infrastructure. The goal of a commodity flow study is to map these goods to the transportation system in a given area. This particular study addresses the flow of hazardous materials through the San Diego County region.

The size and complexity of a commodity flow study is primarily dependent on the size of the area under analysis. A commodity flow study tracks the flow of goods for an entire country, a state or a local municipality. As the area under study grows, the complexity of the transportation system and the difficulties of mapping the interrelationships of the businesses within the region increase. Limiting a commodity flow study to a local area provides better accuracy and allows better decision-making by local policy-makers.

Historically, urban and regional planners and transportation officials are the primary beneficiaries of commodity flow analysis. They use the results of such studies to understand the needs of businesses in their community, plan highways, make zoning decisions, and compete for funding for infrastructure projects. As commodity flow studies evolve, more information is learned that is applied in related fields. This San Diego study limited the commodities under study to hazardous materials. The phrase "hazardous material movements" is synonymous with commodity flow for the purpose of this study.

The information in this study allows the development of better disaster preparedness plans, helps to determine whether emergency response equipment is appropriately placed and whether responder training is adequate, and can assist officials to minimize hazardous material releases.

A material is hazardous if it exhibits one or more of the following characteristics<sup>1</sup>:

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<sup>1</sup> Definitions from USEPA at [www.epa.gov](http://www.epa.gov).

- *Ignitability*: Can create fires under certain conditions. Examples include liquids that catch fire, such as solvents and fuels, and friction-sensitive substances.
- *Corrosivity*: Is acidic and capable of corroding metal (such as tanks, containers, drums, and barrels).
- *Reactivity*: Can create explosions or toxic fumes, gases, and vapors when exposed or mixed with water.
- *Toxicity*: Harmful or fatal when ingested, breathed, or absorbed by the skin.

When many of these materials are disposed of on land, contaminated liquid may drain (leach) from the materials and pollute the soil and ground water.

Hazardous materials come in all shapes and forms. Any solid, liquid, or gaseous material that is toxic, flammable, radioactive, corrosive, chemically reactive, or unstable after prolonged storage could pose a threat to life, property, or the environment.<sup>2</sup>

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<sup>2</sup> [www.ntp.doe.gov](http://www.ntp.doe.gov)



## 2 Methodology

The purpose of this study is to provide a commodity flow study of hazardous materials to aid local, state, and federal authorities to understand the volume and nature of hazardous material movements into, out of, and through the region, in particular San Diego County. To accomplish this goal, the study employed a step-by-step methodology, as described below.

**Stakeholders** – The first step in developing a commodity flow study that is both accurate and useful is to understand the stakeholders that are affected by the movement of hazardous materials in and through San Diego County. To some degree, all residents and public officials are concerned with hazardous materials traveling through their community. The residents that have the most interest are those living in close proximity to hazardous material travel routes and potential release sites. A goal of this study is to identify those routes so residents are aware of the risks in their areas.

Fire and emergency response officials are interested in the quantities and types of hazardous materials in order to plan effectively. These officials are entrusted with protection of the public. This type of information allows them to ensure that they are properly trained and equipped. The nature of the hazardous risk affects the number of emergency personnel needed and their training needs. The police department is generally the first on the scene in an emergency or accident. They too have an interest in the movements of hazardous materials. Police procedures and tactics will reflect the particular nature of the risks present in the local area.

Planning officials can use the results of this study to improve decision-making. By understanding the travel routes that are most at risk, planning officials may make informed decisions regarding zoning and public projects, like schools. Some activities, such as warehousing, can also create hazardous risks, depending upon the types and volumes of goods they are handling and their commitment to safety. Planning officials can institute policies to help relocate businesses or activities that pose hazardous risks to appropriate areas of the city without reducing desired economic activity. Planning officials can use the results of this study to help support funding requests for transportation projects. In every state, transportation needs far outweigh the availability of funds. Those projects that are supported by solid analysis, including identified environmental risks that will be alleviated by new construction, fare better in the budget arena.

Interviews with local authorities and stakeholders were conducted, in order to understand how border traffic affects city plans, residents and the region.

**Data Collection** – The next phase of the study involved a thorough data collection effort. Data was collected on the commodities that are present in the local area, the flow of goods in the region, and sensitive areas in the region.

Within San Diego, the types and quantities of commodities present are determined by three activities. San Diego's position close to border crossings creates considerable amounts of international trade. Imports and exports through the San Diego area road and rail crossing points include a sizable amount of the total hazardous materials in the region. Another source of hazardous materials is the economic activities generated in

the wider region, from the industrial areas in the southern region of San Diego County to the Los Angeles area to the north. These population centers generate goods that are transported through the San Diego area, generally via Interstates I-5 and I-805. The third source of goods in transit is the local commerce that necessitates the movement of goods from one business to another.

The “flow” information began with an examination of the transportation network. This included major truck routes, rail lines, border facilities, and surface streets. Truck counts available from state agencies provided a better understanding of the natural flow of goods through the city and region. Examining the business information (both inter- and intra-region) helped isolate individual commodities to specific roads.

Data collection of the sensitive and local characteristics of the region gave the study relevance to the community. These data included planning documents, traffic accident data, historic spill information, road characteristics and population and business formation trends.

Interviews with local authorities provided a better understanding of border traffic, transportation routes in and through the county, and the effect of the county layout on residents. To better support the study, data was collected from local, state, and federal agencies.

Data Analysis - After gathering the data, an analysis of imports and exports by mode of transportation, volume, and shipment weight by type (tariff classification) was conducted. The analysis identified the hazardous materials flowing through the area. Reported accidents and spills were analyzed over a period of 5 years. This analysis identifies particular locations within the region that contribute most often to the number of reported accidents and spills.

Business location data was first mapped on a regional basis. Local businesses were evaluated to determine whether any are large producers or purchasers of hazardous materials that contribute to locally bound truck traffic.

This portion of the study developed general knowledge of the hazardous material types that are present in the region. After the “commodity “ portion of the study was completed, the work moved to define hazardous material movements.

Determining Transportation of Hazardous Materials - In this task, data analysis combined traffic data with hazardous material movements. An analysis of the local traffic patterns to and from the San Diego area border crossings (north/south and east/west directions) yielded the primary border routes. Next, truck counts at specific locations along the interstate highway and arterial access roads were analyzed. This identified the flow of trucks along the traffic network. Finally, the practical operations of the Otay Mesa port of entry and the procedures for moving trucks to and from the border crossing were examined to determine the most-used surface streets and any time-of-day issues.

Next, an analysis of rail traffic determined direction and crossing procedures. Because there is only one rail crossing at San Ysidro, the identity of the hazardous materials moving across the rail infrastructure is known. However, rail-crossing procedures were analyzed to determine whether there are points along the tracks at which the rail companies store goods pending final transport.

Hot Spots – The next task was to determine hot spots around the region. This identifies potential risk areas and any links between problem areas and critical infrastructure, which can be useful to local officials. The first part of this task involved the identification of all areas that were environmentally sensitive. This included bodies of water that are sources of drinking water or that have unique environmental significance. It also included wetlands or any geographical areas where a spill or release might create significant risk to the population.

The second part of this task was to identify places and points along major traffic routes that are at a higher level of risk in the event of an accident. These include schools, dense population centers, and public gathering points like parks or markets. In evaluating these hot spots, the study looked at their proximity to truck routes and rail lines and the types of hazards that are present.

The final task was to look at potential hot spots that may be emerging, or that are located at emergency routes, where they may become a problem in the event of a spill or release. For example, the study examined major traffic areas that are potential problem sites if traffic grows to a point where the road infrastructure can no longer adequately handle the amount of traffic. Roads are constructed for a pre-determined amount and type of traffic. If smaller residential roads become favorite truck routes, then the potential for accidents becomes greater. The study examined the hazardous material movements to determine whether there are emerging hot spots in the region.

Knowledge Transfer – The final task was to provide suggestions to local officials on ways to monitor hazardous materials in their areas. Conducting this study required data to be made available and to be shared. For this task, the study provides a list of helpful points of contact for future information. In addition, a list of publicly available web sites and data sources is provided. The goal is to give emergency planners and responders enough knowledge to update this report, or at least to monitor trends, to determine whether the nature of their environmental risk is changing.

### 3 Regional Overview

#### 3.1 San Diego County

San Diego County is in Southern California, located on the Pacific Ocean and the U.S.-Mexico border. The region is part of the San Diego Customs District, which includes a total of four ports of entry for hazardous material traffic: San Diego, San Ysidro, Tecate, and Otay Mesa.

The majority of the population of San Diego County is concentrated in and around the city of San Diego with roughly 60% of the total population of the county located in this area.

Table 3-1 shows that the population of San Diego County was approximately 2,856,050 in 2000, up from 17% just 10 years before<sup>3</sup>. The population of the county is expected to continue growing at an annual rate of approximately 8%.

**Table 3-1: San Diego County: Thirty Year Population Forecast**

<b>Cities</b>	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2020</b>
Carlsbad	63,126	82,000	97,446	109,332	132,232
Chula Vista	135,163	174,300	208,107	233,313	27,455
Coronado	26,540	24,650	29,166	29,209	29,709
Del Mar	4,860	5,400	5,543	5,736	6,079
El Cajon	88,693	96,600	99,337	101,964	104,563
Encinitas	55,386	62,100	66,564	68,440	70,750
Escondido	108,635	127,800	136,211	140,490	143,228
Imperial Beach	26,512	29,200	29,230	30,180	33,333
La Mesa	52,931	59,200	61,752	63,979	66,828
Lemon Grove	23,984	25,950	27,887	29,342	30,238
Oceanside	128,398	160,800	184,138	196,613	202,592
Poway	43,516	49,300	50,904	52,031	53,338
San Diego	1,110,549	1,277,200	1,403,874	1,499,437	1,693,533
San Marcos	38,974	53,900	67,453	75,356	91,557
Santee	52,902	58,300	68,561	73,607	74,856
Solana Beach	12,962	14,350	14,714	15,103	16,127
Vista	71,872	85,700	95,616	101,364	103,316
Unincorporated Area	398,764	469,300	519,022	553,621	666,576
<b>Total County</b>	<b>2,443,767</b>	<b>2,856,050</b>	<b>3,165,525</b>	<b>3,379,117</b>	<b>3,546,310</b>

Source: Southern California Association of Governments. April 1998.

Table 3-2 lists the major industries in which county residents are employed. Based on earnings and income in the region described in Table 3-2, the top four industries in San Diego County are (1) services, (2) government services, (3) manufacturing, and (4) retail trade. In addition, there are six main industry clusters: biotechnology/ biosciences, defense and space manufacturing, electronics manufacturing, financial and business services, software, and telecommunications. These “economic engines” will likely determine San Diego’s future growth. Other industries showing significant potential

<sup>3</sup> Southern California Association of Governments (April 1998)

growth for the region include environmental, transportation, recreational goods, and international trade.

**Table 3-2: Earnings and Income by Industry in San Diego County  
in 1996 and 1997 (in \$000)**

<b>Industry</b>	<b>1996</b>	<b>1997</b>
Services	13,657,560	14,818,730
Government Services	9,849,022	10,108,895
Manufacturing	5,433,976	5,909,763
Retail Trade	4,157,496	4,462,440
Financial Services	2,973,572	3,310,505
Construction	2,255,043	2,638,662
Transportation	2,030,409	2,173,966
Wholesale Trade	1,879,432	2,126,584
Agriculture	569,527	574,441
Mining	27,934	30,916
<b>Total</b>	<b>42,835,967</b>	<b>46,156,899</b>

Source: US Department of Commerce--The Bureau of Economic Analysis. November 2000.

### 3.2 City of San Diego

San Diego is a Southern California city, located on the Pacific Ocean and the U.S.-Mexico border. Because of its location, San Diego is perfect for companies interested in international markets, especially those in Latin America and on the Pacific Rim. San Diego is strategically located just 17 miles from Tijuana and the international border with Mexico. With a population of approximately 1.2 million, San Diego is the sixth largest city in the country and the second largest in California. Figure 3-1 below is a map of the San Diego County showing the cities and interstate highways. Figure 3-2 below is a map focusing on the portion of San Diego County near San Ysidro and Otay Mesa, two of the border crossings. Figure 3-2 shows key features in more detail.

San Diego provides border access between large transportation hubs such as San Francisco, Los Angeles, Phoenix and Baja California. San Diego is the second most populous of California's 58 counties, with a population of 2.8 million in 2000. San Diego County covers approximately 4,255 square miles – 65 miles from north to south and 86 miles from east to west. San Diego has four major interstate freeways and six state highways.



Maquiladoras - A maquiladora is an assembly or manufacturing operation located in Mexico that is fully or partially owned by a non-Mexican person or company. A maquiladora employs competitively-priced Mexican labor in assembly processing or other manufacturing operations. Maquiladoras temporarily import most component parts from the U.S. and other sources. Mexican law also allows these operations to bring in most capital equipment and machinery from abroad. Maquiladora operations are generally labor-intensive, with most production geared for export from Mexico. Maquiladoras may be entirely managed by foreign firms, such as U.S. firms, unlike other multinational companies operating in Mexico.

The Maquiladora Program arose from Mexico's Border Industrialization Program, after Mexico joined the General Agreement on Tariffs and Trade (GATT) in 1986. GATT is an international treaty, which reduces trade barriers among member countries. Mexico's participation in GATT encouraged foreign companies to locate in Mexico. The Border Industrialization Program allowed the duty-free importation of raw materials and equipment for use by manufacturing plants, which would then export finished goods or components to factories in the United States, where they were sold or assembled into final products.

Maquiladoras manufacture a broad array of products under Mexican law. Some industries are not allowed to participate in the maquiladora program (petroleum, petrochemicals, other chemicals, arms, and items containing radioactive elements). Most products begin the assembly process in Mexico and complete the process in the US. As long as the components imported into Mexico are destined for export, no Mexican import duty is levied on the temporarily imported maquiladora inputs. Maquiladora operators must post a bond with the Mexican Customs Service to guarantee that components and raw materials are re-exported from Mexico to the country of origin within a six-month period. A bond on capital equipment and machinery is collected to better ensure that they will be fully returned to the maquiladora operator's country of origin once it ceases operations in Mexico.





## 4 Stakeholders

All residents and public officials are concerned with hazardous materials traveling through their community. The residents who have the most interest are those living in close proximity to hazardous material travel routes and potential release sites. In the San Diego, the residential areas of the most concern are those situated near Interstates I-5, I-15, and I-805. These highways are the primary routes for hazardous materials moving toward the border.

Public officials are stakeholders as well. Fire and emergency response officials need information on the hazards they face to plan effectively. These officials are entrusted with protection of the public. This type of information allows them to ensure that the right emergency equipment is available when and where needed, and response time is minimized. There are substantial hazardous material response resources in San Diego.

San Diego County's Hazardous Materials Incident Response Team (HIRT) was established by the Board of Supervisors in 1986. It provides 24 hour, 7 days per week chemical emergency response services county-wide to members of the Unified Disaster Council as a program of the Unified San Diego County Emergency Services Organization. HIRT combines the skills of trained specialists from the San Diego County Department of Environmental Health with San Diego Fire and Life Safety Services. The HIRT is responsible for emergency incidents involving the transportation, manufacturing and storage of chemicals and hazardous materials and responds to approximately 400 chemical emergencies per year and services the City and County of San Diego, 50 fire districts and a population of over 3 million.

The Federal Fire Department in San Diego was established in 1982 and is currently the largest fire department in the Department of Defense. It was formed by consolidating the individual fire departments on each military installation in the San Diego area. It has two hazmat units and one hazmat trailer at Naval Air Station North Island and Naval Station San Diego 32<sup>nd</sup> Street.

Local law enforcement agencies are also likely to respond to chemical emergencies involving their jurisdictions. They too have an interest in the results of a commodity flow study. Police procedures and tactics reflect the particular nature of the risks present in the local area. Some of the responsibilities of the police department in a hazardous material incident are evacuation, crowd control, and documentation of violations of environmental law. The interested stakeholders in the law enforcement community include police and sheriff departments of the cities of San Diego, National City, Chula Vista and Coronado, and the California Highway Patrol.

Planning officials can also use the results of this study to improve decision-making. By understanding the travel routes that are most at risk, planning officials can make informed decisions regarding zoning and public projects, like schools. Warehouses used for holding exports, pending final transport to Mexico, also create hazardous risks depending upon the types and volumes of goods they are handling. Planning officials can use policies such as local tax incentives or zoning actions to help move businesses or activities that pose hazardous risk to appropriate areas of the city, without reducing desired economic activity. Planning officials can use the results of this study to help

support funding requests for transportation projects. The planning officials most affected by this study include elected officials, such as city councils, mayors, city managers and planning commissions of cities in the County of San Diego, and economic development and redevelopment authorities. Civic organizations, such as chambers of commerce, will have an interest in the study as well.

## 5 Data Collection

The purpose of data collection is to compile a detailed inventory of hazardous materials moving through one of the most significant international border crossing areas, the three ports of entry in San Diego County (Otay Mesa, Tecate and San Ysidro). The study uses data from a number of sources (listed under Knowledge Transfer, chapter 9 below). Data was gathered from both publicly available databases, and databases that contain business-confidential information. Publicly available data is generally aggregated information. Business-confidential data is much more specific, and includes proprietary information.

USEPA obtained some confidential data by executing agreements with other federal agencies that collect this information. All data presented in this report was screened to remove company-specific information. The discussion of the data below is divided into three categories: commodities, traffic, and geographic and environmental data.

This chapter is a description of each data source and category. The analysis of the data is provided in chapter 6 below. Before analyzing the data, some terminology definitions are provided below.

1. **Movement**<sup>4</sup> – Transportation by a single truck or rail car from a point of origin to a point of either (a) transfer to another vehicle, or (b) final delivery of the freight. For example, assume that a single container of freight is hauled by truck to a rail intermodal terminal, placed on a rail car and hauled to another rail terminal, and then placed on a truck for final delivery. That one shipment is considered to involve three separate movements: (1) highway, (2) rail, and then (3) highway.
2. **Shipment**<sup>5</sup> - A shipment is an individual movement of goods from one location to a customer or to another location of the company, which may include a warehouse, distribution center, retail or wholesale outlet. A shipment may use one or more modes of transportation, including parcel delivery, private truck, for-hire truck, rail, water, pipeline, air and other modes.
3. **HTS Codes** – The import data used in this study was provided by US Customs organized according to the Harmonized Tariff System (HTS). The HTS is the global classification system that describes most world trade in goods. This classification system is used in this study to help identify categories of hazardous materials. The HTS codes refer to a numeric system (10 digits long) assigned to a specific product or hazardous material. The first 2-digits of the code number, referred to as a chapter, are a broad hazardous material category. As the hazardous material description becomes more detailed, the numeric code becomes longer, up to 10 digits.

For example, 29 is the 2-digit code for organic chemicals. This description covers a broad group of goods. Code 2901 describes a specific organic chemical, acyclic hydrocarbons. Code 2901.10 covers saturated acyclic hydrocarbons. Code

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<sup>4</sup> US Department of Transportation

<sup>5</sup> US Bureau of Census

2901.10.10.00 is a smaller group of commodities within the saturated acyclic hydrocarbon group, consisting of ethane and butane.

As of January 1, 2000, there were 17,032 10-digit statistical categories in the HTS. For the purposes of this study, we identified and used 43 of the 10-digit, HTS codes as the codes that included hazardous materials. All 43 of the 10-digit HTS codes are within 10 of the 2-digit HTS chapters. The 10 selected 2-digit HTS codes are listed in Table 5-1. The 43 selected 10-digit HTS codes are listed in Appendix A.

4. **Standard International Trade Classification (SITC)<sup>6</sup>** – The export data used in this study was provided by the US Bureau of Census organized according to the Standard International Trade Classification (SITC). The SITC is another system of classifying international trade, using 1-digit to 5-digit codes. Like the HTS, the fewer the digits, the broader the category. The entire SITC is approximately 3,000 5-digit SITC codes. For the purposes of this study, we identified and used about 250 of the 5-digit codes as the codes that included hazardous materials. All of the 5-digit codes used are within 13 of the 2-digit SITC codes. The 5-digit SITC codes used are listed in Appendix B.

The Harmonized Tariff System codes and SITC codes are similar, but not identical. As a result, comparisons between imports and exports of goods of the same type are not as exact as a uniform coding system would allow. However, such comparisons are not important for purposes of this study. For this study, the detail provided by the coding systems is adequate to identify the nature of the hazardous material.

5. **Mode of Transportation** – Transportation is categorized into three groups: air, vessel, and surface. Air is hazardous material movement by airplane, vessel is shipping goods by sea (ships, boats, etc.), and surface movement consists of commodities transported by truck, rail, or pipeline.

## 5.1 Commodity Data

Commodities are tracked by imports and exports through two agencies, US Customs and US Bureau of Census. Import and export information is available by mode of transportation, port of entry/exit, volume, shipment weight, and value.

*Imports.* US Customs tracks commodity movements entering the United States electronically, through the Automated Commercial System (ACS). The goods entering the US are categorized by the HTS. Additionally, US Customs staff at international ports of entry maintain local databases to track commercial traffic volume, inspections, seizures and other special operations. As part of the import inspection process, the ports of entry in San Diego record shipments of hazardous materials into a local database. This system is linked to larger US Customs databases where vital statistics are stored and analyzed. This data is confidential. USEPA Region 9 made an agreement with US Customs to obtain sufficient hazardous material data for this study.

US Customs assigns 10-digit HTS codes to all imported commodities. Information about each imported shipment is recorded in a database. This database identifies the hazardous materials imported into the US. Table 5-1 below identifies the specific

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<sup>6</sup> [www.census.gov](http://www.census.gov)

hazardous materials for which import information was collected for this study, organized by 2-digit HTS code. The 10-digit HTS codes used in this study are listed in Appendix A. We include the entire HTS description in Table 5-1, even though only selected categories within each 2-digit code were used in the study, as specified in Appendix A.

**Table 5-1: Imported Hazardous Materials by HTS Code**

<b>HTS Code</b>	<b>HTS Description</b>
26	Ores, slag and ash
27	Mineral fuels, mineral oils and products of their distillation
28	Inorganic chemicals; compounds of precious metals, rare earth metals, radioactive elements
29	Organic chemicals
31	Fertilizers
32	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other coloring matter; paints and varnishes; other mastics; inks
34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial waxes, prepared waxes, polishing or scouring preparations, candles and similar articles, modeling pastes, dental waxes and dental preparations with a basis of plaster
36	Explosives
37	Photographic or cinematographic goods
38	Miscellaneous chemical products

Source: Harmonized Tariff Schedule of the United States (2000).

*Hazardous Waste and Haztraks.* All imports, including hazardous waste, are assigned an HTS code and included in the HTS database. Hazardous waste quantities are included within HTS codes 26 (slag and ash), 28 (inorganic chemicals), 29 (organic chemicals), and 38 (miscellaneous chemical products). Because there is no specific HTS code for hazardous waste, the HTS does not allow hazardous waste to be distinguished from the overall categories of hazardous materials.

We were able to sort out hazardous waste shipments from the total of all hazardous materials with information from the US/Mexico hazardous waste tracking system known as Haztraks. Haztraks was created jointly by the USEPA and the Mexican Environmental Ministry to track the movement of hazardous waste between the U.S. and Mexico. US Customs ensures that hazardous waste cargo entering the US is accompanied by a hazardous waste manifest form, but they do not compile or track this

data. US Customs does send a copy of the importer's hazardous waste manifest form to a USEPA centralized database, where it is entered into Haztraks. Information about Haztraks is available at <http://www.epa.gov/earth1r6/6en/h/haztraks/haztraks.htm>.

*Exports.* The export data is from the US Bureau of Census, organized by SITC code. In the export database, exported goods are described by SITC code, port of exit, mode of transportation (air, vessel, and surface, in which surface consist of rail, truck and pipeline), values and year. The 2-digit SITC codes used in this study are listed in Table 5-2 below. The 5-digit SITC codes used in this study appear in Appendix B. We include the entire SITC description in Table 5-2, even though only selected categories within each 2-digit code were used in the study, as specified in Appendix B.

**Table 5-2: Exported Hazardous Materials by SITC Code**

<b>SITC Code</b>	<b>SITC Description</b>
27	Crude minerals (excluding coal and petroleum)
28	Ash and residues containing metals and metallic compounds
32	Coal, coke and briquettes
33	Petroleum, petroleum products and related materials
34	Gas, natural and manufactured
51	Organic chemicals
52	Inorganic chemicals
53	Dyeing, tanning and coloring materials
55	Polishing and cleansing preparations
56	Fertilizers
57	Plastics in primary forms
59	Chemical materials and products
88	Chemical preparations for photographic uses

Source: US Bureau of Census.

## 5.2 Traffic Data

The US Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS) maintains the Rail Waybill database. This database contains proprietary and confidential rail shipment information. The data includes original destination regions, type of commodity, number of cars divided by tons, and values. USEPA Region 9 submitted a written request to the US Department of Transportation, Bureau of Transportation Statistics for the release of the data for this study.

Unlike the Rail Waybill, the Transborder Surface Freight database is accessible from the BTS web page. These two databases can be used to obtain information on exported goods by border port, mode of transportation, and 5-digit SITC code.

BTS also produces a Commodity Flow Survey. This survey is conducted every five years. The survey data is organized at a national, regional, and state level. The latest survey contains 1997 data. In another publication, the 1997 Commodity Flow Study Hazardous Shipping Material, data is presented on hazardous material<sup>7</sup> shipment characteristics.

This data was used for an overall analysis because the information covers a broad area. More specific data was used for traffic north/south and east/west in the San Diego area. Based on the industries located north and east of San Diego, the routes and flows of hazardous materials in the San Diego area were identified.

### **5.3 Geographic and Environmental Data**

This data was obtained through a number of web sites, maps of the City of San Diego, a visit to the city, and interviews with local authorities.

Geographic information and maps of the County and City of San Diego are available from SanGIS at [www.sangis.org](http://www.sangis.org). SanGIS was created in July 1997, as a Joint Powers Agreement (JPA) between the City and County of San Diego. After 13 years of working together on data and application development, the City and County decided to formalize their partnership in geographic information systems by creating the SanGIS JPA. The maps give an overall picture of the sensitive areas, as well as the locations of airports, waterways, residential areas, business districts, and other features. The city's website at [www.sannet.gov](http://www.sannet.gov) provides the redevelopment project areas, as well as listings of schools, parks, and other services.

The US Coast Guard's National Response Center web page provides reported accident and spills data.<sup>8</sup> Data is available from January 1978 through August 2000. Because the most relevant data is the most recent, only data from 1994 to 1999 was used in this study. Only transportation-related spill data was used.

This study includes information from interviews with San Diego Planning Department officials, regional U.S. Navy representatives, and Mr. Michael Handman of the San Diego County Department of Environmental Health. Interviews with the Planning Department centered around the development plans for the city, mainly residential development and its relationship to potential human exposure in case of a hazardous material accident on highly traveled routes in the newly developed areas. The talks with Ms. Mary Kay Faryan and Ms. Mary Terry of the U.S. Navy revolved around the Navy's activities in the county that involve the movement of hazardous materials, such as the transport of fuel or ammunition. The interview with Mr. Handman yielded information on

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<sup>7</sup> The USDOT defines hazardous materials as belonging to one of nine hazard classes: Explosives, Gases, Flammable Liquids, Flammable Solids, Oxidizers and Organic Peroxides, Toxic Materials and Infectious Substances, Radioactive Materials, Corrosive Materials, and Miscellaneous Dangerous Goods.

<sup>8</sup> [www.nrc.uscg.mil](http://www.nrc.uscg.mil)

the county's Hazardous Materials Incident Response Team (HIRT) and the hazardous materials statistics kept by the Department of Environmental Health. Ms. Melinda Hathaway of San Diego Fire and Life Safety Services provided details on HIRT.



## 6 Data Analysis

This chapter describes the movement of hazardous materials through the region. First, the general movement of commodities is discussed, followed by a detailed analysis of hazardous materials in transit. The analysis covers cross-border movements at the San Ysidro, Otay Mesa and Tecate border crossings, traffic along the interstates, and local traffic.

From an overall perspective, hazardous material exports through Otay Mesa are significantly more numerous than hazardous material imports, measured by the number of trucks. The reason is that the majority of cross border traffic through Otay Mesa is regional in nature. Over 80% of goods are shipped by truck. Over 85% of exports originate in California and are destined for the neighboring state of Baja California. Exports are often raw materials or partial products intended for production plants in Tijuana. Finished goods returning to the US dominate imports. Finished goods are less likely to be hazardous than the raw materials used in production. An example is raw materials for plastic production, such as polyester resin and other chemicals, leaving the US, and plastic toys returning from Mexico.

Exports may pose a greater risk to San Diego than imports for other reasons. Materials to be exported tend to remain in the region longer than imports. Imports cross the border and proceed immediately either north on I-5 or I-805 or east on I-8 to their final destination, simply passing through San Diego. In contrast, exports often remain in San Diego warehouses or parking lots for consolidation or export clearance. This extended time in the region increases the risk of an incident occurring locally. For example, the risks of propane awaiting export are greater than the risks of propane just passing through, because of the longer period of time involved.

Next, the traffic network in the region was analyzed in order to identify problem areas or hot spots. The areas identified as most critical are the high levels of truck traffic on the interstates that cut through densely populated areas of San Diego.

The third section of this chapter addresses the specific local characteristics that lead to the movement of hazardous materials. The significant presence of the US Navy and Marine Corps, and their impact on hazardous material movements, was analyzed. This section also addresses the history of reported hazardous material spills from fixed facilities and mobile sources in the county.

### 6.1 Hazardous Material Movements

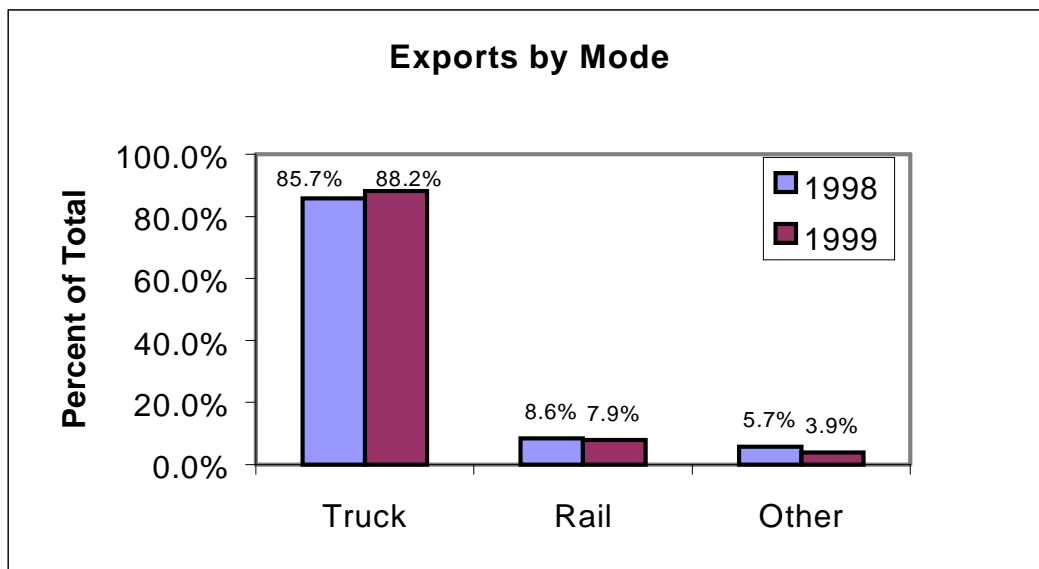
Commodities flow in, through, and out of the Otay Mesa, San Ysidro, and Tecate ports daily. The movement of hazardous materials through San Diego County (the City of San Diego in particular) is defined by (1) cross border traffic with Mexico, (2) traffic to and from points east (Arizona) and north (Los Angeles metro area), and (3) local traffic from production sites or consumption in the region.

#### 6.1.1 *Cross Border Movements*

In this section, we address cross border movements along the entire US/Mexico border as background, then focus on the border area at San Diego.

The cross border traffic between the US and Mexico contributes significantly to the movement of hazardous materials through the region. The total value of goods traded between the US and Mexico was \$152 billion in 1998 and \$171 billion in 1999.<sup>9</sup> Exports from the US to Mexico increased from \$70 billion to \$76 billion from 1998 to 1999. At the same time, imports from Mexico to the US increased from \$82 billion to \$95 billion.<sup>10</sup> The surface trade between the two countries is mainly by truck. More than 80% (\$143 billion in 1999) of all trade by value travels by truck. As shown in Figure 2 and Figure 3, imports have a slightly higher percentage of rail traffic, 15% versus 8%, and slightly lower percentage of truck traffic, 80% versus 86%. However, in either case, truck is the dominating mode of transportation by 10 to 1 (exports) and 5 to 1 (imports).

**Figure 2: Percentage Breakdown of Exports by Mode of Transportation (1998-1999)**

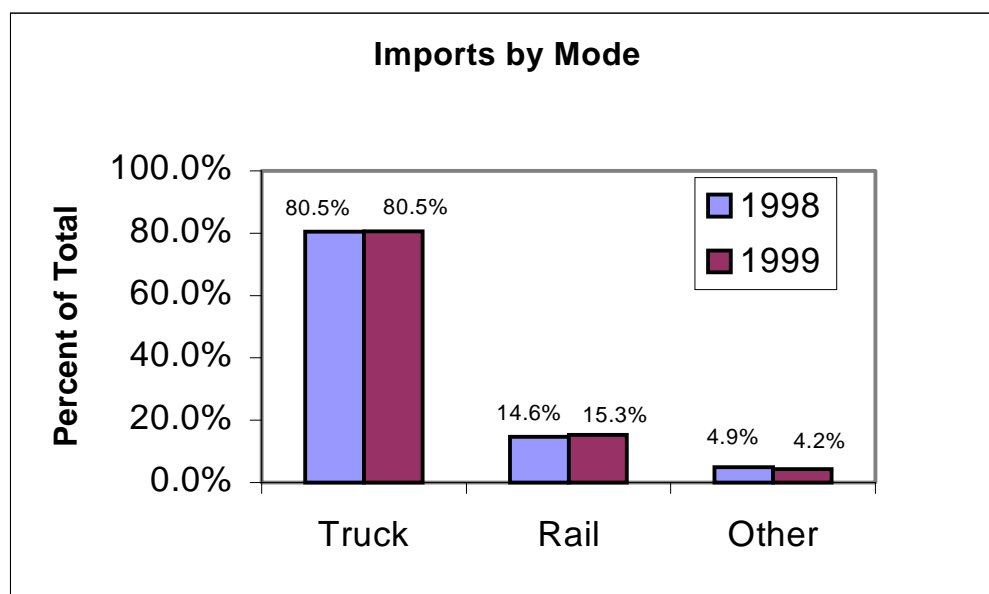


Source: US Department of Transportation, Bureau of Transportation Statistics, Transborder Surface Freight Dataset (1999)

<sup>9</sup> US Department of Transportation, Bureau of Transportation Statistics, Transborder Surface Freight Dataset (1999)

<sup>10</sup> Ibid.

**Figure 3: Percentage Breakdown of Imports by Mode of Transportation (1998-1999)**



Source: US Customs.

Cross border traffic between the US and Mexico is concentrated at particular ports of entry. The four large border crossings in Texas account for almost 70% of all surface traffic between the US and Mexico. The largest port, Laredo, alone accounts for nearly 40% of all surface traffic. California ports account for roughly \$25 billion worth of surface trade between the US and Mexico, which represents close to 15% of the overall surface trade between the two countries.

The port of Otay Mesa saw about \$16 billion worth of surface trade in 1999 or nearly 10% of all surface trade between the US and Mexico. Across the U.S./Mexico border, Otay Mesa processes the third highest dollar volume of imports and exports.<sup>11</sup> Otay Mesa handles 2/3 of all commercial truck traffic across the entire California/Mexico border.<sup>12</sup> In 1999, 1.2 million trucks crossed at Otay Mesa, northbound and southbound.<sup>13</sup> This is projected to increase to 2.9 million trucks within 20 years.<sup>14</sup>

Of the overall traffic between the US and Mexico, hazardous materials make up roughly 3.5% of the total value of imports and exports. This amount is fairly constant over time, as well as for imports and exports. At the national level, the top five hazardous materials for imports and exports are organic chemicals, mineral oils and fuels, miscellaneous chemicals, inorganic chemicals, and paints.

In lieu of dollar value, it is more important for purposes of this study to identify the quantities of hazardous materials that cross the border, in order to determine the

<sup>11</sup> State of California, Department of Transportation, District 11, Transportation Planning, Otay Mesa Port of Entry: International Cross Border Freight Delay Survey (March 2001).

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

number of trucks or rail cars that travel through the San Diego community. Import statistics are kept by value and weight, but export data is collected by value only. Utilizing the import data, the export values were converted into weight data as well. Imports of hazardous materials in tons from Mexico to the US via the ports of Otay Mesa and Tecate by truck for the years 1998 and 1999 are shown in Table 6-1 and Table 6-3 below. Table 6-1.1 below provides more detail on the nature of the inorganic chemical imports through Otay Mesa. No imports of hazardous materials were recorded at the San Ysidro border crossing.

**Table 6-1: Otay Mesa Surface Imports by HTS Code: 1998-1999**

Source: US Customs, November 2000

	<b>OTAY MESA</b>	<b>Tons</b>	<b>Tons</b>
<b>HTS code</b>		<b>1998</b>	<b>1999</b>
28	Inorganic chemicals	63,152	46,034
34	Organic surface-active agents	35,127	28,708
38	Miscellaneous chemical products	1,819	3,264
32	Paints	1,471	1,592
36	Explosives	1,710	1,127
26	Ores, Slag, and ash	40	143
31	Fertilizers		39
27	Mineral fuels	62	39
29	Organic chemicals	1	2
37	Photographic or cinematographic goods	6	2
	<b>Total</b>	<b>103,388</b>	<b>80,951</b>

**Table 6-1.1: Detail on Otay Mesa Inorganic Imports: 1998-1999**

<b>Otay Mesa - Imported Inorganic Chemicals: 1998-1999</b>	<b>Tons 1998</b>	<b>Tons 1999</b>
Argon	286	0
Nitrogen	38,743	27,830
Oxygen	22,070	16,341
Aluminum oxide, other than artificial corundum	2	3
Synthetic pigments, black	5	0
Synthetic pigments, red	28	0
Synthetic pigments, yellow	1	0
Synthetic pigments, other	34	0
Lead monoxide	1,981	1,860
Phosphinates and phosphonates	2	0
<b>Total</b>	<b>63,152</b>	<b>46,034</b>

Source: US Customs, November 2000

Haztraks, which is USEPA's database for tracking hazardous waste shipments from Mexico, shows that 9,195 tons of hazardous waste was imported from Mexico through

Otay Mesa in 1999 (Haztraks version 2001). The import data from HTS for hazardous material imports through Otay Mesa, shown in Table 6-1 above (80,951 tons), includes hazardous waste. This means that approximately 11% of the hazardous materials imported from Mexico through Otay Mesa in 1999 consisted of hazardous waste. Table 6-1.2 below shows the hazardous waste proportion of the hazardous materials imported through Otay Mesa.

**Table 6-1.2: Otay Mesa Hazardous Waste Imports in 1999**

Otay Mesa Imports for 1999	Tons 1999	% of Total
Hazardous waste	9,195	11%
Hazardous materials other than hazardous waste	71,756	89%
Total hazardous material, including hazardous waste	80,951	100%

Source: US Customs, November 2000; USEPA Haztraks version 2001, May 2001

**Table 6-3: Tecate Surface Imports by HTS Code: 1998-1999**

2505	TECATE	Tons	Tons
HTS code		1998	1999
36	Explosives	57	4670
26	Ores, Slag, and ash		6
34	Organic surface-active agents		6
		<b>57</b>	<b>4,682</b>

Source: US Customs, November 2000

The value of exports of hazardous materials from the US to Mexico via truck through the ports of Otay Mesa and Tecate, for the years 1998 and 1999, are shown in Table 6-4 and Table 6-5 below. There are no rail crossings at these ports, so all trade is done via truck. Table 6-6 below shows the value of hazardous materials exported via the rail crossing through the port of San Ysidro. The San Ysidro port was closed to trucks in 1997. Most trucks use the new crossing at Otay Mesa.

**Table 6-4: Value of Otay Mesa Surface Exports by SITC Code: 1998-1999**

PORT NAME	SITC CODE	SITC_DESCRIPTION	1998 Surface VALUE	1999 Surface VALUE
OTAY MESA	57	PLASTICS IN PRIMARY FORMS	\$135,185,102	\$174,995,382
OTAY MESA	33	PETROLEUM, PETROLEUM PRODUCTS AND RELATED MATERIALS	\$29,609,571	\$26,712,427
OTAY MESA	34	GAS, NATURAL AND MANUFACTURED	\$16,666,138	\$19,715,102
OTAY MESA	53	DYEING, TANNING AND COLORING MATERIALS	\$10,875,789	\$14,225,640
OTAY MESA	51	ORGANIC CHEMICALS	\$16,033,269	\$14,899,504
OTAY MESA	52	INORGANIC CHEMICALS	\$7,351,543	\$10,929,872
OTAY MESA	88	CHEMICAL PREPARATIONS FOR PHOTOGRAPHIC USES	\$7,728,124	\$10,537,987
OTAY MESA	59	CHEMICAL MATERIALS AND PRODUCTS	\$5,250,603	\$8,665,468
OTAY MESA	56	FERTILIZERS	\$6,451,329	\$7,297,778
OTAY MESA	27	CRUDE MINERALS (EXCLUDING COAL & PETROLEUM)	\$1,392,141	\$1,915,733
OTAY MESA	55	PERFUME MATERIALS, POLISHING AND CLEANSING PREPARATIONS	\$1,572,954	\$2,433,790
OTAY MESA	28	ASH & RESIDUES CNTNG METALS & METALLIC COMPS	\$232,945	\$457,518
OTAY MESA	32	COAL, COKE AND BRIQUETTES	\$15,461	\$96,984
		<b>Total</b>	<b>\$238,364,969</b>	<b>\$292,883,185</b>

Source: US Bureau of Census, November 2000

**Table 6-5: Value of Tecate Surface Exports by SITC Code: 1998-1999**

PORT NAME	SITC CODE	SITC_DESCRIPTION	1998 Surface VALUE	1999 Surface VALUE
TECATE	53	DYEING, TANNING AND COLORING MATERIALS	\$4,347,291	\$3,323,188
TECATE	57	PLASTICS IN PRIMARY FORMS	\$3,428,012	\$3,914,202
TECATE	33	PETROLEUM, PETROLEUM PRODUCTS AND RELATED MATERIALS	\$2,569,071	\$1,040,745
TECATE	51	ORGANIC CHEMICALS	\$503,930	\$889,550
TECATE	52	INORGANIC CHEMICALS	\$450,326	\$590,731
TECATE	32	COAL, COKE AND BRIQUETTES	\$3,766	\$539,315
TECATE	59	CHEMICAL MATERIALS AND PRODUCTS	\$398,373	\$384,939
TECATE	56	FERTILIZERS	\$220,929	\$278,833
TECATE	55	PERFUME MATERIALS, POLISHING AND CLEANSING PREPARATIONS	\$177,933	\$215,458
<b>Total</b>			<b>\$7,752,340</b>	<b>\$7,853,773</b>

Source: US Bureau of Census, November 2000

**Table 6-6: Value of San Ysidro Surface Exports by SITC Code: 1998-1999**

PORT NAME	SITC CODE	SITC_DESCRIPTION	1998 Surface VALUE	1999 Surface VALUE
SAN YSIDRO	57	PLASTICS IN PRIMARY FORMS	\$94,740,819	\$38,252,650
SAN YSIDRO	59	CHEMICAL MATERIALS AND PRODUCTS	\$3,178,160	\$7,973,424
SAN YSIDRO	51	ORGANIC CHEMICALS	\$4,320,876	\$2,706,735
SAN YSIDRO	53	DYEING, TANNING AND COLORING MATERIALS	\$1,561,248	\$999,296
SAN YSIDRO	52	INORGANIC CHEMICALS	\$1,435,417	\$858,092
SAN YSIDRO	28	ASH & RESIDUES CNTNG METALS & METALLIC COMPDS	\$494,270	\$425,694
SAN YSIDRO	55	PERFUME MATERIALS, POLISHING AND CLEANSING PREPARATIONS	\$61,461	\$395,538
SAN YSIDRO	33	PETROLEUM, PETROLEUM PRODUCTS AND RELATED MATERIALS	\$894,652	\$209,622
SAN YSIDRO	34	GAS, NATURAL AND MANUFACTURED	\$133,040	\$138,162
SAN YSIDRO	88	CHEMICAL PREPARATIONS FOR PHOTOGRAPHIC USES	\$0	\$84,519
SAN YSIDRO	56	FERTILIZERS	\$67,873	\$25,423
SAN YSIDRO	27	CRUDE MINERALS (EXCLUDING COAL & PETROLEUM)	\$69,933	\$0
<b>Total</b>			<b>\$106,887,816</b>	<b>\$52,069,155</b>

Source: US Bureau of Census, November 2000

Based on the value to weight ratios available from the import data, the weight of the hazardous materials exported was estimated. Tables 6-6, 6-7 and 6-8 below show the weight of hazardous materials exported via the San Diego ports in 1998 and 1999. Liquefied gas and petroleum products account for a larger portion of the weight of the hazardous materials exported than the value exported due to the high weight to value ratio of these materials.

**Table 6-6: Weight of Otay Mesa Surface Exports by SITC Code: 1998-1999**

PORT NAME	SITC CODE	SITC DESCRIPTION	1998 Annual Surface Tons	1999 Annual Surface Tons
OTAY MESA	33	PETROLEUM, PETROLEUM PRODUCTS AND RELATED MATERIALS	227,870	205,574
OTAY MESA	34	GAS, NATURAL AND MANUFACTURED	128,260	151,724
OTAY MESA	57	PLASTICS IN PRIMARY FORMS	79,506	102,919
OTAY MESA	52	INORGANIC CHEMICALS	12,797	19,025
OTAY MESA	27	CRUDE MINERALS (EXCLUDING COAL & PETROLEUM)	10,714	14,743
OTAY MESA	56	FERTILIZERS	12,664	14,326
OTAY MESA	51	ORGANIC CHEMICALS	7,489	6,959
OTAY MESA	88	CHEMICAL PREPARATIONS FOR PHOTOGRAPHIC USES	4,545	6,198
OTAY MESA	59	CHEMICAL MATERIALS AND PRODUCTS	3,088	5,096
OTAY MESA	53	DYEING, TANNING AND COLORING MATERIALS	3,426	4,481
OTAY MESA	55	PERFUME MATERIALS, POLISHING AND CLEANSING PREPARATIONS	504	780
OTAY MESA	28	ASH & RESIDUES CNTNG METALS & METALLIC COMPDS	145	285
OTAY MESA	32	COAL, COKE AND BRIQUETTES	10	60
<b>Total</b>			<b>491,017</b>	<b>532,171</b>

Source: Science Applications International Corporation based on US Census Bureau exports data

**Table 6-7: Weight of Tecate Surface Exports by SITC Code: 1998-1999**

PORT NAME	SITC CODE	SITC DESCRIPTION	1998 Annual Surface Tons	1999 Annual Surface Tons
TECATE	33	PETROLEUM, PETROLEUM PRODUCTS AND RELATED MATERIALS	19,771	8,009
TECATE	57	PLASTICS IN PRIMARY FORMS	2,016	2,302
TECATE	53	DYEING, TANNING AND COLORING MATERIALS	1,369	1,047
TECATE	52	INORGANIC CHEMICALS	784	1,028
TECATE	56	FERTILIZERS	434	547
TECATE	51	ORGANIC CHEMICALS	235	415
TECATE	32	COAL, COKE AND BRIQUETTES	2	336
TECATE	59	CHEMICAL MATERIALS AND PRODUCTS	234	226
TECATE	55	PERFUME MATERIALS, POLISHING AND CLEANSING PREPARATIONS	57	69
<b>Total</b>			<b>24,903</b>	<b>13,981</b>

Source: Science Applications International Corporation based on US Census Bureau exports data

**Table 6-8: Weight of San Ysidro Surface Exports by SITC Code: 1998-1999**

PORT NAME	SITC CODE	SITC DESCRIPTION	1998 Annual Surface Tons	1999 Annual Surface Tons
SAN YSIDRO	57	PLASTICS IN PRIMARY FORMS	55,719	22,497
SAN YSIDRO	59	CHEMICAL MATERIALS AND PRODUCTS	1,869	4,689
SAN YSIDRO	33	PETROLEUM PRODUCTS	6,885	1,613
SAN YSIDRO	52	INORGANIC CHEMICALS	2,499	1,494
SAN YSIDRO	51	ORGANIC CHEMICALS	2,018	1,264
SAN YSIDRO	34	GAS, NATURAL AND MANUFACTURED	1,024	1,063
SAN YSIDRO	53	DYEING, TANNING AND COLORING MATERIALS	492	315
SAN YSIDRO	28	RESIDUES CNTNG METALS & METALLIC COMPDS	308	265
SAN YSIDRO	55	CLEANSING PREPARATIONS	20	127
SAN YSIDRO	56	FERTILIZERS	133	50
SAN YSIDRO	88	CHEMICAL PREPARATIONS	-	50
SAN YSIDRO	27	CRUDE MINERALS	538	-
<b>Total</b>			<b>70,967</b>	<b>33,427</b>

Source: Science Applications International Corporation based on US Census Bureau exports data

In addition to truck and rail, hazardous materials will soon move across the border in the San Diego region via pipeline. A natural gas pipeline is currently under construction.

### 6.1.2 Domestic Movements

In San Diego County, traffic moves north on I-5 and I-15 toward Los Angeles, north and south on I-805 within the City of San Diego, and east/west on I-8 toward Imperial County and Yuma, Arizona. No specific traffic counts are available that would indicate the number of trucks carrying hazardous materials on these roads. The national average is that roughly 7% of trucks carry hazardous materials.<sup>15</sup> In order to determine whether the local interstates are carrying hazardous material shipments above or below the national average, the industrial base of key cities along the route was examined.

The economic activities in the Yuma, San Diego, and Los Angeles areas do not indicate above average shipment of hazardous materials between these areas. The Los Angeles metro area is one of the largest ports of entry in the country. Most of the goods landing in the ports of Los Angeles and Long Beach leave the area, either by rail toward Phoenix on the Union Pacific Sunset Route or by truck to I-5 and points north and

<sup>15</sup> US Census Bureau, 1997 Economic Census, Transportation - Commodity Flow Survey

south. The Yuma metro region has no chemical industry and little other manufacturing that would involve hazardous materials.<sup>16</sup> Economic activity in the Yuma region is clearly dominated by service industries, agriculture, and trade, with manufacturing playing a very limited role in the regional economy (5% of total earnings).

The economic data for region supports the assumption that hazardous materials shipments account for no more than the national average of 7% of truck traffic through the region.

### **6.1.3 Local Movements**

The predominant sources of employment in San Diego County are service industries, as shown in Chapter 3, Table 3-2 (page 11). Over 50% of earnings and income are generated by service industries, compared to 13% for manufacturing. Manufacturing in the San Diego region is mainly in the electronics sector. Industries intensive in hazardous materials use, such as chemicals or petroleum products, account for less than 10% of the manufacturing earnings and income.<sup>17</sup> It can be assumed that the levels of traffic unrelated to the border on local roads that carry hazardous materials are similar to national averages.

## **6.2 Traffic Network Description**

Highways and railways provide strategic corridors in both north/south and east/west directions through San Diego County. The main north/south highways are I-5, I-805 and I-15. The east/west highway is I-8.

## **6.3 Local Characteristics**

During the six years from 1994 to 1999, 1,573 hazardous material spills in San Diego County were reported to the National Response Center. More than half of these spills (802 spills) were transportation-related. Figure 4 shows the number of reported transportation-related hazardous material spills in San Diego County each year for the past six years. Figure 8-2 in Chapter 8 (Hot Spots) below shows the geographic areas in which transportation-related releases have been reported, and the numbers of reported releases in each area.

The incident data does not reveal any particular trend in the occurrence of hazardous materials spills. While the lack of a trend may seem uninformative, in this instance, the lack of specific information should remind officials and policy makers that hazardous material spills are unpredictable and, therefore, present great risk to the community in which they occur.

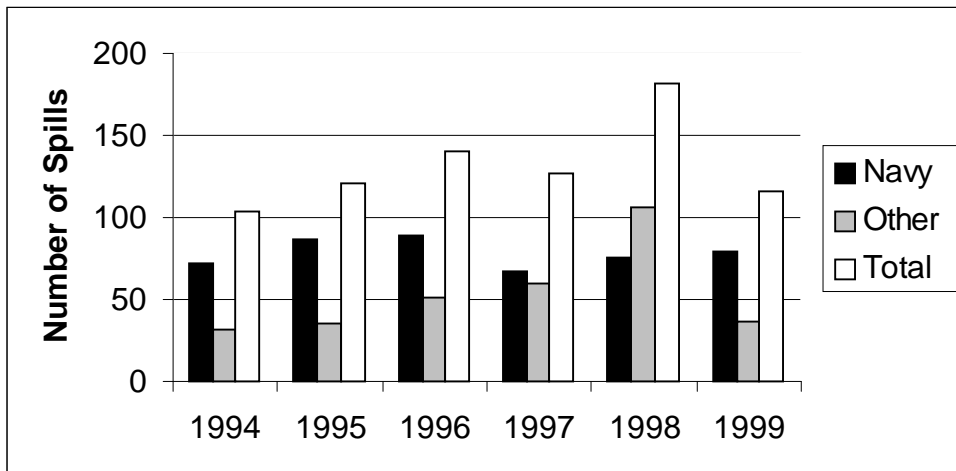
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<sup>16</sup> US Department of Commerce, Bureau of Economic Analysis, Regional Accounts Data 1997

<sup>17</sup> Ibid



**Figure 4: San Diego County, Reported Transportation-Related Hazardous Materials Spills, 1994-1999**



Source: US Coast Guard, National Response Center (November 2000)

It is widely assumed that many if not most hazardous materials spills go unreported to the authorities. It is a federal and state requirement that the party responsible for releasing the hazardous material into the environment report such "spills" to a variety of agencies that keep such data and take follow up action. Even when the parties clean up their spills, they must still report them. Therefore, spill history data consists of only of those spills that are reported, largely representing those parties who have complied with spill reporting requirements.

For example, the data indicates that over the past six years, the Navy and Marine Corps combined have reported 59% of all reported transportation-related spills. However, the Navy and the Marine Corps have a large presence in San Diego County and established policies for reporting spills.

Table 6-9 identifies the actual hazardous material released during reported transportation-related spills in San Diego County during the past six years. Petroleum products (oil, jet fuel and gasoline) were the most common substances released. The category of "all others" consists primarily of substances reported to be spilled only once or twice.

**Table 6-9: San Diego County, Nature and Frequency of Material Spilled in Reported Transportation-Related Incidents, 1994-1999**

<b>Material</b>	<b>Frequency</b>	<b>Percent of Total</b>
Oils	588	73%
Jet Fuel	58	7%
Gasoline	31	4%
Bilge material	19	2%
Unknown material	9	1%
Naphthilic acid	9	1%
Paints	9	1%
Dichloromonofluoromethane	6	1%
All others	73	9%
<b>Total</b>	<b>802</b>	<b>100%</b>

Source: US Coast Guard, National Response Center, November 2000

## 7 Identifying Hazardous Material Transportation Routes

This chapter shows how hazardous materials crossing the border and traveling north/south and east/west along the interstates translate into numbers of trucks per day on individual stretches of roads in San Diego County. This chapter further identifies the number of railcars that travel through San Diego per year carrying hazardous material to and from Mexico.

The truck data shows that hazardous materials transported to Mexico resulted in six times as many trucks as imports in 1999, compared to five times as many in 1998. All movements to and from the border account for roughly one fifth of the total number of trucks carrying hazardous materials on I-5 and I-805. The analysis clearly shows that the number of trucks carrying hazardous materials on I-5 and I-805 is significantly higher than the trucks traveling to and from the border through San Diego. However, the trucks traveling through San Diego travel on roads that traverse densely populated neighborhoods. Despite the lower numbers of border-related hazardous material truck traffic, such traffic still represents a significant concern to the immediate population and environment.

### 7.1 Truck Traffic

The amount of hazardous materials moving through the region is based on the amount shipped across the border and on average truck traffic counts on the interstates and local roads. The analysis assumed that an average truck carries 26 tons of hazardous material.<sup>18</sup>

The figures for cross border truck traffic carrying hazardous materials through San Diego were based on the data provided in Section 6.1.1. Exports of hazardous materials are more numerous than imports, because much of the exports traveling through Otay Mesa via truck are destined for manufacturing facilities in neighboring Tijuana. For example, plastics in primary form, such as polyester resins exported to Tijuana, may return in the form of finished goods that no longer are considered hazardous. Trade data shows that the origin and destination of the overwhelming majority of truck exports are local to the California/Baja California region. Over 90% of truck exports traveling through Otay Mesa and Tecate originate in California and over 95% have a destination in Baja California<sup>19</sup>.

Table 7-1 and Table 7-2 below show the number of trucks that carried imported hazardous materials through Otay Mesa and Tecate in 1998 and 1999. The San Ysidro port was closed to trucks in 1997. The largest group of imported hazardous materials is inorganic chemicals and cleaning solutions, which account for close to 90% of all hazardous material imports. Each table shows the total number of trucks on an annual basis, and the average number of trucks each business day. The average daily truck number for imports is determined by dividing the annual figure by 156 days, because truck imports are allowed on three days per week. The average daily truck number for

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<sup>18</sup> US Army Corps of Engineers, Compare Cargo Capacities

<sup>19</sup> US Department of Transportation, Bureau of Transportation Statistics, Transborder Surface Freight Dataset (1999)

exports is determined by dividing the annual figure by 350 days, because truck exports generally are allowed seven days per week.

**Table 7-1: Truck Imports by Commodity Description for Otay Mesa in 1998-1999**

<b>2506 HTS code</b>	<b>OTAY MESA</b>	<b>1998 Annual # of Trucks</b>	<b>1999 Annual # of Trucks</b>	<b>1998 Avg. Daily Trucks</b>	<b>1999 Avg. Daily Trucks</b>
28	Inorganic chemicals	2,429	1,771	16	11
34	Organic surface-active agents	1,351	1,104	9	7
38	Miscellaneous chemical products	70	126	0	1
32	Paints	57	61	0	<1
36	Explosives	66	43	0	<1
26	Ores, Slag, and ash	2	6	0	0
31	Fertilizers	0	2	0	0
27	Mineral fuels	2	1	0	0
29	Organic chemicals	0	0	0	0
37	Photographic or cinematographic goods	0	0	0	0
		<b>3,976</b>	<b>3,113</b>	<b>25</b>	<b>20</b>

Source: Science Applications International Corporation based on US Customs import data.

**Table 7-2: Truck Imports by Commodity Description for Tecate in 1998-1999**

<b>2505 HTS code</b>	<b>TECATE</b>	<b>1998 Annual # of Trucks</b>	<b>1999 Annual # of Trucks</b>	<b>1998 Avg. Daily Trucks</b>	<b>1999 Avg. Daily Trucks</b>
36	Explosives	2	180	0	1
26	Ores, Slag, and ash	0	0	0	0
34	Organic surface-active agents	0	0	0	0
		2	180	0	1

Source: Science Applications International Corporation based on US Customs imports data.

The decrease in the number of trucks importing hazardous materials from 1998 to 1999 at Otay Mesa (Table 7-1 above) is not sufficient to indicate a downward trend. As discussed earlier, overall truck traffic at Otay Mesa is expected to increase over the next 20 years.

The HTS does not provide enough detail to indicate the nature of the imported explosives. However, government agency personnel familiar with border activities have indicated that the substance may be sodium azide, which is used in initiators for air bags in passenger cars.

Exports are more diverse, with petroleum products, natural gas, and plastics in primary form being the most frequent exports. Table 7-3 and Table 7-4 show number of trucks that carried exported hazardous materials through Otay Mesa and Tecate in 1998 and 1999.

**Table 7-3: Truck Exports by Commodity Description for Otay Mesa in 1998-1999**

<b>Commodity Description</b>	<b>1998 Annual # of Trucks</b>	<b>1999 Annual # of Trucks</b>	<b>1998 Avg. Daily Trucks</b>	<b>1999 Avg. Daily Trucks</b>
PETROLEUM, PETROLEUM PRODUCTS AND RELATED MATERIALS	8,764	7,907	25	23
GAS, NATURAL AND MANUFACTURED	4,933	5,836	14	17
PLASTICS IN PRIMARY FORMS	3,058	3,958	9	11
INORGANIC CHEMICALS	492	732	1	2
CRUDE MINERALS (EXCLUDING COAL & PETROLEUM)	412	567	1	2
FERTILIZERS	487	551	1	2
ORGANIC CHEMICALS	288	268	<1	<1
CHEMICAL PREPARATIONS FOR PHOTOGRAPHIC USES	175	238	<1	<1
CHEMICAL MATERIALS AND PRODUCTS	119	196	<1	<1
DYEING, TANNING AND COLORING MATERIALS	132	172	<1	<1
PERFUME MATERIALS, POLISHING AND CLEANSING PREPARATIONS	19	30	0	0
ASH & RESIDUES CNTNG METALS & METALLIC COMPDS	6	11	0	0
COAL, COKE AND BRIQUETTES	0	2	0	0
<b>Total</b>	<b>18,885</b>	<b>20,468</b>	<b>54</b>	<b>58</b>

Source: Science Applications International Corporation based on US Bureau of Census Data

**Table 7-4: Truck Exports by Commodity Description for Tecate in 1998-1999**

<b>Commodity Description</b>	<b>1998 Annual # of Trucks</b>	<b>1999 Annual # of Trucks</b>	<b>1998 Avg. Daily Trucks</b>	<b>1999 Avg. Daily Trucks</b>
PETROLEUM, PETROLEUM PRODUCTS AND RELATED MATERIALS	760	308	2	1
PLASTICS IN PRIMARY FORMS	78	89	<1	<1
DYEING, TANNING AND COLORING MATERIALS	53	40	<1	<1
INORGANIC CHEMICALS	30	40	<1	<1
FERTILIZERS	17	21	<1	<1
ORGANIC CHEMICALS	9	16	0	0
COAL, COKE AND BRIQUETTES	0	13	0	0
CHEMICAL MATERIALS AND PRODUCTS	9	9	0	0
PERFUME MATERIALS, POLISHING AND CLEANSING PREPARATIONS	2	3	0	0
<b>Total</b>	<b>958</b>	<b>538</b>	<b>3</b>	<b>2</b>

Source: Science Applications International Corporation based on US Bureau of Census Data

About 81 trucks per day carrying hazardous materials enter and leave the US through the Otay Mesa and Tecate ports. The ports accept hazardous material shipments from 6 a.m. to 6 p.m. only. Therefore, on average, about 7 trucks per hour cross the border carrying hazardous materials. Over 95% of the hazardous material truck traffic occurs at Otay Mesa, which averages 6 or 7 hazardous material trucks per hour. Tecate sees relatively little hazardous material traffic, with about 2 hazardous material trucks per day, on average.

Delays in processing are common at all border crossings. As a result, the movements of hazardous materials are probably concentrated before noon as trucks move to the border to line up for possible inspection. An on-scene survey (which was not conducted) would be necessary to measure activity by time of day more precisely.

In addition to the cross border traffic, hazardous materials travel through the county on four major interstates and local roads for reasons unrelated to the border. Table 7-5 shows the daily truck counts on selected roads in the county and the number of trucks carrying hazardous materials on these roads. The interstate hazardous material truck count is based on the national average of 7%.<sup>20</sup> Local-only hazardous material traffic is likely much less, around 2%. The nature of these hazardous materials is determined by the economic activity in both the county itself and points north and east.

<sup>20</sup> US Department of Transportation, Bureau of Transportation Statistics, 1997 Economic Census, 1997 Commodity Flow Survey

**Table 7-5: Average Daily Truck Traffic, Selected San Diego Intersections**

Road	Intersection	Daily Trucks	5 axles	Hazmat Trucks
I-5	I-805	1862	626	44
I-5	I-15	6150	1519	106
I-805	I-5	1825	442	31
I-805	I-15	8668	1812	127
I-805	I-8	11417	2032	142
I-8	I-805	6624	768	54
I-15	I-5	1846	495	35
I-15	I-805	957	139	10
I-15	I-8	990	143	10
I-905	I-5	2680	791	55
I-905	I-805	3200	944	66

Source: California Department of Transportation, November 2000

High levels of truck traffic occur close to population centers throughout San Diego along the major interstates. Essentially all of the interstates travel directly through densely populated areas of San Diego. At present, there is no alternative for traffic heading north or east from the border crossing at Otay Mesa to avoid the City of San Diego. Traffic heading for the border is consolidated in local warehouses, where trucks await the arrival of export clearance. Although there is a concentration of warehouses close to the border, some are located in the City of San Diego itself.

## 7.2 Rail Traffic

Rail traffic has less of a local presence than truck traffic. According to the data, no hazardous materials were imported by rail in San Diego in 1998 or 1999. Exports of hazardous materials by rail are infrequent and amount to a small fraction of the cross border traffic by truck in San Diego. The number of railcars carrying hazardous materials for export in 1998 and 1999 is shown Table 7-6 below. Plastics in primary forms accounted for more than half of the rail exports. The amount of hazardous materials moving across the border by rail is based on the surface export data collected from the US Census Bureau. The analysis assumed that an average rail car carries 100 tons of hazardous material.<sup>21</sup>

**Table 7-6: Rail Exports by Commodity Description for San Ysidro in 1998-1999**

Commodity Description	1998 Annual # of Railcars	1999 Annual # of Railcars	1998 Railcars per Day	1999 Railcars per Day
PLASTICS IN PRIMARY FORMS	557	225	2	1
CHEMICAL MATERIALS AND PRODUCTS	19	47	0	0
PETROLEUM PRODUCTS	69	16	0	0
INORGANIC CHEMICALS	25	15	0	0
ORGANIC CHEMICALS	20	13	0	0
GAS, NATURAL AND MANUFACTURED	10	11	0	0
DYEING, TANNING AND COLORING MATERIALS	5	3	0	0
RESIDUES CNTNG METALS & METALLIC COMPDS	3	3	0	0
CLEANSING PREPARATIONS	0	1	0	0
FERTILIZERS	1	0	0	0
CHEMICAL PREPARATIONS	-	0	0	0
CRUDE MINERALS	5	-	0	0
<b>Total</b>	<b>715</b>	<b>334</b>	<b>2</b>	<b>1</b>

Source: Science Applications International Corporation based on US Census Bureau export data

<sup>21</sup> US Army Corps of Engineers, Compare Cargo Capacities

## 8 Hot Spots

This chapter identifies the hot spots as they relate to San Diego's geography, environmental and human sensitive areas, and the location of customhouse brokers. This chapter provides recommendations on ways in which information provided in this report could be used in future planning of emergency response services.

### 8.1 San Diego Geography

San Diego is growing at a rate that exceeds the rate of growth for the nation overall and California's rate of growth as well. This sustained population growth is due in large part to migration caused by job growth in the service sector, especially in the defense-related, high-tech, and bio-medical industries. From 2000 to 2010, the county is expected to grow by over a half million people. By 2020, the county's population is expected to exceed 3.5 million, with 1.7 million in the City of San Diego alone.

To better manage the city's growth and to improve economic and physical conditions, the city's Redevelopment Agency has undertaken six major projects. These projects will make substantial improvements to the community and are intended to attract private developers to the project areas. Table 8-1 shows the six major project areas affected by the redevelopment plan. The project areas are mostly older and urban areas. As shown in Figure 5, most of the project areas are located adjacent to one of the major highways in San Diego.

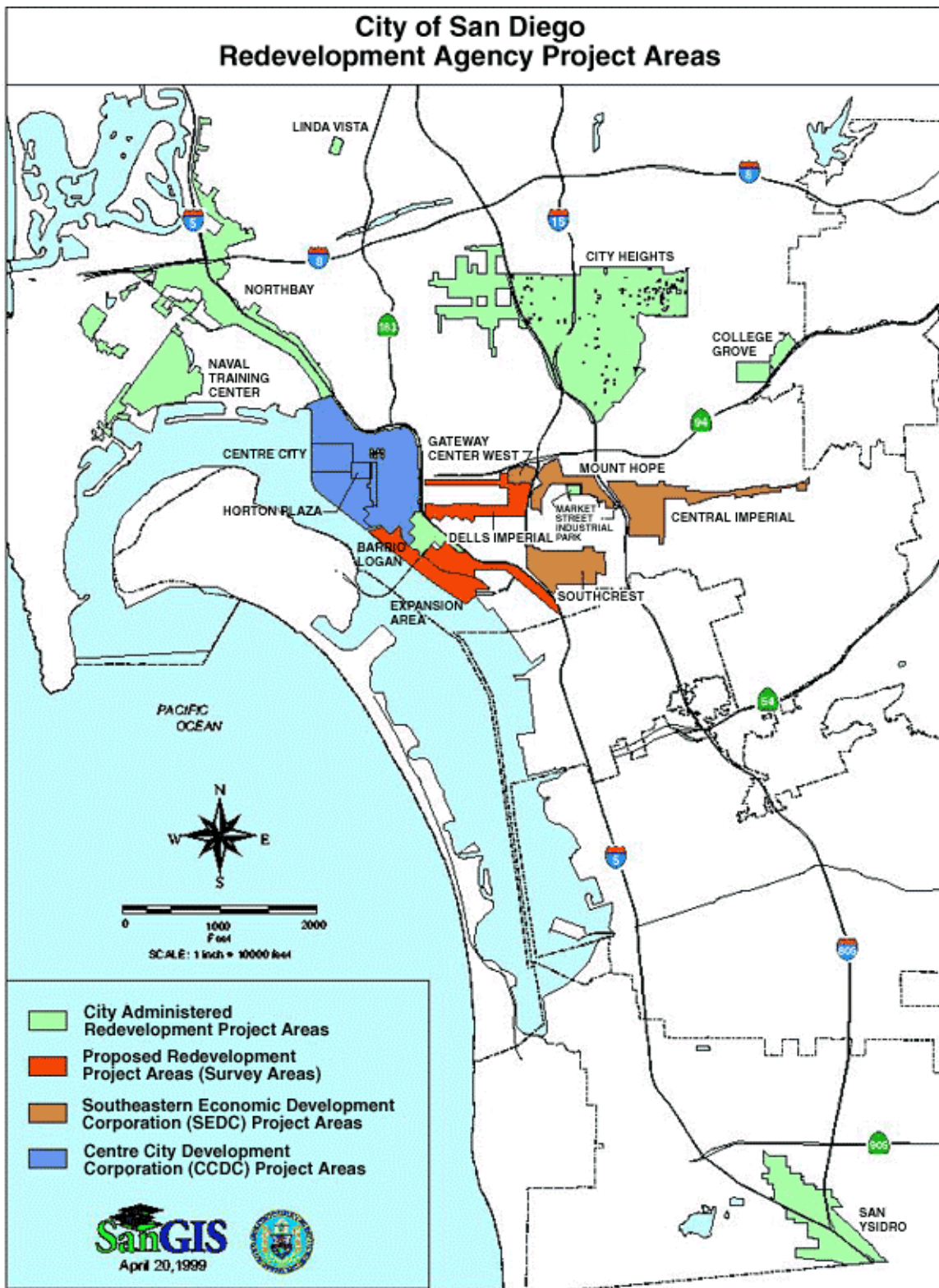
**Table 8-1: San Diego Major Redevelopment Project Areas**

<b>Project</b>	<b>Description</b>
City Heights Urban Village	Development of the City Heights Community
International Gateway of the Americas	World-class gateway
Interstate 15 Corridor Project	Landscaping, new parks, improved public transit
Mercado del Barrio Commercial Project	Create 100,000 square feet of retail
Proposed Ball park and Redevelopment Project	Redevelop downtown with a multiple use ballpark
Regional Transit Center	Education facility about alternative fuel vehicles

Source: City of San Diego Official Website, March 2000,  
<http://www.sannet.gov/redevelopment-agency/majorproj.shtml>



Figure 5: San Diego Project Area Map



The City of San Diego has designated the Metropolitan Enterprise Zone and the Otay Mesa Enterprise Zone for efforts to stimulate business investment and job growth. The Enterprise Zone program seeks to increase economic development by fostering foreign trade and by promoting economic self-sufficiency for the local community.

Incentives for the private sector include tax credits for up to half the wages paid to employees and preference by the state of California in industrial development bond applications. Industries within the foreign trade zone may import parts and export finished products without paying U.S. Customs duties, except for merchandise entering the U.S. Customs territory.

The foreign trade zone is conveniently located near a number of airports and the maquiladoras in Tijuana. Most of these companies are small businesses and include importers, manufacturers, distributors, assemblers of products, and exporters of imported merchandise. Some of these areas around Otay Mesa are:

73 acres at Airway Road and State Route 125

312 acres at Brown Field Business Park, bounded by Otay Mesa Road, Britannia Boulevard and Airport Road

389 acres at the Otay Mesa International Center business park in the southeast portion of Otay Mesa.

The Enterprise Community Initiative identified 18 census tracts with similar need-based objectives for economical revitalization. The Enterprise Community effort began in 1994. The benefits extended to businesses participating in the program will last until 2004. During these 10 years, the community will determine the ways in which \$2.95 million will be spent to enhance the economic base to create job and business opportunities that enhance community identity, stability and livability. Tax-exempt bond financing is available to businesses that locate and expand in these areas and agree to hire local residents. Some federal grants include preferences and bonus points for enterprise communities, which enhance their ability to compete for federal funds. Past efforts at revitalization have resulted in job placements for 4,000 people, the creation of 200 jobs, improved education for more than 1,300 parents and students, and economic self-sufficiency support services for 3,600 families.

Figure 8-2 below shows the numbers of reported transportation-related hazardous material spills by area within San Diego County, for which there was adequate location information. Reported transportation-related spills are also discussed in section 6.3 above. Available location information for some spills was too general to enable placement on Figure 8-2. As shown on Figure 8-2, larger numbers of transportation-related spills have been reported in and around downtown San Diego and the harbor than in the other portions of the county from 1994 to 1999. Spills that occurred while a ship was docked at a pier in San Diego harbor are included in the count for land area, even if the spill entered the ocean. The box labeled "water spills" refers to spills reported by ships of the

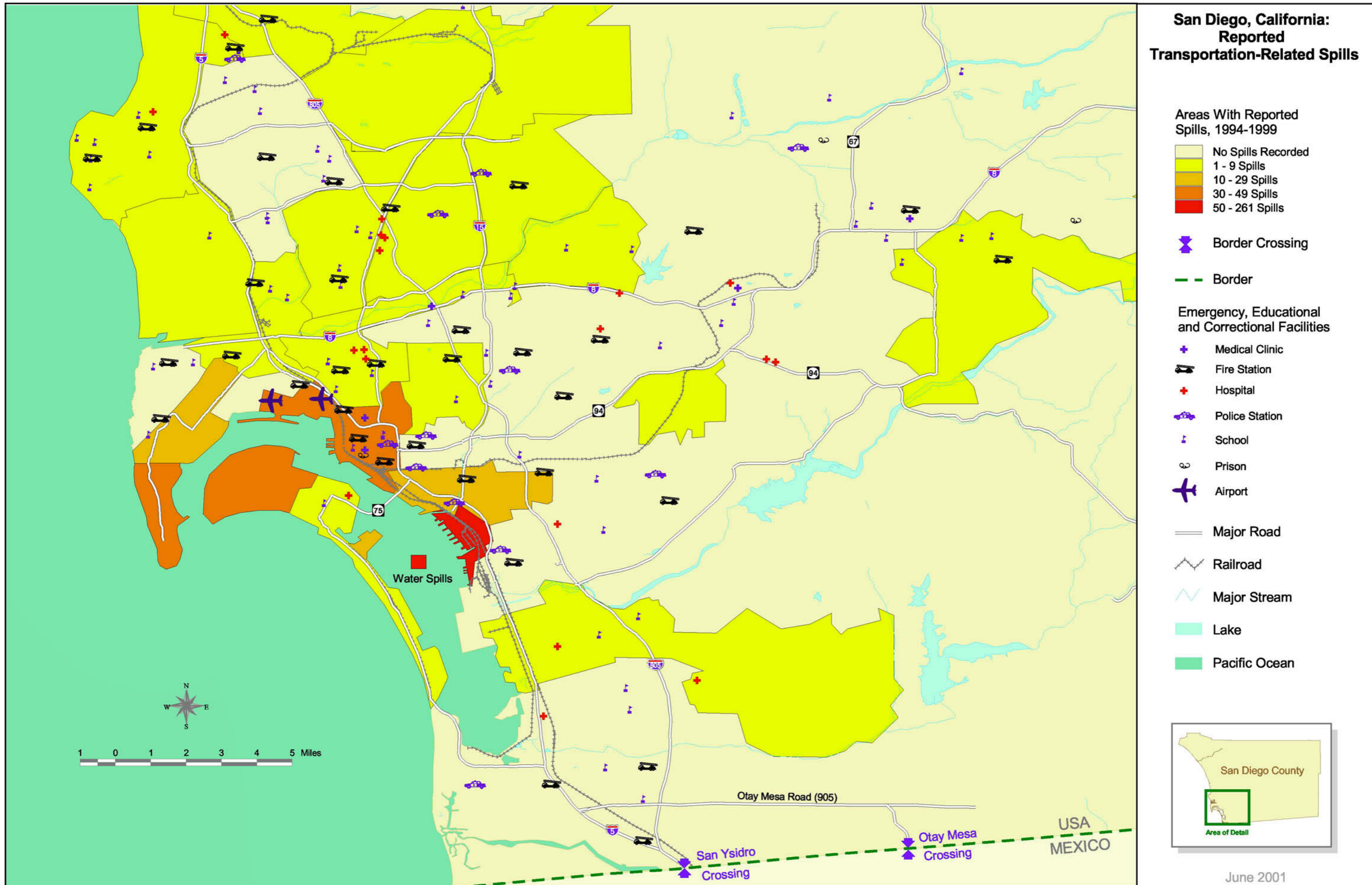
Navy's Pacific fleet that occurred while the vessels were in San Diego harbor, but that could not be clearly associated with a pier. The vast majority of transportation-related spills shown on Figure 8-2 are petroleum spills. From an overall perspective, these areas appear to have an increased likelihood of transportation-related hazardous material spills and thus may be considered hotspots.

The county's Hazardous Materials Incident Response Team (HIRT) provides assistance to law enforcement officials in events involving hazardous materials. These law enforcement related activities can occur anywhere in the county. According to local environmental health officials, law enforcement is becoming a significant part of HIRT's workload.

## **8.2 Environmentally Sensitive Areas**

The most sensitive parts of the environment in the San Diego region are the local water resources. Hazardous materials are difficult to remove from water. Water is vitally important to wildlife, farming, recreation, and human consumption. Public health is directly affected by water quality.

The San Diego region is located in a watershed known as the San Diego Hydraulic region. A watershed is a drainage basin where water and sediment drain to a common outlet. Many waterways in San Diego drain into the harbor and Pacific Ocean. Numerous water resources, including local rainfall, rivers, lakes, streams, ponds, reservoirs, springs, and wells, help to supply drinking water for San Diego. Up to 20 percent of the drinking water supply is from local sources captured in local reservoirs. This portion of the water supply is most vulnerable to hazardous material releases. Most of the rest of the water supply is imported through the Metropolitan Water District of Southern California from Lake Havasu via the 242-mile aqueduct. A smaller amount of water is imported from the Sacramento-San Joaquin Delta in northern California. Water from local and imported sources is delivered to the Otay, Alvarado, or Miramar treatment plants for distribution to customers.



The Upper Otay Reservoir and the Lower Otay Reservoir, cover over 1,000 surface acres when full. Located between the Tecate and Otay Mesa ports, they are two of the reservoirs for the City of San Diego's municipal water supply system. The local Tecate fire department is composed of volunteers, instead of full-time city employees. Volunteer fire departments are less equipped, trained and prepared to handle a hazardous material spill than a specialized hazmat team, such as San Diego's Hazardous Incident Response Team. Because the local fire department has comparatively less expertise, a hazardous material spill poses a higher risk of environmental damage and adverse public health impacts. This risk could be mitigated with better training and equipment for the local fire department. Road conditions from Tecate are not as optimal for hazardous material truck traffic as from the Otay Mesa port, which may lead to an increase in transportation-related accidents.

### **8.3 Human Sensitive Areas**

Hot spots can also be areas that create unique risk to the human population. These areas include schools, hospitals, public places such as parks, and densely populated areas near heavy hazardous material traffic. The city of San Diego is traversed by four major interstates that all cut through densely populated areas. These interstates are:

I-5 which extends northward along the Pacific Coast and directly through the downtown area;

I-8 which starts just north of downtown San Diego and extends eastward toward Arizona, crossing through the eastern suburbs of San Diego;

I-15 which extends northeastward to Colorado; and

I-805 which splits off of I-5 just north of the Mexican border, and then runs parallel and east of I-5, before rejoining I-5 north of Miramar Naval Air Station.

The biggest hot spots are the intersections along the most traveled interstates. These areas are the intersections of I-8 with I-5, I-805 and I-15, all of which are within densely populated areas of San Diego.

### **8.4 Customhouse Brokers**

The customhouse brokers operate warehouses for inventory to be exported into Mexico. Of approximately 100 brokers in the San Diego region, 57% are located near the Otay Mesa border crossing. The other 43% are scattered throughout the city of San Diego. The more frequent the transportation of hazardous materials to and from the warehouses, the more likely the possibility of a hazardous material spill. The longer that inventory remains in the warehouse, the more likely that leaks or accidents may occur. The warehouses near the Otay Mesa border crossing are clustered together, which would allow emergency response equipment to be positioned near a large number of potential incident sites. The area where the warehouses are located at the Otay Mesa border crossing is one of the least densely populated areas of the San Diego region, which mitigates the potential consequences of a release. In comparison, the other warehouses are scattered throughout the city in more densely populated areas, posing a potentially greater risk.

## **8.5 Recommendations**

Many communities have improved the safety of their residents by placing restrictions on truck traffic carrying hazardous materials, and by enacting zoning measures to prevent the storage and shipment of hazardous materials in sensitive or high-risk areas. The San Diego region has few options to affect the current movement of hazardous materials through residential areas in the city. Hazardous material traffic flows on major interstates. There are no real alternatives to these routes. Restricting hazardous material traffic on the interstates would effectively transfer the trucks onto local surface roads, which would increase the risk of a spill.

Awareness of the nature of hazardous material flows, and the nature and location of spills, as described in this report, would assist emergency preparedness. This information could be used to determine placement for hazardous materials response equipment and facilities, and training priorities for emergency responders. It would be helpful to update this information by periodically monitoring developments in hazardous material flows using the resources provided in Chapter 9 below.

## 9 Knowledge Transfer

Having expert consultants conduct studies such as this one is not inexpensive, and is generally beyond the reach of most municipalities with more immediate priorities. This chapter provides local emergency managers insight into data that can help them monitor hazardous material transfers in their jurisdiction. It can also provide readers from other jurisdictions with data sources that they can consult to better understand the hazardous material flows in their areas.

### 9.1 Federal Level

At the federal level, proprietary data on imports and exports were collected from US Customs and US Bureau of Census, respectively. The US Customs provided a list of imports by 10-digit HTS code, by mode of transportation, by volume, by shipment weight, by port of entry and by year. Because US Customs import data contains proprietary information, USEPA Region 9 needed to specifically request the data at this level of detail.

The US Bureau of Census releases export data for a fee of \$60 per year. The data is provided by 5-digit SITC code and by mode of transportation (air, vessel, and surface), by value, and by port of exit. Surface transit consists of all rail, trucks and pipeline movement.

The Transborder Surface Freight Dataset is available on the US Department of Transportation, Bureau of Transportation Statistics (BTS) web site and can be used to obtain details of rail traffic.

The Hazardous Materials Movements Study, produced by the BTS and the US Department of Commerce, captures the national movement of goods.

The websites for the US Environmental Protection Agency (EPA) ([www.epa.gov](http://www.epa.gov)) and the US Department of Energy ([www.doe.gov](http://www.doe.gov)) are provide definitions of hazardous materials.

It is suggested that local officials concentrate on monitoring two databases. These are the import data provided by the US International Trade Commission via dataweb ([www.dataweb.usitc.gov](http://www.dataweb.usitc.gov)), and the export data provided by BTS ([www.bts.gov/ntda/tbscd](http://www.bts.gov/ntda/tbscd)), in order to update this study. Both data sources allow local officials to monitor significant shifts in the commodities moving across the border. The review could be done on an annual basis upon release of new data.

### 9.2 State Level

At the state level, the California Department of Transportation (Caltrans) web page provided useful traffic counts. The data is available from 1978 to 1998. This study used only the most recent data (1997 and 1998).

Local officials can monitor the Caltrans website at [www.dot.ca.gov/hq/traffops/saferes/trafdata/](http://www.dot.ca.gov/hq/traffops/saferes/trafdata/) for updates to the traffic counts. Updates are made periodically.

Review is recommended at least annually, possibly in conjunction with review of the import and export data discussed above.

### **9.3 Local Level**

Study personnel visited the City of San Diego to gather data from local authorities and to obtain information on the border crossing and traffic patterns within and around the City. Helpful local resources included the following:

- The Hazardous Materials Division of the County of San Diego Department of Environmental Health (619-338-2216) provided information on the current system of emergency planners and responders.
- The Fleet and Industrial Supply Center (619-556-6208) supplied information on environmental protection efforts of the Navy.
- The Environmental Counsel of the Department of Defense (619-532-4301) supplied information on the Navy's management of hazardous material spills.
- The San Diego Association of Governments (<http://www.sandag.cog.ca.us/>) supplied topographical and road maps.



# List of Appendices

**Appendix A Imports by Harmonized Tariff System (HTS) Codes: San Diego Ports**

**Appendix B Exports by Standard Industrial Trade Classification (SITC) Codes:  
San Diego Ports**

**Appendix C San Diego Public Institutions**

# Appendix A

Imports by  
Harmonized Tariff System (HTS) Codes:  
San Diego Ports

HTS Code	HTS Description
<b>26: Ores, slag and ash</b>	
<b>2620</b>	Ash and residues (other than from the manufacture of iron or steel) containing metals or metal compounds:
2620193000	Containing mainly zinc: other zinc dross and zinc skimmings
2620500000	containing mainly vanadium
2620907580	Other materials not provided for elsewhere in this heading: other materials which are residues not advanced in value or condition by any means, and which if containing over 2% by weight of copper, lead or zinc are not to be treated for the recovery thereof: gold content
<b>27: Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes</b>	
<b>2710</b>	Petroleum oils and oils obtained from bituminous minerals, other than crude; preparations not elsewhere specified or included, containing by weight 70% or more of petroleum oils or of oils obtained from bituminous minerals, these oils being the basic constituents of the preparations
2710000550	Distillate and residual fuel oils (including blends) derived from bituminous minerals, testing under 25 degrees A.P.I.-- Other
2710003080	Lubricating oils and greases w/or w/o additives: other oils
<b>2715</b>	
2715000000	Bituminous mixtures based on natural asphalt, natural bitumen, petroleum bitumen, mineral tar or mineral tar pitch
<b>28: Inorganic chemicals; compounds of precious metals, rare earth metals, radioactive elements</b>	
<b>2804</b>	Hydrogen, rare gases and other nonmetals:
2804210000	Rare gases: argon
2804300000	Nitrogen
2804400000	Oxygen
<b>2818</b>	Artificial corundum, whether or not chemically defined; aluminum oxide; aluminum hydroxide:
2818200000	Aluminum oxide, other than artificial corundum
<b>2824</b>	Lead oxides; red lead and orange lead:
2824100000	Lead monoxide (litharge, massicot)
<b>2835</b>	Phosphinates (hypophosphites), phosphonates (phosphites), phosphates and polyphosphates:
2835100000	Phosphinates (hypophosphites) and phosphonates (phosphites)
2847000000	Hydrogen peroxide, whether or not solidified with urea
<b>29: Organic chemicals</b>	
<b>2905</b>	Acyclic alcohols and their halogenated, sulfonated, nitrated or nitrosated derivatives:
2905150000	Saturated monohydric alcohols: Pentanol (amyl alcohol) and isomers thereof

HTS Code	HTS Description
2909	Ethers, ether-alcohols, ether-phenols, ether-alcohol-phenols, alcohol peroxides, ether peroxides, ketone peroxides (whether or not chemically defined), and their halogenated, sulfonated, nitrated or nitrosated derivatives:
2909505000	Ether-phenols, ether-alcohol-phenols and their halogenated, sulfonated, nitrated or nitrosated derivatives: Other--Other
2912	Aldehydes, whether or not with other oxygen function; cyclic polymers of aldehydes; paraformaldehyde:
2912195000	Acyclic aldehydes w/o other oxygen function: Other Other
2912492500	Aldehyde-ethers, aldehyde-phenols and aldehydes w/ other oxygen function: Other--other
2914	Ketones and quinones, whether or not w/ other oxygen function, and their halogenated, sulfonated, nitrated, or nitrosated derivatives:
2914115000	Acyclic ketones w/o other oxygen function: Acetone: Other
2915	Saturated acyclic monocarboxylic acids and their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulfonated, nitrated or nitrosated derivatives:
2915210000	Acetic acid and its salts; acetic anhydride: acetic acid
2916	Unsaturated acyclic monocarboxylic acids, cyclic monocarboxylic acids, their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulfonated, nitrated or nitrosated derivatives:
2916195000	Unsaturated acyclic monocarboxylic acids, their anhydrides, halides, peroxides and peroxyacids and their derivatives: Other--other
2918	Carboxylic acids with additional oxygen function and their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulfonated, nitrated or nitrosated derivatives:
2918221000	Carboxylic acids with phenol function but w/o other oxygen function, their anhydrides, halides, peroxides, peroxyacids and their derivatives: O-Acetylsalicylic acid (aspirin)
2918905000	Carboxylic acids with phenol function but w/o other oxygen function, their anhydrides, halides, peroxides, peroxyacids and their derivatives: Other--other
2922	Oxygen-function amino-compounds:
2922496000	Amino-acids and their esters, other than those containing more than one kind of oxygen function; salts thereof: Other--3-Aminocrotonic acid, methyl ester; and (R)-Amino-1, 4-cyclohexadiene-1-acetic acid
2933	Heterocyclic compounds w/nitrogen hetero-atom(s) only:
2933909700	Other--Hexamethyleneimine--Other
2934	Nucleic acids and their salts; other heterocyclic compounds
2934904400	Other aromatic or modified aromatic: Other--other

HTS Code	HTS Description
<b>31: Fertilizers</b>	
3101	Animal or vegetable fertilizers, whether or not mixed together or chemically treated; fertilizers produced by the mixing or chemical treatment of animal or vegetable products
3101000000	Animal or vegetable fertilizers, whether or not mixed together or chemically treated; fertilizers produced by the mixing or chemical treatment of animal or vegetable products
<b>32: Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other coloring matter; paints and varnishes</b>	
3208	Paints and varnishes (including enamels and lacquers) based on synthetic polymers or chemically modified natural polymers, dispersed or dissolved in a nonaqueous medium; solutions as defined in note 4 to this chapter
3208100000	Paints and varnishes (including enamels and lacquers) based on polyesters in a nonaqueous medium
3208900000	Paints and varnishes based on synthetic polymers or chemically modified natural polymers nesoi, in a nonaqueous medium
<b>34: Soap, organic surface-active agents, washing preparations, lubricating preparations, polishing or scouring preparations</b>	
3402	Organic surface-active agents (other than soap); surface-active preparations, whether or not containing soap, other than those of heading 3401:
3402131000	Aromatic or modified aromatic nonionic organic surface-active agents (other than soap)--
3402191000	Aromatic or modified aromatic organic surface-active agents (other than soap) other than anionic, cationic or nonionic
3402195000	Nonaromatic organic surface-active agents (other than soap) nesoi
3402905010	Other: washing preparations
3402905030	Other: cleaning preparations
3402905050	Other: other
<b>36: Explosives; pyrotechnical products</b>	
3604	Fireworks, signaling flares, rain rockets, forg signals and other pyrotechnic articles:
3604101000	Display or special fireworks (Class 1.3G)--
3606	Ferrocerium and other pyrophoric alloys in all forms; articles of combustible materials as specified in note 2 to this chapter:
3606100000	Liquid or liquefied-gas fuels in containers used for filling cigarette or similar lighters of a capacity not exceeding 300 cubic cm
3606908000	Articles of combustible materials as specified in note 2 of chap. 36, nesoi
<b>37: Photographic or cinematographic goods</b>	
3707	Chemical preparations for photographic uses (other than varnishes, glues, adhesives and similar preparations); unmixed products for photographic uses, put up in measured portions or put up for retail sale in a form ready for use:
3707903290	Other chemical preparations for photographic uses: Other

HTS Code	HTS Description
<b>38: Miscellaneous chemical products</b>	
<b>3809</b>	Finishing agents, dye carriers to accelerate the dyeing or fixing of dyestuffs and other products and preparations (for example, dressings and mordants), of a kind used in the textile, paper, leather or like industries, not elsewhere specified or included:
3809910000	Finishing agents, dye carriers and like products, nesoi, used in the textile or like industries
<b>3810</b>	Pickling preparations for metal surfaces; fluxes and other auxiliary preparations for soldering, brazing or welding; soldering, brazing or welding powders and pastes consisting of metal and other materials; preparations of a kind used as cores or coatings for welding electrodes or rods
3810100000	Pickling preparations for metal surfaces; soldering, brazing or welding powders and pastes consisting of metal and other materials
<b>3824</b>	Prepared binders for foundry molds or cores; chemical products and preparations of the chemical or allied industries (including those consisting of mixtures of natural products), not elsewhere specified or included; residual products of the chemical or allied industries, not elsewhere specified or included):
3824200050	Naphthenic acids, their water-insoluble salts, and their esters: Other
3824903900	Chemical mixtures of two or more inorganic compounds, nesoi
3824909050	Chemical products, preparations, and residual products of the chemical or allied products industries, nesoi

# Appendix B

Exports by  
Standard Industrial Trade Classification  
(SITC) Codes:  
San Diego Ports

PORT	SITC	SITC_DESCRIPTION
<b>OTAY MESA STATION</b>		
	<b>27</b>	
OTAY MESA STATION	27410	SULFUR OF ALL KINDS (EXCEPT SBLMD,PRCPT OR COLL)
OTAY MESA STATION	27840	ASBESTOS
OTAY MESA STATION	27897	BITUMEN & ASPHALT, NAT; ASPHALTITIES & ASPHALTIC R
	<b>28</b>	
OTAY MESA STATION	28520	ALUMINA (ALUMINUM OXIDE)
OTAY MESA STATION	28810	ASH & RESIDUES CNTNG METALS & METALLIC COMPDS NES
	<b>32</b>	
OTAY MESA STATION	32210	BRIQUETTES, OVOIDS & OTH SOLID FUEL MFR FRM COAL
OTAY MESA STATION	32230	PEAT (INCLUDING PEAT LITTER), AGGLOMERATED OR NOT
OTAY MESA STATION	32500	COKE, SEMICOKE ETC OF COAL, LIGNITE ETC; RE CARBON
	<b>33</b>	
OTAY MESA STATION	33300	CRUDE OIL FROM PETROLEUM OR BITUMINOUS MINERALS
OTAY MESA STATION	33411	GASOLINE INCLUDING AVIATION (EXCEPT JET) FUEL
OTAY MESA STATION	33419	LIGHT OILS FROM PETROL & BITUM MINERALS NES ETC
OTAY MESA STATION	33421	KEROSENE, INCLUDING KEROSENE TYPE JET FUEL
OTAY MESA STATION	33429	MEDIUM OILS FROM PETROL & BITUM MINERALS NES ETC
OTAY MESA STATION	33430	GAS OILS
OTAY MESA STATION	33440	FUEL OILS, N.E.S.
OTAY MESA STATION	33452	OIL PET/BIT MTRL A PRP THS OILS BSC CONST X NG CON
OTAY MESA STATION	33523	TOLUENE
OTAY MESA STATION	33524	XYLENE
OTAY MESA STATION	33525	OILS & PRODUCTS NES AS COAL TAR DISTILLATES ETC
OTAY MESA STATION	33531	PITCH FROM COAL TAR OR OTHER MINERAL TARS
OTAY MESA STATION	33541	PETROLEUM BITUMEN ETC; BITUMINOUS MIXTURES
OTAY MESA STATION	33542	PETROLEUM COKE
OTAY MESA STATION	33543	BITUMINOUS MIXTURES BASED ON NATURAL ASPHALT ETC
	<b>34</b>	
OTAY MESA STATION	34210	PROPANE, LIQUEFIED
OTAY MESA STATION	34250	BUTANE, LIQUEFIED
OTAY MESA STATION	34310	NATURAL GAS, LIQUEFIED
OTAY MESA STATION	34320	NATURAL GAS, IN THE GASEOUS STATE
OTAY MESA STATION	34410	ETHYLENE, PROPYLENE, BUTYLENE & BUTADIENE, LIQUID
OTAY MESA STATION	34420	GASEOUS HYDROCARBONS, LIQUEFIED, N.E.S
OTAY MESA STATION	34490	GASEOUS HYDROCARBONS IN THE GASEOUS STATE, N.E.S.
	<b>51</b>	
OTAY MESA STATION	51113	BUTYLENES, BUTADIENES AND METHYLBUTADIENES
OTAY MESA STATION	51114	SATURATED ACYCLIC HYDROCARBONS
OTAY MESA STATION	51121	CYCLOHEXANE
OTAY MESA STATION	51123	TOLUENE, PURE
OTAY MESA STATION	51124	XYLENES, PURE
OTAY MESA STATION	51129	CYCLIC HYDROCARBONS, N.E.S.
OTAY MESA STATION	51132	TRICHLOROETHYLENE
OTAY MESA STATION	51133	TETRACHLOROETHYLENE (PERCHLOROETHYLENE)
OTAY MESA STATION	51136	SATURATED CHLOR DERIV OF ACYCLIC HYDROCARBONS NES
OTAY MESA STATION	51137	FLUORINATED ETC DERIVATIVES OF ACYCLIC HYDROCARBNS
OTAY MESA STATION	51138	HALOGENATED DERIV ACYCLIC HYDROCARB OVER 1 HALOGEN



PORT	SITC	SITC_DESCRIPTION
OTAY MESA STATION	51139	HALOGENATED DERIVATIVES OF HYDROCARBONS, N.E.S.
OTAY MESA STATION	51140	SULFONATED, NITRATED ETC DERIVATIVES OF HYDROCARBN
OTAY MESA STATION	51211	METHANOL (METHYL ALCOHOL)
OTAY MESA STATION	51212	PROPAN-1-OL AND PROPAN-2-OL
OTAY MESA STATION	51216	ETHYL ALCOHOL & OTHER SPIRITS, DENATURED
OTAY MESA STATION	51217	FATTY ALCOHOLS, INDUSTRIAL
OTAY MESA STATION	51219	MONOHYDRIC ALCOHOLS, N.E.S.
OTAY MESA STATION	51221	ETHYLENE GLYCOL (ETHANEDIOL)
OTAY MESA STATION	51222	GLYCEROL (GLYCERINE), GLYCEROL WATERS & LYES
OTAY MESA STATION	51223	PENTAERYTHRITOL
OTAY MESA STATION	51225	D-GLUCITOL (SORBITOL)
OTAY MESA STATION	51229	ACYCLIC ALCOHOLS, N.E.S.
OTAY MESA STATION	51231	CYCLANIC ETC ALCOHOLS & HALOGENATED ETC DERIVATIVS
OTAY MESA STATION	51235	AROMATIC CYCLIC ALCOHOLS & HALOGEN ETC DERIVATIVES
OTAY MESA STATION	51241	PHENOL (HYDROXYBENZENE), PURE, AND ITS SALTS
OTAY MESA STATION	51371	ACETIC ACID AND ITS SALTS
OTAY MESA STATION	51372	ESTERS OF ACETIC ACID
OTAY MESA STATION	51373	METHACRYLIC ACID AND ITS SALTS AND ESTERS
OTAY MESA STATION	51375	BUTYRIC ACIDS, VALERIC ACIDS, THEIR SALTS & ESTERS
OTAY MESA STATION	51376	PALMITIC ACID, STEARIC ACID, THEIR SALTS & ESTERS
OTAY MESA STATION	51377	SATURATED ACYCLIC MONOCARBOXYLIC ACIDS NES ETC
OTAY MESA STATION	51379	UNSATURATED ACYCLIC MONOCARBOXYLIC ACIDS NES ETC
OTAY MESA STATION	51383	DIOCTYL ORTHOPHTHALATES
OTAY MESA STATION	51389	POLYCARBOXYLIC ACIDS NES; ANHYRIDES, HALIDES ETC
OTAY MESA STATION	51391	LACTIC, TARTARIC, CITRIC ACIDS & SALTS & ESTERS
OTAY MESA STATION	51396	CARBOXYLIC ACIDS WITH OXYGEN FUNCTIONS NES ETC
OTAY MESA STATION	51451	ACYCLIC MONOAMINES AND THEIR DERIVATIVES; SALTS OF
OTAY MESA STATION	51454	AROMATIC MONOAMINES AND DERIVATIVES; SALTS THEREOF
OTAY MESA STATION	51461	AMINO-ALCOHOLS, ETHERS ETC NES; SALTS THEREOF
OTAY MESA STATION	51464	LYSINE, ESTERS & SALTS OF; GLUTAMIC ACIDS & SALTS
OTAY MESA STATION	51465	AMINO ACIDS & ESTERS ETC NES; SALTS THEREOF
OTAY MESA STATION	51467	AMINO-ALCOHOL-PHENOLS, AMINO-ACID-PHENOLS ETC
OTAY MESA STATION	51471	ACYCLIC AMIDES & CARBAMATES & DERIVATIVES; SALTS
OTAY MESA STATION	51479	CYCLIC AMIDES NES ETC, DERIVATIVES; SALTS OF
OTAY MESA STATION	51481	QUATERNARY AMMONIUM SALTS ETC; LECITHINS ETC
OTAY MESA STATION	51482	CARBOXYIMIDE-FUNCTION & AMINE-FUNCTION COMPDS ETC
OTAY MESA STATION	51483	ACRYLONITRILE
OTAY MESA STATION	51484	NITRILE-FUNCTION COMPOUNDS N.E.S.
OTAY MESA STATION	51489	NITROGEN-FUNCTION COMPOUNDS N.E.S.
OTAY MESA STATION	51542	THIOCARBAMATES AND DITHIOCARBAMATES
OTAY MESA STATION	51543	THIURAM MONO-, DI-, OR TETRASULFIDES
OTAY MESA STATION	51549	ORGANO-SULFUR COMPOUNDS N.E.S.
OTAY MESA STATION	51561	LACTAMS
OTAY MESA STATION	51563	LACTONES N.E.S.
OTAY MESA STATION	51569	HETEROCYCLIC COMPOUNDS, OXYGEN HETERO-ATOM(S) ETC
OTAY MESA STATION	51571	HETEROCYCLIC CMP, NITROGEN HETERO-ATOM(S) ETC
OTAY MESA STATION	51573	HETEROCYCLIC CMP NES WITH UNFUSED IMAZOLE RING ETC
OTAY MESA STATION	51576	HETEROCYCLIC CMPD, NITROGEN ETC, PYRIMIDINE RG ETC
OTAY MESA STATION	51577	HETEROCYCLIC CMPD WITH NITROGEN HETERO-ATM ETC NES

PORT	SITC	SITC_DESCRIPTION
OTAY MESA STATION	51579	HETEROCYCLIC COMPOUNDS, N.E.S.
OTAY MESA STATION	51580	SULFONAMIDES
OTAY MESA STATION	51612	ACETALS & HEMIACETALS ETC, HALOGENATED ETC
OTAY MESA STATION	51613	OXIRANE (ETHYLENE OXIDE)
OTAY MESA STATION	51615	EPOXIDES, EPOXYALCOHOLS, EPOXYPHENOLS ETC N.E.S.
OTAY MESA STATION	51616	ACYCLIC, CYCLANIC, CYCLENIC ETC ETHERS ETC
OTAY MESA STATION	51617	ETHER-ALCOHOLS, ETHER-PHENOLS ETC
OTAY MESA STATION	51621	ACYCLIC ALDEHYDES WITHOUT OTHER OXYGEN FUNCTION
OTAY MESA STATION	51623	ACETONE
OTAY MESA STATION	51624	BUTANONE (ETHYL METHYL KETONE)
OTAY MESA STATION	51625	ACYCLIC KETONES WITHOUT OTHER OXYGEN FUNCTION NES
OTAY MESA STATION	51631	PHOSPHORIC ESTERS AND SALTS ETC
OTAY MESA STATION	51639	ESTERS OF INORGANIC ACIDS ETC NES
OTAY MESA STATION	51699	ORGANIC COMPOUNDS, N.E.S.
	<b>52</b>	
OTAY MESA STATION	52221	HYDROGEN, RARE GASES, NITROGEN AND OXYGEN
OTAY MESA STATION	52222	SELENIUM, TELLURIUM, PHOSPHORUS, ARSENIC AND BORON
OTAY MESA STATION	52224	CHLORINE
OTAY MESA STATION	52225	FLUORINE, BROMINE AND IODINE
OTAY MESA STATION	52226	SULFUR, SUBLIMED OR PRECIPITATED; COLLOIDAL SULFUR
OTAY MESA STATION	52229	CALCIUM, STRONTIUM & BARIUM; RARE EARTH METALS ETC
OTAY MESA STATION	52231	HYDROGEN CHLORIDE; CHLOROSULFURIC ACID
OTAY MESA STATION	52232	SULFURIC ACID; OLEUM
OTAY MESA STATION	52233	NITRIC ACID; SULFONITRIC ACIDS
OTAY MESA STATION	52234	DIPHOSPHORUS PENTOXIDE; PHOSPHORIC ACID ETC
OTAY MESA STATION	52236	INORGANIC ACIDS, N.E.S.
OTAY MESA STATION	52239	INORGANIC OXYGEN COMPOUNDS OF NONMETALS, N.E.S.
OTAY MESA STATION	52242	SULFIDES OF NONMETALS; COMMER PHOSPHOR TRISULFIDE
OTAY MESA STATION	52251	ZINC OXIDE; ZINC PEROXIDE
OTAY MESA STATION	52252	CHROMIUM OXIDES AND HYDROXIDES
OTAY MESA STATION	52253	MANGANESE OXIDES
OTAY MESA STATION	52256	TITANIUM OXIDES
OTAY MESA STATION	52257	LEAD OXIDES; RED LEAD AND ORANGE LEAD
OTAY MESA STATION	52261	AMMONIA, ANHYDROUS, OR IN AQUEOUS SOLUTION
OTAY MESA STATION	52262	SODIUM HYDROXIDE (CAUSTIC SODA), SOLID
OTAY MESA STATION	52263	SODIUM HYDROXIDE IN AQUEOUS SOLUTION (LIQUID SODA)
OTAY MESA STATION	52264	POTASSIUM HYDROXIDE; SODIUM OR POTASSIUM PEROXIDES
OTAY MESA STATION	52265	MAGNESIUM HYDROXIDE ETC; STRONT & BARIUM OXIDE ETC
OTAY MESA STATION	52266	ALUMINUM HYDROXIDE
OTAY MESA STATION	52268	HYDRAZINE AND HYDROXYLAMINE AND INORGANIC SALTS
OTAY MESA STATION	52269	INORGANIC BASES, METAL OXIDES, HYDROXIDES ETC NES
OTAY MESA STATION	52310	FLUORIDES; FLUROSILICATES, FLUROALUMINATES ETC
OTAY MESA STATION	52321	AMMONIUM CHLORIDE
OTAY MESA STATION	52322	CALCIUM CHLORIDE
OTAY MESA STATION	52329	CHLORIDES, CHLORIDE OXIDE ETC NES BROMIDES ETC NES
OTAY MESA STATION	52331	HYPOCHLORITES; COMM. CALCIUM HYPOCHLORITE ETC
OTAY MESA STATION	52332	SODIUM CHLORATE
OTAY MESA STATION	52339	CHLORATES & PERCHLORATES NES; BROMATES ETC
OTAY MESA STATION	52342	SULFIDES N.E.S.; POLYSULFIDES

PORT	SITC	SITC_DESCRIPTION
OTAY MESA STATION	52344	SULFITES; THIOSULFATES
OTAY MESA STATION	52345	SODIUM SULFATES
OTAY MESA STATION	52351	NITRITES
OTAY MESA STATION	52352	POTASSIUM NITRATE
OTAY MESA STATION	52359	NITRATES N.E.S.
OTAY MESA STATION	52363	PHOSPHATES N.E.S.
OTAY MESA STATION	52364	SODIUM TRIPHOSPHATE (SODIUM TRIPOLYPHOSPHATE)
OTAY MESA STATION	52365	POLYPHOSPHATES N.E.S.
OTAY MESA STATION	52372	NEUTRAL SODIUM CARBONATE (DISODIUM CARBONATE)
OTAY MESA STATION	52373	SODIUM HYDROGENCARBONATE (SODIUM BICARBONATE)
OTAY MESA STATION	52379	CARBONATES N.E.S.
OTAY MESA STATION	52381	CYANIDES, CYANIDE OXIDES AND COMPLEX CYANIDES
OTAY MESA STATION	52383	SILICATES; COMMERCIAL ALKALI METAL SILICATES
OTAY MESA STATION	52384	BORATES; PEROXOBORATES (PERBORATES)
OTAY MESA STATION	52431	SALTS OF OXOMETALLIC OR PEROXOMETALLIC ACIDS
OTAY MESA STATION	52432	COLLOIDAL PRECIOUS METALS; PRECIOUS METAL COMP ETC
OTAY MESA STATION	52491	HYDROGEN PEROXIDE, SOLIDIFIED OR NOT WITH UREA
OTAY MESA STATION	52494	CARBIDES N.E.S., CHEMICALLY DEFINED OR NOT
OTAY MESA STATION	52499	INORGANIC COMPOUNDS NES; LIQ & COMP AIR; AMALGAMS
OTAY MESA STATION	52511	NATURAL URANIUM & COMPOUNDS, ALLOYS & CERAMICS ETC
OTAY MESA STATION	52591	STABLE ISOTOPES AND THEIR COMPOUNDS
OTAY MESA STATION	52595	RARE-EARTH METAL COMP OF YTTRIUM OR SCANDIUM; MIXT
	<b>53</b>	
OTAY MESA STATION	53342	PAINTS & VARNISHES FROM SYNTH POLYMERS, NONAQUEOUS
OTAY MESA STATION	53355	ORG COMPOSITE SOLVENTS ETC NES; PAINT REMOVER PREP
	<b>55</b>	
OTAY MESA STATION	55421	ORGANIC SURF-ACT AGENTS NES FOR RETAIL SALE OR NOT
OTAY MESA STATION	55423	SURF-ACT WASHING ETC PREP NES, NOT FOR RETAIL SALE
	<b>56</b>	
OTAY MESA STATION	56200	FERTILIZERS (EXPORTS ONLY; INCLUDES GROUP 272)
	<b>57</b>	
OTAY MESA STATION	57111	POLYETHYLENE, SPECIFIC GRAVITY LESS THAN 0.94 PR F
OTAY MESA STATION	57112	POLYETHYLENE, SPECIFIC GRAVITY 0.94 OR MORE PR FM
OTAY MESA STATION	57120	ETHYLENE-VINYL ACETATE COPOLYMERS, PRIMARY FORMS
OTAY MESA STATION	57190	POLYMERS OF ETHYLENE N.E.S. IN PRIMARY FORMS
OTAY MESA STATION	57211	POLYSTYRENE, EXPANSIBLE, IN PRIMARY FORMS
OTAY MESA STATION	57219	POLYSTYRENE, OTHER THAN EXPANSIBLE, PRIMARY FORMS
OTAY MESA STATION	57291	STYRENE-ACRYLONITRILE (SAN) COPOLYMERS, PRIMARY FM
OTAY MESA STATION	57292	ACRYLONITRILE-BUTADIENE-STYRENE (ABS) COPOLYMERS
OTAY MESA STATION	57299	STYRENE POLYMERS, N.E.S. IN PRIMARY FORMS
OTAY MESA STATION	57311	POLYVINYL CHLORIDE, NOT MIXED WITH OTHER SUBSTANCE
OTAY MESA STATION	57312	POLYVINYL CHLORIDE, MIXED ETC, NONPLASTICIZED
OTAY MESA STATION	57313	POLYVINYL CHLORIDE, MIXED ETC, PLASTICIZED, PR FMS
OTAY MESA STATION	57391	VINYL CHLORIDE-VINYL ACETATE COPOLYMERS, PRIM FORM
OTAY MESA STATION	57392	VINYL CHLORIDE COPOLYMERS, N.E.S., PRIMARY FORMS
OTAY MESA STATION	57394	FLUORO-POLYMERS, IN PRIMARY FORMS
OTAY MESA STATION	57399	POLYMERS OF VINYL CHLORIDE & OTHER HAL OLEFINS NES
OTAY MESA STATION	57411	POLYACETALS, IN PRIMARY FORMS
OTAY MESA STATION	57419	POLYETHER RESINS, OTHER THAN POLYACETALS, PRIM FMS

PORT	SITC	SITC_DESCRIPTION
OTAY MESA STATION	57420	EPOXIDE RESINS, IN PRIMARY FORMS
OTAY MESA STATION	57431	POLYCARBONATES, IN PRIMARY FORMS
OTAY MESA STATION	57432	ALKYD RESINS, IN PRIMARY FORMS
OTAY MESA STATION	57433	POLYETHYLENE TEREPHTHALATE, IN PRIMARY FORMS
OTAY MESA STATION	57434	POLYESTERS IN PRIMARY FORMS N.E.S., UNSATURATED
OTAY MESA STATION	57439	POLYESTERS IN PRIMARY FORMS N.E.S., SATURATED
OTAY MESA STATION	57511	POLYPROPYLENE, IN PRIMARY FORMS
OTAY MESA STATION	57512	POLYISOBUTYLENE, IN PRIMARY FORMS
OTAY MESA STATION	57513	PROPYLENE COPOLYMERS, IN PRIMARY FORMS
OTAY MESA STATION	57519	POLYMERS OF OLEFINS, N.E.S., IN PRIMARY FORMS
OTAY MESA STATION	57521	POLYMETHYL METHACRYLATE, IN PRIMARY FORMS
OTAY MESA STATION	57529	ACRYLIC POLYMERS, N.E.S., IN PRIMARY FORMS
OTAY MESA STATION	57531	POLYAMIDE-6, -11, -12, -6,6, -6,9, -6,10 OR -6,12
OTAY MESA STATION	57539	POLYAMIDES, N.E.S., IN PRIMARY FORMS
OTAY MESA STATION	57541	UREA RESINS; THIOUREA RESINS, IN PRIMARY FORMS
OTAY MESA STATION	57542	MELAMINE RESINS, IN PRIMARY FORMS
OTAY MESA STATION	57543	AMINO-RESINS, N.E.S., IN PRIMARY FORMS
OTAY MESA STATION	57544	PHENOLIC RESINS, IN PRIMARY FORMS
OTAY MESA STATION	57545	POLYURETHANES, IN PRIMARY FORMS
OTAY MESA STATION	57551	CELLULOSE ACETATES, NONPLASTICISED, PRIMARY FORMS
OTAY MESA STATION	57552	CELLULOSE ACETATES, PLASTICISED, IN PRIMARY FORMS
OTAY MESA STATION	57553	CELLULOSE NITRATES (INCLUDING COLLODIONS), PR FORM
OTAY MESA STATION	57554	CELLULOSE ETHERS, IN PRIMARY FORMS
OTAY MESA STATION	57559	CELLULOSE & ITS CHEMICAL DERIVATIVES NES, PR FORMS
OTAY MESA STATION	57591	POLYMERS OF VINYL ACETATE, IN PRIMARY FORMS
OTAY MESA STATION	57592	POLYMERS OF VINYL ESTERS NES; VINYL POLYMERS NES
OTAY MESA STATION	57593	SILICONES IN PRIMARY FORMS
OTAY MESA STATION	57594	ALGINIC ACID, ITS SALTS AND ESTERS, PRIMARY FORMS
OTAY MESA STATION	57595	NATURAL POLYMERS & MODIFIED NATURAL POLYMERS, NES
OTAY MESA STATION	57596	PETRO RESINS, POLYTERPENES, ETC & PLASTICS NES
OTAY MESA STATION	57597	ION-EXCHANGERS, BASED ON PLASTICS IN PRIMARY FORMS
OTAY MESA STATION	57910	WASTE, PARINGS AND SCRAP, POLYMERS OF ETHYLENE
OTAY MESA STATION	57920	WASTE, PARINGS AND SCRAP, POLYMERS OF STYRENE
OTAY MESA STATION	57930	WASTE, PARINGS AND SCRAP, POLYMERS OF VIN CHLORIDE
OTAY MESA STATION	57990	WASTE, PARINGS AND SCRAP, OF PLASTICS, N.E.S.
	<b>59</b>	
OTAY MESA STATION	59110	INSECTICIDES, PUT UP OR PACKED FOR RETAIL SALE ETC
OTAY MESA STATION	59120	FUNGICIDES, PUT UP OR PACKED FOR RETAIL SALE ETC
OTAY MESA STATION	59130	HERBICIDES, ANTISPROUTING ETC PRODUCTS, RETAIL ETC
OTAY MESA STATION	59141	DISINFECTANTS PUT UP OR PACKED FOR RETAIL SALE ETC
OTAY MESA STATION	59149	RODENTICIDES & SIMILAR PRODUCTS, RETAIL PACKED ETC
OTAY MESA STATION	59320	SAFETY & DETONATING FUSES; DETONATING CAPS; ETC.
OTAY MESA STATION	59721	ANTIKNOCK PREPARATIONS
OTAY MESA STATION	59725	ADDITIVES FOR LUBRICATING OILS
OTAY MESA STATION	59729	ADDITIVES FOR LIQUIDS SUBSTITUTING FOR MIN OIL NES
OTAY MESA STATION	59731	HYDRAULIC BRAKE OR TRANSMISSION FLUIDS, UN 70% OIL
OTAY MESA STATION	59733	ANTIFREEZING PREPARATIONS AND DEICING FLUIDS
OTAY MESA STATION	59771	PRODUCTS TO TREAT TEXTILES, LEATHER ETC, PETRO ETC
OTAY MESA STATION	59772	LUBRICATING PREPS, CONTAINING PETROLEUM OILS ETC

PORT	SITC	SITC_DESCRIPTION
OTAY MESA STATION	59773	PRODUCTS TO TREAT TEXTILES, LEATH ETC NO PETRO ETC
OTAY MESA STATION	59774	LUBRICATING PREPS, CONTAINING OIL ETC NO PETRO ETC
OTAY MESA STATION	59813	GUM, WOOD OR SULFATE TURPENTINE; PINE OIL ETC.
OTAY MESA STATION	59814	ROSIN, ROSIN ACIDS AND DERIVATIVES; ROSIN OILS ETC
OTAY MESA STATION	59818	WOOD TAR; WOOD TAR OILS; WOOD CREOSOTE, ETC.
OTAY MESA STATION	59841	MIXED ALKYL BENZENES, N.E.S.
OTAY MESA STATION	59850	CHEM ELEMENTS & COMPDS DOPED TO USE IN ELECTRONICS
OTAY MESA STATION	59881	SUPPORTED CATALYSTS, NICKEL OR ITS COMPDS ACTIVITY
OTAY MESA STATION	59885	SUPPORTED CATALYSTS, N.E.S.
OTAY MESA STATION	59889	CATALYSTS AND CATALYTIC PREPARATIONS, N.E.S.
OTAY MESA STATION	59891	FINISHING AGENTS ETC FOR TEXTILE, PAPER ETC PREP
OTAY MESA STATION	59893	COMP PLASTICIZERS, ANTIOXID ETC, FOR RUB OR PLASTC
OTAY MESA STATION	59894	CHARGES ETC FOR FIRE EXTINGUISHERS; EXTIN GRENADES
OTAY MESA STATION	59896	METAL PICKLING PREP; FLUXES ETC; SOLDER PREPS ETC
OTAY MESA STATION	59899	CHEMICAL PRODUCTS AND PREPARATIONS, N.E.S.
<b>SAN YSIDRO</b>		
	<b>27</b>	
SAN YSIDRO	27410	SULFUR OF ALL KINDS (EXCEPT SBLMD,PRCPT OR COLL)
	<b>28</b>	
SAN YSIDRO	28520	ALUMINA (ALUMINUM OXIDE)
SAN YSIDRO	28810	ASH & RESIDUES CNTNG METALS & METALLIC COMPDS NES
	<b>33</b>	
SAN YSIDRO	33429	MEDIUM OILS FROM PETROL & BITUM MINERALS NES ETC
SAN YSIDRO	33440	FUEL OILS, N.E.S.
SAN YSIDRO	33452	OIL PET/BIT MTRL A PRP THS OILS BSC CONST X NG CON
SAN YSIDRO	33541	PETROLEUM BITUMEN ETC; BITUMINOUS MIXTURES
SAN YSIDRO	33543	BITUMINOUS MIXTURES BASED ON NATURAL ASPHALT ETC
	<b>34</b>	
SAN YSIDRO	34210	PROPANE, LIQUEFIED
SAN YSIDRO	34250	BUTANE, LIQUEFIED
SAN YSIDRO	34310	NATURAL GAS, LIQUEFIED
SAN YSIDRO	34420	GASEOUS HYDROCARBONS, LIQUEFIED, N.E.S
SAN YSIDRO	34490	GASEOUS HYDROCARBONS IN THE GASEOUS STATE, N.E.S.
	<b>51</b>	
SAN YSIDRO	51129	CYCLIC HYDROCARBONS, N.E.S.
SAN YSIDRO	51132	TRICHLOROETHYLENE
SAN YSIDRO	51133	TETRACHLOROETHYLENE (PERCHLOROETHYLENE)
SAN YSIDRO	51136	SATURATED CHLOR DERIV OF ACYCLIC HYDROCARBONS NES
SAN YSIDRO	51137	FLUORINATED ETC DERIVATIVES OF ACYCLIC HYDROCARBNS
SAN YSIDRO	51138	HALOGENATED DERIV ACYCLIC HYDROCARB OVER 1 HALOGEN
SAN YSIDRO	51211	METHANOL (METHYL ALCOHOL)
SAN YSIDRO	51212	PROPAN-1-OL AND PROPAN-2-OL
SAN YSIDRO	51214	OCTANOL (OCTYL ALCOHOL) AND ISOMERS THEREOF
SAN YSIDRO	51215	ETHYL ALCOHOL (NOT DENATURED) 80% OR MORE ALCOHOL
SAN YSIDRO	51216	ETHYL ALCOHOL & OTHER SPIRITS, DENATURED
SAN YSIDRO	51217	FATTY ALCOHOLS, INDUSTRIAL
SAN YSIDRO	51219	MONOHYDRIC ALCOHOLS, N.E.S.
SAN YSIDRO	51221	ETHYLENE GLYCOL (ETHANEDIOL)
SAN YSIDRO	51222	GLYCEROL (GLYCERINE), GLYCEROL WATERS & LYES

PORT	SITC	SITC_DESCRIPTION
SAN YSIDRO	51235	AROMATIC CYCLIC ALCOHOLS & HALOGEN ETC DERIVATIVES
SAN YSIDRO	51244	PHENOL OR PHENOL ALCOHOL HALOGEN ETC DERIVATIVES
SAN YSIDRO	51464	LYSINE, ESTERS & SALTS OF; GLUTAMIC ACIDS & SALTS
SAN YSIDRO	51481	QUATERNARY AMMONIUM SALTS ETC; LECITHINS ETC
SAN YSIDRO	51489	NITROGEN-FUNCTION COMPOUNDS N.E.S.
SAN YSIDRO	51612	ACETALS & HEMIACETALS ETC, HALOGENATED ETC
SAN YSIDRO	51617	ETHER-ALCOHOLS, ETHER-PHENOLS ETC
	<b>52</b>	
SAN YSIDRO	52221	HYDROGEN, RARE GASES, NITROGEN AND OXYGEN
SAN YSIDRO	52224	CHLORINE
SAN YSIDRO	52231	HYDROGEN CHLORIDE; CHLOROSULFURIC ACID
SAN YSIDRO	52232	SULFURIC ACID; OLEUM
SAN YSIDRO	52236	INORGANIC ACIDS, N.E.S.
SAN YSIDRO	52257	LEAD OXIDES; RED LEAD AND ORANGE LEAD
SAN YSIDRO	52262	SODIUM HYDROXIDE (CAUSTIC SODA), SOLID
SAN YSIDRO	52263	SODIUM HYDROXIDE IN AQUEOUS SOLUTION (LIQUID SODA)
SAN YSIDRO	52269	INORGANIC BASES, METAL OXIDES, HYDROXIDES ETC NES
SAN YSIDRO	52310	FLUORIDES; FLUROSILICATES, FLUROALUMINATES ETC
SAN YSIDRO	52331	HYPOCHLORITES; COMM. CALCIUM HYPOCHLORITE ETC
SAN YSIDRO	52344	SULFITES; THIOSULFATES
SAN YSIDRO	52352	POTASSIUM NITRATE
SAN YSIDRO	52379	CARBONATES N.E.S.
SAN YSIDRO	52389	SALTS OF INORGANIC ACIDS OR PEROXOACIDS N.E.S.
SAN YSIDRO	52432	COLLOIDAL PRECIOUS METALS; PRECIOUS METAL COMP ETC
SAN YSIDRO	52494	CARBIDES N.E.S., CHEMICALLY DEFINED OR NOT
SAN YSIDRO	52499	INORGANIC COMPOUNDS NES; LIQ & COMP AIR; AMALGAMS
SAN YSIDRO	52595	RARE-EARTH METAL COMP OF YTTRIUM OR SCANDIUM; MIXT
	<b>53</b>	
SAN YSIDRO	53342	PAINTS & VARNISHES FROM SYNTH POLYMERS, NONAQUEOUS
SAN YSIDRO	53355	ORG COMPOSITE SOLVENTS ETC NES; PAINT REMOVER PREP
	<b>55</b>	
SAN YSIDRO	55421	ORGANIC SURF-ACT AGENTS NES FOR RETAIL SALE OR NOT
SAN YSIDRO	55423	SURF-ACT WASHING ETC PREP NES, NOT FOR RETAIL SALE
	<b>56</b>	
SAN YSIDRO	56200	FERTILIZERS (EXPORTS ONLY; INCLUDES GROUP 272)
	<b>57</b>	
SAN YSIDRO	57111	POLYETHYLENE, SPECIFIC GRAVITY LESS THAN 0.94 PR F
SAN YSIDRO	57112	POLYETHYLENE, SPECIFIC GRAVITY 0.94 OR MORE PR FM
SAN YSIDRO	57120	ETHYLENE-VINYL ACETATE COPOLYMERS, PRIMARY FORMS
SAN YSIDRO	57190	POLYMERS OF ETHYLENE N.E.S. IN PRIMARY FORMS
SAN YSIDRO	57211	POLYSTYRENE, EXPANSIBLE, IN PRIMARY FORMS
SAN YSIDRO	57219	POLYSTYRENE, OTHER THAN EXPANSIBLE, PRIMARY FORMS
SAN YSIDRO	57291	STYRENE-ACRYLONITRILE (SAN) COPOLYMERS, PRIMARY FM
SAN YSIDRO	57292	ACRYLONITRILE-BUTADIENE-STYRENE (ABS) COPOLYMERS
SAN YSIDRO	57299	STYRENE POLYMERS, N.E.S. IN PRIMARY FORMS
SAN YSIDRO	57311	POLYVINYL CHLORIDE, NOT MIXED WITH OTHER SUBSTANCE
SAN YSIDRO	57312	POLYVINYL CHLORIDE, MIXED ETC, NONPLASTICIZED
SAN YSIDRO	57313	POLYVINYL CHLORIDE, MIXED ETC, PLASTICIZED, PR FMS
SAN YSIDRO	57391	VINYL CHLORIDE-VINYL ACETATE COPOLYMERS, PRIM FORM

PORT	SITC	SITC_DESCRIPTION
SAN YSIDRO	57392	VINYL CHLORIDE COPOLYMERS, N.E.S., PRIMARY FORMS
SAN YSIDRO	57394	FLUORO-POLYMERS, IN PRIMARY FORMS
SAN YSIDRO	57399	POLYMERS OF VINYL CHLORIDE & OTHER HAL OLEFINS NES
SAN YSIDRO	57411	POLYACETALS, IN PRIMARY FORMS
SAN YSIDRO	57419	POLYETHER RESINS, OTHER THAN POLYACETALS, PRIM FMS
SAN YSIDRO	57420	EPOXIDE RESINS, IN PRIMARY FORMS
SAN YSIDRO	57431	POLYCARBONATES, IN PRIMARY FORMS
SAN YSIDRO	57433	POLYETHYLENE TEREPHTHALATE, IN PRIMARY FORMS
SAN YSIDRO	57434	POLYESTERS IN PRIMARY FORMS N.E.S., UNSATURATED
SAN YSIDRO	57439	POLYESTERS IN PRIMARY FORMS N.E.S., SATURATED
SAN YSIDRO	57511	POLYPROPYLENE, IN PRIMARY FORMS
SAN YSIDRO	57512	POLYISOBUTYLENE, IN PRIMARY FORMS
SAN YSIDRO	57513	PROPYLENE COPOLYMERS, IN PRIMARY FORMS
SAN YSIDRO	57519	POLYMERS OF OLEFINS, N.E.S., IN PRIMARY FORMS
SAN YSIDRO	57521	POLYMETHYL METHACRYLATE, IN PRIMARY FORMS
SAN YSIDRO	57529	ACRYLIC POLYMERS, N.E.S., IN PRIMARY FORMS
SAN YSIDRO	57531	POLYAMIDE-6, -11, -12, -6,6, -6,9, -6,10 OR -6,12
SAN YSIDRO	57539	POLYAMIDES, N.E.S., IN PRIMARY FORMS
SAN YSIDRO	57541	UREA RESINS; THIOUREA RESINS, IN PRIMARY FORMS
SAN YSIDRO	57543	AMINO-RESINS, N.E.S., IN PRIMARY FORMS
SAN YSIDRO	57544	PHENOLIC RESINS, IN PRIMARY FORMS
SAN YSIDRO	57545	POLYURETHANES, IN PRIMARY FORMS
SAN YSIDRO	57559	CELLULOSE & ITS CHEMICAL DERIVATIVES NES, PR FORMS
SAN YSIDRO	57591	POLYMERS OF VINYL ACETATE, IN PRIMARY FORMS
SAN YSIDRO	57592	POLYMERS OF VINYL ESTERS NES; VINYL POLYMERS NES
SAN YSIDRO	57593	SILICONES IN PRIMARY FORMS
SAN YSIDRO	57595	NATURAL POLYMERS & MODIFIED NATURAL POLYMERS, NES
SAN YSIDRO	57596	PETRO RESINS, POLYTERPENES, ETC & PLASTICS NES
SAN YSIDRO	57920	WASTE, PARINGS AND SCRAP, POLYMERS OF STYRENE
SAN YSIDRO	57930	WASTE, PARINGS AND SCRAP, POLYMERS OF VIN CHLORIDE
SAN YSIDRO	57990	WASTE, PARINGS AND SCRAP, OF PLASTICS, N.E.S.
	<b>59</b>	
SAN YSIDRO	59110	INSECTICIDES, PUT UP OR PACKED FOR RETAIL SALE ETC
SAN YSIDRO	59141	DISINFECTANTS PUT UP OR PACKED FOR RETAIL SALE ETC
SAN YSIDRO	59149	RODENTICIDES & SIMILAR PRODUCTS, RETAIL PACKED ETC
SAN YSIDRO	59721	ANTIKNOCK PREPARATIONS
SAN YSIDRO	59725	ADDITIVES FOR LUBRICATING OILS
SAN YSIDRO	59729	ADDITIVES FOR LIQUIDS SUBSTITUTING FOR MIN OIL NES
SAN YSIDRO	59733	ANTIFREEZING PREPARATIONS AND DEICING FLUIDS
SAN YSIDRO	59771	PRODUCTS TO TREAT TEXTILES, LEATHER ETC, PETRO ETC
SAN YSIDRO	59772	LUBRICATING PREPS, CONTAINING PETROLEUM OILS ETC
SAN YSIDRO	59774	LUBRICATING PREPS, CONTAINING OIL ETC NO PETRO ETC
SAN YSIDRO	59885	SUPPORTED CATALYSTS, N.E.S.
SAN YSIDRO	59889	CATALYSTS AND CATALYTIC PREPARATIONS, N.E.S.
SAN YSIDRO	59893	COMP PLASTICIZERS, ANTIOXID ETC, FOR RUB OR PLASTC
SAN YSIDRO	59896	METAL PICKLING PREP; FLUXES ETC; SOLDER PREPS ETC
SAN YSIDRO	59899	CHEMICAL PRODUCTS AND PREPARATIONS, N.E.S.

PORT	SITC	SITC_DESCRIPTION
	<b>88</b>	
SAN YSIDRO	88210	CHEMICAL PREPARATIONS FOR PHOTOGRAPHIC USES
<b>TECATE</b>	<b>32</b>	
TECATE	32110	ANTHRACITE, PULVERIZED OR NOT, NOT AGGLOMERATED
TECATE	32121	BITUMINOUS COAL, PULVERIZED OR NOT, NOT AGGLOMER
TECATE	32230	PEAT (INCLUDING PEAT LITTER), AGGLOMERATED OR NOT
TECATE	32500	COKE, SEMICOKE ETC OF COAL, LIGNITE ETC; RE CARBON
	<b>33</b>	
TECATE	33440	FUEL OILS, N.E.S.
TECATE	33452	OIL PET/BIT MTRL A PRP THS OILS BSC CONST X NG CON
TECATE	33541	PETROLEUM BITUMEN ETC; BITUMINOUS MIXTURES
TECATE	33543	BITUMINOUS MIXTURES BASED ON NATURAL ASPHALT ETC
	<b>51</b>	
TECATE	51113	BUTYLENES, BUTADIENES AND METHYLBUTADIENES
TECATE	51124	XYLENES, PURE
TECATE	51211	METHANOL (METHYL ALCOHOL)
TECATE	51217	FATTY ALCOHOLS, INDUSTRIAL
TECATE	51219	MONOHYDRIC ALCOHOLS, N.E.S.
TECATE	51222	GLYCEROL (GLYCERINE), GLYCEROL WATERS & LYES
TECATE	51229	ACYCLIC ALCOHOLS, N.E.S.
TECATE	51243	PHENOLS AND PHENOL-ALCOHOLS N.E.S.
TECATE	51244	PHENOL OR PHENOL ALCOHOL HALOGEN ETC DERIVATIVES
TECATE	51371	ACETIC ACID AND ITS SALTS
TECATE	51391	LACTIC, TARTARIC, CITRIC ACIDS & SALTS & ESTERS
TECATE	51464	LYSINE, ESTERS & SALTS OF; GLUTAMIC ACIDS & SALTS
TECATE	51465	AMINO ACIDS & ESTERS ETC NES; SALTS THEREOF
TECATE	51467	AMINO-ALCOHOL-PHENOLS, AMINO-ACID-PHENOLS ETC
TECATE	51479	CYCLIC AMIDES NES ETC, DERIVATIVES; SALTS OF
TECATE	51483	ACRYLONITRILE
TECATE	51489	NITROGEN-FUNCTION COMPOUNDS N.E.S.
TECATE	51617	ETHER-ALCOHOLS, ETHER-PHENOLS ETC
TECATE	51622	ALDEHYDES WITH OTHER OXYGEN FUNCTON OR NOT ETC NES
TECATE	51623	ACETONE
TECATE	51639	ESTERS OF INORGANIC ACIDS ETC NES
TECATE	51691	ENZYMES; PREPARED ENZYMES, N.E.S.
	<b>52</b>	
TECATE	52224	CHLORINE
TECATE	52231	HYDROGEN CHLORIDE; CHLOROSULFURIC ACID
TECATE	52239	INORGANIC OXYGEN COMPOUNDS OF NONMETALS, N.E.S.
TECATE	52252	CHROMIUM OXIDES AND HYDROXIDES
TECATE	52253	MANGANESE OXIDES
TECATE	52256	TITANIUM OXIDES
TECATE	52257	LEAD OXIDES; RED LEAD AND ORANGE LEAD
TECATE	52262	SODIUM HYDROXIDE (CAUSTIC SODA), SOLID
TECATE	52263	SODIUM HYDROXIDE IN AQUEOUS SOLUTION (LIQUID SODA)
TECATE	52264	POTASSIUM HYDROXIDE; SODIUM OR POTASSIUM PEROXIDES
TECATE	52322	CALCIUM CHLORIDE
TECATE	52331	HYPOCHLORITES; COMM. CALCIUM HYPOCHLORITE ETC



PORT	SITC	SITC_DESCRIPTION
TECATE	52332	SODIUM CHLORATE
TECATE	52344	SULFITES; THIOSULFATES
TECATE	52345	SODIUM SULFATES
TECATE	52359	NITRATES N.E.S.
TECATE	52363	PHOSPHATES N.E.S.
TECATE	52364	SODIUM TRIPHOSPHATE (SODIUM TRIPOLYPHOSPHATE)
TECATE	52379	CARBONATES N.E.S.
TECATE	52383	SILICATES; COMMERCIAL ALKALI METAL SILICATES
TECATE	52495	HYDRIDES, NITRIDES, AZIDES, SILICIDES AND BORIDES
TECATE	52499	INORGANIC COMPOUNDS NES; LIQ & COMP AIR; AMALGAMS
	<b>53</b>	
TECATE	53342	PAINTS & VARNISHES FROM SYNTH POLYMERS, NONAQUEOUS
TECATE	53355	ORG COMPOSITE SOLVENTS ETC NES; PAINT REMOVER PREP
	<b>55</b>	
TECATE	55421	ORGANIC SURF-ACT AGENTS NES FOR RETAIL SALE OR NOT
TECATE	55423	SURF-ACT WASHING ETC PREP NES, NOT FOR RETAIL SALE
	<b>56</b>	
TECATE	56200	FERTILIZERS (EXPORTS ONLY; INCLUDES GROUP 272)
	<b>57</b>	
TECATE	57111	POLYETHYLENE, SPECIFIC GRAVITY LESS THAN 0.94 PR F
TECATE	57120	ETHYLENE-VINYL ACETATE COPOLYMERS, PRIMARY FORMS
TECATE	57299	STYRENE POLYMERS, N.E.S. IN PRIMARY FORMS
TECATE	57313	POLYVINYL CHLORIDE, MIXED ETC, PLASTICIZED, PR FMS
TECATE	57392	VINYL CHLORIDE COPOLYMERS, N.E.S., PRIMARY FORMS
TECATE	57394	FLUORO-POLYMERS, IN PRIMARY FORMS
TECATE	57399	POLYMERS OF VINYL CHLORIDE & OTHER HAL OLEFINS NES
TECATE	57419	POLYETHER RESINS, OTHER THAN POLYACETALS, PRIM FMS
TECATE	57420	EPOXIDE RESINS, IN PRIMARY FORMS
TECATE	57431	POLYCARBONATES, IN PRIMARY FORMS
TECATE	57433	POLYETHYLENE TEREPHTHALATE, IN PRIMARY FORMS
TECATE	57434	POLYESTERS IN PRIMARY FORMS N.E.S., UNSATURATED
TECATE	57439	POLYESTERS IN PRIMARY FORMS N.E.S., SATURATED
TECATE	57511	POLYPROPYLENE, IN PRIMARY FORMS
TECATE	57521	POLYMETHYL METHACRYLATE, IN PRIMARY FORMS
TECATE	57529	ACRYLIC POLYMERS, N.E.S., IN PRIMARY FORMS
TECATE	57539	POLYAMIDES, N.E.S., IN PRIMARY FORMS
TECATE	57545	POLYURETHANES, IN PRIMARY FORMS
TECATE	57551	CELLULOSE ACETATES, NONPLASTICISED, PRIMARY FORMS
TECATE	57553	CELLULOSE NITRATES (INCLUDING COLLODIONS), PR FORM
TECATE	57554	CELLULOSE ETHERS, IN PRIMARY FORMS
TECATE	57559	CELLULOSE & ITS CHEMICAL DERIVATIVES NES, PR FORMS
TECATE	57591	POLYMERS OF VINYL ACETATE, IN PRIMARY FORMS
TECATE	57593	SILICONES IN PRIMARY FORMS
TECATE	57594	ALGINIC ACID, ITS SALTS AND ESTERS, PRIMARY FORMS
TECATE	57595	NATURAL POLYMERS & MODIFIED NATURAL POLYMERS, NES
TECATE	57597	ION-EXCHANGERS, BASED ON PLASTICS IN PRIMARY FORMS
TECATE	57990	WASTE, PARINGS AND SCRAP, OF PLASTICS, N.E.S.

PORT	SITC	SITC_DESCRIPTION
	<b>59</b>	
TECATE	59141	DISINFECTANTS PUT UP OR PACKED FOR RETAIL SALE ETC
TECATE	59721	ANTIKNOCK PREPARATIONS
TECATE	59725	ADDITIVES FOR LUBRICATING OILS
TECATE	59729	ADDITIVES FOR LIQUIDS SUBSTITUTING FOR MIN OIL NES
TECATE	59731	HYDRAULIC BRAKE OR TRANSMISSION FLUIDS, UN 70% OIL
TECATE	59733	ANTIFREEZING PREPARATIONS AND DEICING FLUIDS
TECATE	59771	PRODUCTS TO TREAT TEXTILES, LEATHER ETC, PETRO ETC
TECATE	59772	LUBRICATING PREPS, CONTAINING PETROLEUM OILS ETC
TECATE	59774	LUBRICATING PREPS, CONTAINING OIL ETC NO PETRO ETC
TECATE	59881	SUPPORTED CATALYSTS, NICKEL OR ITS COMPDS ACTIVITY
TECATE	59889	CATALYSTS AND CATALYTIC PREPARATIONS, N.E.S.
TECATE	59891	FINISHING AGENTS ETC FOR TEXTILE, PAPER ETC PREP
TECATE	59893	COMP PLASTICIZERS, ANTIOXID ETC, FOR RUB OR PLASTC
TECATE	59894	CHARGES ETC FOR FIRE EXTINGUISHERS; EXTIN GRENADES
TECATE	59896	METAL PICKLING PREP; FLUXES ETC; SOLDER PREPS ETC
TECATE	59899	CHEMICAL PRODUCTS AND PREPARATIONS, N.E.S.

# APPENDIX C

## San Diego Public Institutions

## **Airports**

Lindberg Field  
3165 Pacific Hwy  
San Diego, CA 92101  
(619) 686-6200

Ramona Airport  
  
(760) 789-0736

[Agua Caliente](#): Agua Caliente Airstrip is north of Interstate 8, on County Highway S2, 95 miles east of San Diego.

[Borrego Valley](#): Three miles east of Borrego Springs and 100 miles northeast of downtown San Diego.

[Fallbrook Airpark](#): Two miles south of downtown Fallbrook on Mission Road and 60 miles north of downtown San Diego

[Gillespie Field](#): 1960 Joe Crosson Road, El Cajon, CA 92020. Off Bradley & Highway 67, 10 miles NE of downtown San Diego.

[Jacumba](#): On Old Highway 80, one mile east of Jacumba and 75 miles east of San Diego.

[McClellan-Palomar](#): Three miles southeast of Carlsbad at Palomar Airport Road and El Camino Real, 30 miles north of downtown San Diego.

[Ocotillo](#): Ocotillo Wells, CA, 100 miles E of San Diego on State Highway 78.

## **Police Departments**

### **National City Police Department**

1200 National City Blvd, National City, CA 91950  
(619) 336-4400

## FIELD LOCATIONS

### Alpine Substation

1347 Tavern Rd.  
Alpine, CA 92001  
(619) 579-4136

### **Borrego Office**

565 Palm Canyon Rd.  
Borrego, CA 92004  
(760)767-5656

### **Boulevard/Jacumba Substation**

39919 Hwy 94  
Boulevard, CA 92005  
(619) 766-4585

### **Campo Substation**

378 Sheraton Rd.  
Campo, CA 92006  
(619) 478-5378

### **Dulzura Office**

P.O. Box 306  
Dulzura, CA 92007  
(619) 468-3268

### **Encinitas Sheriff's Station**

175 North El Camino Real  
Encinitas, CA 92024  
(760) 966-3500

### **Fallbrook Substation**

127 East Hawthorne  
Fallbrook, CA 92028  
(760) 723-6050

### **Imperial Beach Station**

845 Imperial Beach Blvd.  
Imperial Beach, CA 91932  
(619) 498-2400

### **Julian Substation**

1485 Hollow Glen Rd.  
Julian, CA 92036  
(760) 765-0503

### **Lemon Grove Station**

3240 Main St.  
Lemon Grove, CA 91945  
(619) 337-2000

### **Pauma/Valley Center Substation**

28205 N. Lake Wohlford Rd.  
Valley Center, CA 92082  
(760) 749-1309

### **Pine Valley Substation**

28848 Old Highway 80  
Pine Valley, CA 92062  
(619) 473-8774

### Poway Station

13100 Bowron Road  
Poway, CA 92064-557  
(858) 513-2800

### Ramona Substation

1424 Montecito Rd.  
Ramona, CA 92065  
(760) 789-9157

### **Ranchita Office**

25704 San Felipe Rd. (S-2)  
Warner Springs, CA 92086  
(760) 782-3353

### San Marcos Station

187 Santar Pl  
San Marcos, CA 92069  
(760) 736-2140

### **Santee Station**

8811 Cuyamaca St  
Santee, CA 92017  
(619) 258-3100

### Vista Station

325 S. Melrose  
Vista, CA 92067  
(760) 940-4551

## City of San Diego Police Department

### **Headquarters**

1401 Broadway (92101-5729)

### **Central Division**

2501 Imperial (92101)  
(619) 744-9500

### **Eastern Division**

9225 Aero Drive (92123)  
(858) 495-7900

### **Mid City Division**

4310 Landis St (92105)  
(619) 516-3000

### **Northeastern Division**

13396 Salmon River Rd. (92129)  
(858) 538-8000

**Northern Division**

4275 Eastgate Mall (92122)  
 (858) 552-1700

**Southeastern Division**

7222 Skyline Drive (92114)  
 (619) 527-3500

**Southern Division**

1120 27th Street (92154)  
 (619) 424-0400

**Western Division**

5215 Gaines St. (92110)  
 (619) 692-4800

**DETENTION FACILITIES****San Diego Central Jail**

P.O. Box 122952  
 San Diego, 92112-2952  
 Ph (619) 615-2700

**Las Colinas Women's Fac.**

9000 Cottonwood  
 Santee, CA 92071  
 Ph (619) 258-3176

**Descanso**

7878 Cambell Ranch Rd.  
 Alpine, CA 91901  
 Ph (619) 445-6960

**South Bay**

500 Third Ave.  
 Chula Vista, CA 91910  
 Ph (619) 691-4817

**East Mesa/George Bailey**

446 Alta Road  
 San Diego, CA 92158  
 Ph (619) 661-2608

**Vista**

325 S. Melrose, Ste. 200  
 Vista, CA 92083-6627  
 Ph (760) 940-4473

**Fire Protection****National City Fire Department Headquarters Station 10**

333 East 16th Street  
 National City, CA 91950  
 619-336-4330

**National City Fire Sub-Station 15**

2333 Euclid Avenue  
 National City, CA 91950

**Escondido Fire Department - *Escondido*****Fire Station #1, Center City**

310 North Quince

This station supports 3 fire engines, 2 ambulances, 1 brush rig, and 1 fire truck. The training tower is its unique feature and, as a result, much of the continuous hands-on training occurs here.

**Fire Station #2, East Valley**

421 N. Midway

Housed here are 1 fire engine, 1 brush rig, an ambulance, and the Police/Fire Mobile Command unit. Station #2 is the only two-story fire station, which means it also is the only one with a gleaming brass pole.

**Fire Station #3, Escondido Hills**

2165 Village Road

This station houses 1 fire engine and a brush rig.

**Fire Station #4, Bear Valley**

3301 Bear Valley Parkway, adjacent to Kit Carson Park

This station houses 1 fire engine and a brush rig.

**Fire Station #5, Felicita**

2705 Felicita, adjacent to Felicita Park

Currently, this station houses a fire engine and a brush rig but is slated to be replaced by a new fire station to be located slightly northward.

[FireSafe](#) - local fire and safety resource directory (training)

San Diego Miramar College

10440 Black Mountain Rd

San Diego, CA 92126

858-536-7800

[Intermountain Volunteer Fire Department](#)

1672 Main St. Ste. E-314

Ramona, CA 92065

(760) 789-3968

[Poway Fire Department](#)

13050 Community Road

Poway, CA 92064

(619) 679-4340

[San Diego Fire Department](#)

Station 1

1222 First Avenue @ B Street

Station 3

725 West Kalmia Street @ State Street

Station 4

404 8th Avenue @ J Street

Station 5

3902 9th Avenue @ University

Fire Station 6

693 Twining Avenue @ Palm Avenue

San Diego, CA

Station 7

944 Crosby Street @ National Avenue

Station 8

3974 Goldfinch Street @ Washington Street

Station 9

7870 Ardath Lane @ Torrey Pines Road

Station 10

4605 62nd Street @ Acorn Street

Station 11

945 25th. St. @ Broadway

Station 12

4964 Imperial Ave @ Ozark St.

Station 13

809 Nautilus St. @ Fay Ave.

Station 14

4011 32nd. St. @ Lincoln Ave.

Station 15

4711 Voltaire St. @ Ebers St.

Station 16  
2110 Via Casa Alta @ La Jolla Scenic

Station 18  
4676 Felton St. @ Adams Ave.

Station 20  
3305 Kemper Blvd. @ Midway Dr.

Station 22  
1055 Catalina Blvd @ Savoy St.

Station 24  
13077 Del Mar Heights Rd. @ Hartfield

Station 26  
2850 54th St. @ Krenning St.

Station 28  
3880 Kearney Villa Rd. @ Aero Dr.

Station 30  
2265 Coronado Ave. @ Hollister St.

Station 32  
484 Briarwood Rd. @ Paradise Valley

Station 34  
6565 Cowles Mtn. Blvd. @ Navajo Rd.

Station 36  
5855 Chateau Dr. @ Mt. Abernathy Ave.

Station 38  
8441 New Salem St. @ Camino Ruiz

Station 40  
13393 Salmon River Rd. @ Paseo Montalban

Station 42  
12110 World Trade Dr. @ Highland Ranch

Station 17  
4206 Chamoune Ave. @ Orange Ave.

Station 19  
3434 Oceanview Blvd @ 35th St.

Station 21  
750 Grand Ave. @ Mission Blvd.

Station 23  
2190 Comstock St. @ Linda Vista Rd.

Station 25  
1972 Chicago St. @ Napier St.

Station 27  
5064 Clairemont Dr. @ Cole St.

Station 29  
179 W. San Ysidro Blvd. @ Cottonwood

Station 31  
Camino Rico @ College Ave.

Station 33  
16966 Bernardo Center Dr.  
@ Rancho Bernardo

Station 35  
4285 Eastgate Mall @ Genessee Ave.

Fire Station 37  
10750 Scripps Lake Dr. @ Red Cedar Dr.

Station 39  
4949 La Cuenta Dr. @ Tierrasanta Blvd

[Station 41](#)  
4914 Carrol Canyon Rd. @ Mira Mesa Blvd

Station 43  
1590 La Media Road @ Otay Mesa Rd.



AirportFire Station, Lindbergh Field  
3698 Pacific Hwy @ Washington St.  
San Diego, CA

[San Pasqual Fire](#) - *Escondido* - serving CSA-113 in the rural foothills of San Diego County.  
208 E. 5th Avenue  
Escondido, CA 92025

## **Health Services**

[Alvarado Hospital Medical Center](#)  
6655 Alvarado Rd  
San Diego, CA 92120  
(619) 287-3270

[American Biologics Integrative Medical Center](#)  
1180 Walnut Ave  
Chula Vista, CA 91911  
(800) 227-4473

[Childrens Hospital and Health Center](#)  
3020 Children's Way  
San Diego, CA 92123  
(858) 966-1700

[Tri-City Medical Center](#)  
4002 Vista Way  
Oceanside, CA 92056  
(760) 940-5782

[UCSD Medical Center, Hillcrest](#)  
200 West Arbor Drive  
San Diego, CA 92103  
619-543-6222

**Perlman Ambulatory Care Center**  
9350 Campus Point Drive  
La Jolla, CA 92093  
858-657-7000

[UCSD Medical Center, La Jolla - Thornton Hospital](#)  
9300 Campus Point Drive  
La Jolla, CA 92093  
858-657-7000

**UCSD Medical Group**  
330 Lewis Street  
San Diego, CA  
1-888-309-8273

[Gardens, The](#)  
4380 Highland Drive  
Carlsbad, California 92008  
(760) 729-1411

**Family Healthcare Ctr.**  
6175 El Cajon Blvd.  
San Diego, CA 92115  
(619) 583-9335

**National City Walk-in Clinic**  
2400 E. 8th Street, Suite A  
National City, CA 91950  
(619) 267-4255

**Pomerado Hospital**  
15615 Pomerado Road  
Poway, CA 92064.  
858.613.4000

**Palomar Medical Center**  
555 East Valley Parkway  
Escondido, CA 92025  
760.739.3000

**Scripps Green Hospital**  
10666 North Torrey Pines Road  
La Jolla, CA 92037  
(858) 455-9100

**Scripps Memorial Hospital Chula Vista**  
435 H Street  
Chula Vista, CA 91910  
(619) 691-7000

**Scripps Memorial Hospital Encinitas**  
354 Santa Fe Drive  
Encinitas, CA 92024  
(760) 753-6501

**Scripps Memorial Hospital La Jolla**  
9888 Genesee Avenue  
La Jolla, CA 92037  
(858) 457-4123

**Scripps Mercy Hospital**  
4077 Fifth Avenue  
San Diego, CA 92103  
(619) 294-8111

**Scripps OceanView Convalescent Hospital**  
900 Santa Fe Drive  
Encinitas, CA 92024  
(760) 753-6423

**Scripps Torrey Pines Convalescent Hospital**  
2522 Torrey Pines Road  
La Jolla, CA 92037  
(858) 453-5810

**Sharp Chula Vista  
Medical Center**  
751 Medical Center Court  
Chula Vista, CA 91911  
(619) 482-5800

**Sharp Coronado Hospital / HealthCare Center**  
250 Prospect Place  
Coronado, CA 92118  
(619) 522-3600

**Grossmont Hospital**  
5555 Grossmont Center Drive  
La Mesa, CA 91942  
(619) 465-0711

**Sharp Mary Birch Hospital for Women**  
3003 Health Center Drive  
San Diego, CA 92123  
(858) 541-3400

**Sharp Memorial Hospital**  
7901 Frost Street  
San Diego, CA 92123  
(858) 541-3400

**Sharp Mesa Vista Hospital**  
7850 Vista Hill Avenue  
San Diego, CA 92123  
(858) 694-8300

**Sharp Vista Pacifica Chemical Dependency Recovery Hospital**  
7989 Linda Vista Road  
San Diego, CA 92111  
(858) 576-1200

[Sharp Rees-Stealy Medical Group](#)

Chula Vista Main  
525 Third Ave  
Chula Vista, CA 91910

Downtown San Diego  
2001 Fourth Ave.  
San Diego, CA 92101

El Cajon  
1240 Broadway Ave  
El Cajon, CA 92021

La Mesa  
5525 Grossmont Center Dr.  
La Mesa, CA 91941

Mira Mesa  
8901 Activity Rd.  
San Diego, CA 92126

Mira Mesa East  
8933 Activity Rd.  
San Diego, CA 92126

Mission Valley  
2655 Camino Del Rio N., Suite 150  
San Diego, CA 92108

Poway  
12620 Monte Vista Rd., Suites A & B  
(858) 499-2777

**Education**

**Elementary Schools (31)**

**Private (16)**

[All Hallows Academy](#)

2390 Nautilus Street  
La Jolla, California 92037  
(Middle/Elem)

[All Saints' Episcopal School](#) San Diego.

3674 Seventh Avenue  
San Diego, California 92103  
(619) 298-1671

[Children's School, The](#)

2225 Torrey Pines Road  
La Jolla, California 92037  
(858) 454-0184

[Del Mar Pines Elementary](#)

3975 Torrington Street  
San Diego, CA 92130  
(619) 481-5615

[Exploration International](#)

4029 Marzo Street  
San Diego, CA 92154  
(619) 428-6540  
(Elem/Middle/High)

[Fairbanks Country Day School](#)

6233 El Apajo  
PO Box 8387  
Rancho Santa Fe, CA 92067  
(Elem/High)

[Gillispie School](#)

7380 Girard Avenue  
La Jolla, CA 92037  
(858) 459-3773

[Holy Trinity School](#)

509 Ballard Street  
El Cajon, CA 92019  
(619) 444-7529  
(Middle/Elem)

[La Jolla Country Day School](#) - *La Jolla*

9490 Genesee Ave  
La Jolla CA 92037  
(858) 453-3440  
(Elem/High)

[O'Farrell Community School](#)

6130 Skyline Drive  
San Diego, CA 92114  
(619) 263-3009

[Our Lady of Perpetual Help Church](#)

13208 Lakeshore Drive  
Lakeside, California 92040  
(Elem/Middle)

[PromiseLand Ranch](#)

(Elem/Middle/High)

[Sacred Heart Academy of Ocean Beach](#)

4895 Saratoga Ave.  
San Diego, CA 92107  
(619) 222-7252  
(Elem/Middle)

[School of the Madeleine](#)

1875 Illion Street  
San Diego, California 92110  
619-276-6545  
(Elem/Middle)

[St. Pius X Elementary School](#) - *Chula Vista*

37 East Emerson Street  
Chula Vista, CA 91911  
(619) 422-2015

[Village Elementary School](#)

602 South Stage Coach Lane  
Fallbrook, CA 92028  
760-723-2221

**Public (15)**

[Breeze Hill Elementary School](#)

1111 Melrose Way  
Vista, CA 92083  
(760) 945-2373

[Casita Center for Math, Science and Technology](#)

260 Cedar Road  
Vista, CA 92083  
(760) 724-8442

[Chollas Elementary](#)

545 45<sup>th</sup> Street  
San Diego, CA 92102  
(619) 264-3113

[Clear View Charter School](#)

455 Windrose Way  
Chula vista, CA 91910  
619-498-3007

[Edison Elementary School](#)

721 Edison Road  
Bakersfield, CA 93306  
(661) 636-4682

[Fallbrook Street School](#) - *Fallbrook*

405 W. Fallbrook Street  
Fallbrook, CA 92028

[Grant Elementary School](#)

1425 Washington Place  
San Diego, CA 92103  
(619) 293-4420

[Horton Elementary](#)  
5050 Gugmon Ave  
San Diego CA 92102  
619-264-0171

[Julian Union Elementary School](#)  
PO Box 337  
Julian, CA 92036  
760-765-0661

[Kumeyaay Elementary](#)  
6475 Antigua Blvd  
San Diego CA 92124  
(858) 279-1022

[Magnolia Elementary School](#)  
650 Greenfield Dr  
El Cajon, Ca 92021  
619-588-3080

[Mt. Woodson Elementary School](#) - *Ramona* [Nye Elementary](#) Academy  
17427 Archie Moore Road  
Ramona, CA 92065  
(760) 788-5120

[Nye Elementary](#) Academy  
981 Valencia Parkway  
San Diego CA 92114  
(619) 527-4901

**Ocean Knoll Elementary School**  
910 Melba Rd  
Encinitas, Ca 92024  
760-944-4351

[Zeta O. Doyle Elementary School](#)  
3950 Berino Court  
San Diego CA 92122-1699  
(858) 455-6230

**High Schools (51)**  
**Private (9)**

[Academy by the Sea](#) - *Carlsbad* - offers academic and recreational camps during the summer.  
P.O. Box 3000  
Carlsbad, CA 92018-3000  
Phone (760) 434-7564  
(Middle/High)

[Academy of Our Lady of Peace High School](#) - Catholic high school for girls.  
4860 Oregon Street  
San Diego, CA 92116

[Army and Navy Academy](#) - *Carlsbad*  
P.O. Box 3000  
2605 Carlsbad Blvd.  
Carlsbad, CA 92008  
(888) 762-2338  
(760) 729-2385 x263  
(Middle/High)

[Bishop's School, The](#) - *La Jolla*  
7607 La Jolla Boulevard  
La Jolla, CA 92037  
858-459-4021  
(Middle/High)

[Saint Augustine High School](#)  
3266 Nutmeg Street  
San Diego, CA 92104  
(619)282-2184

[Exploration International](#)  
4029 Marzo Street  
San Diego, CA 92154  
(619) 428-6540

## Public (36)

### [Bonita Vista High School](#) - *Chula Vista*

820 4<sup>th</sup> Ave  
Chula Vista, CA 91911  
(619) 691-5765

### [Castle Park High School](#) - *Chula Vista*

1395 Hilltop Drive  
Chula Vista CA 91911  
(619) 691-5600

### [Clairemont High School](#)

4150 Ute Drive  
San Diego, CA 92117  
(858) 273-0201

### [El Cajon Valley High School](#) - *El Cajon*

1035 East Madison Ave  
El Cajon, Ca 92021  
619-401-4300

### [El Capitan High School](#)

10410 Ashwood  
Lakeside, California 92040  
619-443-1081

### [Granite Hills High School](#)

1719 E. Madison Ave.  
El Cajon, CA 92019  
(619) 401-4100

### [Helix High School](#)

7323 University Ave.  
La Mesa, CA 91941

### [Hoover High School](#)

4474 Elcacion Blvd  
San Diego, CA 92115  
(619) 283-6281

### [Carlsbad High School](#) - *Carlsbad*

3000 West Church Street  
Carlsbad, New Mexico 88220  
(505) 234-3319

### [Charter School of San Diego](#)

2245 San Diego Avenue, Suite 127  
San Diego, CA 92110  
(619) 686-6666

### [Coronado High School](#) - *Coronado*

650 D Ave  
Coronado, CA 92118  
(619) 522-8907

### [Fallbrook Union High School](#)

2400 South StageCoach Lane  
Fallbrook, CA 92028  
(760) 723-6300

### [Guajome Park Academy](#)

2000 North Santa Fe  
Vista, California 92083  
(760) 631-7482

### [La Costa Canyon High School](#)

3451 Camino de los Coches  
Carlsbad, California 92009  
760-436-6136

### [Kearny High School](#)

7651 Wellington Street  
San Diego, CA 92111-5799  
(858) 496-8370

**La Jolla High School**

750 Nautilus Street  
La Jolla, CA 92037  
(858) 454-3081

**Mira Mesa High School**

10510 Reagan Road  
San Diego, CA 92126  
(858) 566-2262

**Montgomery High School**

3250 Palm Avenue  
San Diego, California 92154  
(619) 628-3007

**Patrick Henry High School**

6702 Wandermere Drive  
San Diego, CA 92126  
(619) 286-7700

**Ramona High School**

1401 Hanson Lane  
Ramona CA 92065  
760-787-4000

**San Diego High School**

1405 Park Boulevard  
San Diego, CA 92101  
(619) 231-0973

**San Marcos High School**

4750 Hollister Avenue  
Santa Barbara, CA 93110  
(805) 967-4581

**Scripps Ranch High School**

10410 Treena Street  
San Diego, CA 92131-1126  
(858) 621-9020

**Torrey Pines High School**

710 Encinitas Blvd.,  
Encinitas, CA 92024  
(858) 755-0125

**Madison High School**

4833 Doliza Drive  
San Diego, CA 92117  
(858) 496-8410

**Mission Bay High School**

2475 Grand Avenue  
San Diego, CA 92109  
(858) 273-1313

**Mt. Carmel High School**

9550 Carmel Mountain Rd  
San Diego, CA 92129  
(619) 484-1180

**Poway High School** - Poway

15500 Espola Road  
Poway, CA 92064-2299  
(858) 748-0245

**Rancho Bernardo High School**

13010 Paseo Lucido  
San Diego, Ca 92128  
858-485-4800

**San Dieguito Academy**

800 Santa Fe Drive  
Encinitas, CA 92024  
(760) 753-1121

**Santana High School**

9915 Magnolia  
Santee, CA 92071  
(619) 448-5500

**Sunset High School**

684 Requeza Street  
Encinitas, California 92024  
(760) 753-3860

**University City High School**

6949 Genesee Avenue  
San Diego, CA  
(858) 457-3040

**Vista High School**

1 Panther Way  
Vista, CA 92084  
760-726-5611

**West Hills High School**

8756 Mast Blvd.  
Santee, CA 92071  
(619)596-3600

**Middle School (31)**

**Private (11)**

Bishops School, The  
7607 La Jolla Boulevard  
La Jolla, CA 92037  
858-459-4021

**Sacred Heart Academy of Ocean Beach**

4895 Saratoga Avenue  
San Diego, CA 92107  
(619) 222-7252

**Holy Trinity School**

509 Ballard Street  
El Cajon, CA 92019  
619-444-7529

**School of the Madeleine**

1875 Illion Street  
San Diego, California 92110  
619-276-6545

**Lewis Jr. High School**

5170 Greenbrier Avenue,  
San Diego 92120  
619-583-3233

**Our Lady of Perpetual Help Church**

923 East Elm Street  
PO Box 1704  
LaFollette, TN 37766

**Public (20)**

**Aviara Oaks Middle School** - *Carlsbad*

Aviara Oaks Middle School  
6900 Ambrosia Lane  
Carlsbad, CA 92009  
Phone: (760) 434-0686

**Bernardo Heights Middle School**

12990 Paseo Lucido  
San Diego, CA 92128-4479  
(858) 485-4850

**Carmel Valley Middle School**

3800 Mykonos Lane  
San Diego, CA. 92130  
(858) 481-8221

**Charter School of San Diego**

2245 San Diego Avenue, Suite 127  
San Diego, CA 92110  
(619) 686-6666

**Correia Junior High School**

4302 Valeta Street  
San Diego, Ca. 92107  
(619) 222-0476

**Diegueño Middle School**

710 Encinitas Blvd  
Encinitas, CA 92024  
(760) 944-1892

**Earl Warren Junior High School**

155 Stevens Avenue  
Solana Beach, CA. 92075  
(858) 755-1558



[Guajome Park Academy](#)  
2000 North Santa Fe  
Vista, California 92083  
(760) 631-7482

[Hidden Valley Online](#) - *Escondido*

[Horace Mann Middle School](#)

[Julian Jr. High](#)  
(760) 765-0661 (Julian Jr. Elementary)

[Kroc Middle School](#)  
5050 Conrad Avenue  
San Diego, Ca  
(858) 292-0585

[Marston Middle School](#)  
3799 Clairemont Drive  
San Diego, CA 92117  
(858) 273-2030

[Montgomery Academy](#)  
2470 Ulric  
San Diego, CA 92111  
(858) 496-8330

[O'Farrell Community School](#)  
Center for Advanced Academic Studies  
6130 Skyline Drive  
San Diego, CA 92114  
(619)263-3009

[Oak Crest Junior High](#)  
675 Balour Drive  
Encinitas, CA 92024  
(760) 753-6241

[Potter Junior High](#)  
1743 Reche Road  
Fallbrook, CA 92028  
(760) 723-7050

[Standley Middle School](#)  
6298 Radcliffe Drive  
San Diego, CA 92122  
(858) 455-0550

[Thurgood Marshall Middle School.](#)  
11778 Cypress Canyon Road  
San Diego, CA 92131  
858-549-8840

[Wilson Academy](#)  
3838 Orange Avenue  
San Diego, CA 92105  
(619) 280-1661

### **Montessori Schools (3)**

[Bonita Country Day School](#) - *Chula Vista*

[Emmaus Today Preschool](#)  
6917 Tait Street  
San Diego, CA 92111  
858-576-0132

[Montessori Schools of San Diego](#)  
1323 West Spruce Street  
San Diego, CA 92103  
(619) 295-7591

## **Adult Learning Center Arts (4)**

### [Academy of Performing Arts](#)

4580-B Alvarado Canyon Road  
San Diego CA 92120  
(619) 282-1884

### [Design Institute of San Diego](#)

8555 Commerce Avenue  
San Diego, CA 92121  
(858) 566-1200

## **Culinary (1)**

### [National Schools.](#)

(619) 283-0200

## **Technical (1)**

### [Networking USA](#)

335 East Pennsylvania  
Escondido, CA 92025  
(760) 740-2610

## **Child Care Centers and PreSchools**

### [Children's Company, The](#)

14 H Street  
Chula Vista, CA 91910  
(619) 421-9244

### [First United Methodist Preschool](#)

341 S Kalmia Street  
Escondido, CA 92025  
(760) 745-6849

### [La Jolla United Methodist Church Nursery School](#)

6063 La Jolla Boulevard  
La Jolla, CA 92037  
(858) 454-1418

### [Panda's P.E. Club](#)

9910 Mira Mesa Boulevard  
San Diego, CA  
(858) 578-4444

### [Super\\*Kids](#)

9909 Hibert Street, Suite F  
San Diego, CA 92131  
(619) 586-7834

### [Twilight Playground](#)

858-483-4201

**College/University  
Private (11)**

[California Institute for Human Science](#)

701, Garden View Court,  
Encinitas, CA 92024.  
760-634-1771

[California Pacific University](#)

9683 Tierra Grande Street  
San Diego, CA  
(858) 695-3292

[National University](#)

4121 Camino Del Rio S  
San Diego, CA  
(619) 563-7100

[California Western School of Law](#)

225 Cedar St.  
San Diego, CA 92101  
800-255-4252 • 619-239-0391

[Christian Heritage College](#)

2100 Greenfield Dr  
El Cajon, CA 92019

[Design Institute of San Diego](#)

8555 Commerce Ave  
San Diego, CA 92121  
858-566-1200

[Newschool of Architecture](#)

1249 F Street  
San Diego, CA 92101-6634  
619.235.4100

[Point Loma Nazarene College](#)

3900 Lomaland Drive  
San Diego, CA 92106  
(619) 849-2200

[University of San Diego](#)

5998 Alcalá Park  
San Diego, CA 92110-2492  
(619) 260-4600

[Thomas Jefferson School of Law](#)

2121 San Diego Avenue  
San Diego, CA 92110  
(619) 297-9700

[United States International University](#)

10455 Pomerado Road  
San Diego, CA 92131  
(858) 635-4772

**Public (4)**

[Advertising Arts College](#)

(858) 546-0602  
10025 Mesa Rim Road  
San Diego, CA  
(858) 546-0602

[University of California, San Diego](#)

9500 Gilman Drive  
La Jolla, CA 92093  
(858) 534-2230

**California State University, San Marcos**

California State University, San Marcos  
San Marcos, CA 92096-0001

**San Diego State University**

5500 Campanile Drive  
San Diego, CA 92182  
(619) 594-5200

**Community/ Technical**

**Cuyamaca College**

900 Rancho San Diego Parkway  
El Cajon, California 92019  
(619)660-4000

**Grossmont Community College**

8800 Grossmont College Drive  
El Cajon, CA 92020  
(619) 644-7000

**Miramar College**

10440 Black Mountain Rd  
San Diego CA 92126  
858-536-7800

**Palomar College**

1140 West Mission Road  
San Marcos, California 92069-1487

**San Diego City College**

1313 Twelfth Avenue  
San Diego, CA

**San Diego Mesa College**

7250 Mesa College Dr  
San Diego, CA 92111  
619-388-2600