

IV. TEXT REVISIONS

Chapter IV contains changes to the text of the Draft EIR that are being made in response to comments raised during the public review process to clarify and/or correct any errors, omissions, or misinterpretation of materials in the Draft EIR. A revised summary table (Table IV-1) describes all mitigation measures and impacts related to the Project following revisions to the Draft EIR. In each case, the revised page and location of the page is set forth, followed by the textual, tabular or graphical revision. Revised text is indicated with underline text. Text deleted from the Draft EIR is shown with ~~strikeout~~. Page numbers correspond to the page numbers of the Draft EIR. Changes made to the text in the Draft EIR are all included in the summary table (Table IV-1).

The following pages have been extracted from the Draft EIR and revised in response to comments raised during the public review. Only pages that have been modified in response to comments are reprinted in this section. Page numbers correspond to the page numbers of the Draft EIR. Where additional pages resulted from modifications, new page numbers are designated by the original page number followed by a, b, c, etc. These revised pages, in addition to the public comments and responses to comments, make up the Final EIR, which must be read with the Draft EIR to provide context. This RTC Addendum in conjunction with the Draft EIR constitute the complete EIR document.

LIST OF FIGURES

I-1:	Planning Areas for Prior Environmental Documents	3
III-1:	Alameda Point Planning Boundaries	28
III-2:	Alameda Point Public Trust Lands	31
III-3:	Proposed Alameda Point General Plan Land Use	37
IV.A-1:	Planning Subareas Proposed Alameda Point General Plan Land Use	48
IV.A-2:	Redevelopment and Community Reuse Plan Boundaries	53
IV.A-3:	Existing Alameda General Plan Diagram	59
IV.C-1:	Historic Resources, Existing and Potential View Corridors	90
IV.C-2:	Views of and from the Project Site	91
IV.C-3:	Views of and from the Project Site	91
IV.C-4:	Views of and from the Project Site	92
IV.C-5:	Views of and from the Project Site	92
IV.C-6:	Views of the from the Project Site	93
IV.C-7:	Views of and from the Project Site	93
IV.D-1:	Existing and Proposed Parks and Schools	105
IV.E-1:	Geologic Cross-Section of Alameda Point and Surrounding Areas	126
IV.F-1:	Historical Resources	144
IV.F-2:	USS Hornet	149
IV.G-1:	Environmental Resources	158
IV.H-1:	Regional Faultlines	186
IV.H-2:	Regional Geology	187
IV.H-3:	Alameda Historical Shoreline	190
IV.J-1:	Study Intersections and Roadway Segments	222
IV.J-2:	Alameda Point Street System	225
IV.J-3:	Transit Services	233

1. Potential Areas of Controversy

The potential areas of controversy surrounding the GPA that were identified as part of the NOP process and are evaluated in Chapter IV of this EIR include: land use; population, employment, and housing; visual resources; public services; water resources; historic and cultural resources; biological resources; geology and soils; utilities; transportation and circulation; air quality; noise; and hazards.

Specific areas of potential controversy include traffic generation; population, employment, and housing; utilities; and hazardous materials. Traffic is a concern throughout the Bay Area and requires special consideration in Alameda due to the limited access points onto the Island in the Project vicinity. Specific concerns have also been raised about the project's potential adverse effects on Downtown Oakland and pedestrian safety in Oakland Chinatown. Development that may occur as a result of the GPA would generate substantial new jobs and housing for the City of Alameda. Also, military base reuse raises questions and requires extensive analysis of existing—often antiquated—utilities, and further requires that any potential on-site hazards be addressed prior to reuse of affected portions of the property. There are many other areas of analysis included in this document, but these are the issues that have created the greatest interest.

Potential impacts related to agricultural resources and energy and mineral resources were determined to be less than significant and have not been further analyzed in this EIR. A more detailed discussion of why these topics were found to be less than significant is provided in Chapter VI, CEQA-Required Assessment Conclusions.

2. Significant Impacts

Under CEQA, a significant impact or effect on the environment is defined as, "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

Implementation of the GPA has the potential to generate environmental impacts in several areas. Impacts in the following areas would be significant without the implementation of mitigation measures, but would be reduced to a less-than-significant level if the mitigation measures set forth in this report are implemented:

- Water Resources
- Biological Resources
- Utilities
- Transportation and Circulation (construction period and transit impacts)
- Noise

Impacts in the following areas would be considered less than significant based on the identified criteria of significance and/or the implementation of existing policies and regulations and/or policies proposed as part of the GPA that would reduce any potential impacts to a less-than-significant level:

- Land Use
- Population, Employment and Housing
- Visual Resources
- Public Services
- Geology and Soils
- Hazards
- Historic and Cultural

3. Significant Unavoidable Impacts

As discussed in Chapter IV of this EIR, buildout of the GPA could result in significant unavoidable impacts in the following topics:

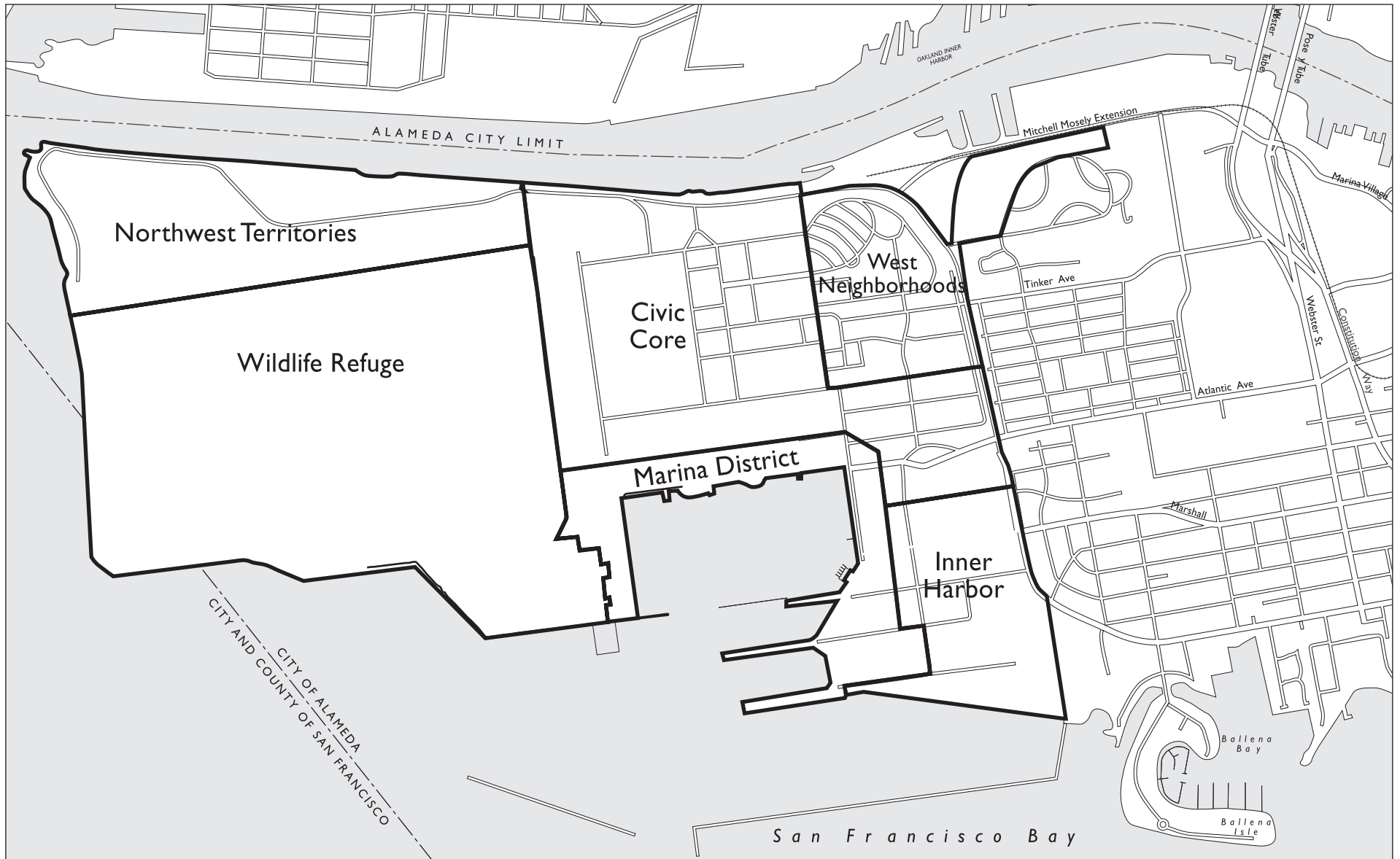
- Transportation and Circulation
- Air Quality

~~The project would also result in a cumulative regional housing impact as discussed in Chapter VI, CEQA Conclusions.~~

4. Alternatives to the Project

The following alternatives to the GPA are considered in this EIR:

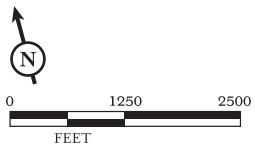
- The **Preservation** alternative assumes the continuation of the existing conditions on the site, and would not involve any improvements to existing buildings or infrastructure within the GPA Planning Area. This alternative also assumes that no new leases would be issued and the number of employees and residences would remain at a level similar to what existed in March 2002 (when the NOP for the Revised Draft EIR was issued). Based on a survey of occupied structures, it assumes a maximum of approximately 1,000 employees and 268 occupied residential units in the year 2020.
- The **No Project** alternative assumes the continuation of the existing conditions on the site, and would not involve any significant improvements to existing buildings or infrastructure within the GPA Planning Area. This alternative assumes that existing low-intensity employment uses will be replaced by more employee-intensive uses over time. This alternative would include the increased intensity of leasing of a portion of the existing buildings located within the GPA Planning Area, consistent with the City's 1997 Master Use Permit (MUP) and Interim Lease Program for Alameda Point which established a cap of 5,420 employees for interim uses and allows for the occupation of 268 residential units.



LSA

FIGURE IV.A-1

Alameda Point GPA EIR
Planning Subareas



SOURCE: DYETT & BHATIA, 2001

I. UTILITIES

This section presents an overview of the utility systems in the City of Alameda and at Alameda Point, including water distribution, sanitary wastewater, industrial wastewater, solid waste management, natural gas, steam, telephone, electricity, and cable television. Table IV.I-1 presents a detailed list of the utility providers for each of the sites. The service areas of local utility providers are identified as well as current capacity levels. The potential effect of buildout of the GPA on these facilities is assessed, the need for new or replacement facilities to serve the development that may occur is documented, and specific measures required to mitigate any adverse impacts are presented.

Table IV.I-1: Utility Infrastructure Service Provider: Alameda Point

Utility System	Service Provider
Water Distribution	EBMUD
Sanitary Wastewater	EBMUD
Industrial Wastewater	Trident
Solid Waste	Waste Management Incorporated
Telephone	Alameda Power and Telecom; Pacific Bell
Electricity	Alameda Power and Telecom
Natural Gas	PG&E
Cable Television	AT&T Broadband; Alameda Power and Telecom

^a EBMUD provides treatment while Alameda and Oakland pipelines convey the wastewater.

Source: LSA Associates, Inc., 2001.

The study area for impact analysis of the proposed project on utilities consists of Alameda Point and the City of Alameda. The *NAS Reuse EIR* contains information on utility services in the City of Alameda and Alameda Point. This information was updated and confirmed through written and personal correspondence with the City of Alameda (including the Alameda Point Leasing and Property Management Division of the Development Services Department and the Public Works Department), East Bay Municipal Utility District (EBMUD), the US Navy, Alameda County Waste Management Agency, and Alameda Power & Telecom (AP&T). Additionally, written correspondence between the City of Alameda and EBMUD were reviewed and drawn upon, as were documents produced by EBMUD and AP&T. Public utility and service providers who are anticipated to serve the Project site were contacted as part of this analysis, and their recommendations for system upgrades and improvements have been considered in the preparation of proposed mitigation measures.

3. Setting

A description of the existing setting for each utility provider that serves the Alameda Point GPA Planning Area is provided below.

a. Potable and Reclaimed Water. The primary source of water for Alameda Point is the Pardee Reservoir on the Mokelumne River in the Sierra Nevada mountains. Raw water is treated at EBMUD's Orinda filter plant and conveyed to Alameda via pipeline. The City of Alameda owns the water distribution system at Alameda Point, which EBMUD operates and maintains the water

~~distribution system~~ under a Joint Powers Agreement. In 2000, average water usage at Alameda Point was 0.25 million gallons per day (mgd).¹⁷⁶

¹⁷⁶ McGowan, William, 2001. Personal communication.

Two distinct water distribution systems serve Alameda Point: one provides potable water and water for fire fighting; the other serves fire protection sprinkler systems within industrial area buildings. EBMUD supplies the water distribution systems through three metered points of connection. The combined maximum rated flow is 4,200 gallons per minute (gpm).¹⁷⁷ Water pressure is increased to meet industrial and fire protection requirements.

The distribution systems are comprised primarily of cast iron and transite (asbestos cement) pipeline with some steel, copper, and polyvinyl chloride (PVC) pipeline. The systems are over 50 years old, with the exception of the PVC pipe, which was installed in the mid-1980s in the southern portion of Alameda Point. Older pipes remain in service, but there have been failures during the past 10 years in the cast-iron piping, requiring extensive repair work and replacement of failed lead joints.¹⁷⁸

Water recycling or reclamation, is a key element of EBMUD's Water Supply Management Program (WSMP), which was adopted in 1993. EBMUD and its customers currently use more than 14.5 mgd of nonpotable water, and the WSMP's 2020 goal is to recycle an additional 8.0 mgd, bringing the total to approximately 22.5 mgd (nearly 9 billion gallons annually). Typical uses for recycled water include irrigation, toilet flushing, cooling towers, and process water. ~~Large commercial and industrial projects are currently encouraged to install separate piping systems to permit use of reclaimed water for irrigation or manufacturing processes.¹⁷⁹ EBMUD will request installation of these dual distribution facilities at Alameda Point.~~ In March 2002, the City of Alameda adopted a dual plumbing ordinance, requiring new developments within the City-Designated Water Reuse Area to use recycled water provided by EBMUD and install dual plumbing systems. The Alameda Point Project is located within the service area boundary of the East Bayshore Recycled Water Project and within a City-Designated Water Reuse Area. Large commercial and industrial projects that are located within a City-Designated Water Reuse Area are required to install separate piping systems to permit the use of recycled water for appropriate uses, such as landscaping. EBMUD has completed a Facilities Plan and EIR for the East Bayshore Recycled Water Project¹⁸⁰ which will serve northern Alameda from the College of Alameda in the east to Alameda Point in the west.¹⁸¹ The impacts of using reclaimed water at Alameda Point are analyzed and disclosed in that document.

¹⁷⁷ US Navy, 1985e (as cited in City of Alameda, 2000).

¹⁷⁸ ARRA, 1995a (as cited in City of Alameda, 2000).

¹⁷⁹ ~~East Bay Municipal Utility District 2001. *East Bayshore Recycled Water Project Final EIR*. SCH No. 2000052128. Prepared by Parsons.~~

¹⁸⁰ Ibid.

¹⁸¹ McGowan, William, 2001. Personal communication.

b. Wastewater.

(1) Collection and Transport. Under a cooperative agreement between the Navy and the City of Alameda, the City operates and maintains the majority of the sanitary wastewater collection system for Alameda Point. This system comprises lateral and branch pipelines augmented by 18 lift or pump stations. Pump Station No. 1, serves Alameda Point. In 2000, the process of transferring ownership of this pump station to EBMUD was initiated, and EBMUD is in the process of rehabili-

- Improve the northbound Jackson Street on-ramp to I-880;
- Create a dual left turn from southbound Broadway at the intersection of Broadway and 5th streets;
- Improve the existing traffic operation system to better manage traffic flow between the Posey/Webster Tubes and I-880 and I-980; and
- Provide improved signage to direct traffic from I-880/I-980 to Downtown Oakland, Jack London Square, Chinatown, and the City of Alameda.

These elements are anticipated to be completed after 2005 due to funding availability, but before 2020, and are assumed in the 2020 traffic model projections.

As identified in the Countywide Transportation Plan prepared by the Alameda County CMA, the preliminary estimated capital cost for this Phase I project is \$24.5 million. Funding sources will include the State Transportation Improvement Program (STIP), federal STP/CMAQ funding, and Measure B.

(2) SR 260 Deficiency Plan. In 1998, the Alameda County CMA notified the cities of Oakland, Berkeley, and Alameda that 7th Street between the Posey Tube (SR 260) and the northbound I-880 at Jackson Street/6th Street was operating at LOS F during the PM peak hour. The CMA determined that the cities of Alameda, Oakland, and Berkeley significantly contribute to the SR 260 deficiency. The approved SR 260 Deficiency Plan identifies the following strategies to reduce the delay at the connection:

- Provide solid striping on the right lane of southbound Jackson Street between 7th Street and 6th Street to allow traffic from the Posey Tube on 7th Street to turn right on Jackson Street into its own lane without merging with southbound Jackson Street traffic.
- Provide a separate northbound left-turn lane on Jackson Street at the I-880 northbound on-ramp intersection.
- Close the 6th Street connection ramp to Broadway and eliminate the crossover to the Broadway off-ramp.
- Provide traffic responsive signal control.

The elements of the Deficiency Plan as adopted by the City of Oakland and approved by the ACCMA Board are as follows:

- Close I-880 Jackson on-ramp crossover to Broadway off-ramp
- Divert southbound Jackson at 7th
- Provide traffic responsive signal control
- Construct Posey Tube to 5th Street Connection (long term)

These elements are being implemented one at a time until the deficiency is corrected. Currently, the City of Oakland is in the process of implementing the diversion of southbound Jackson traffic at 7th Street.

(3) I-880 Access Improvements of High Street/42nd Avenue. A project to improve access for vehicles traveling between I-880 and the cities of Oakland and Alameda via 42nd Avenue and High Street is currently in design. The currently preferred alternative is the 42nd Avenue to High Street connection, defined as Alternative B in the Project Study Report/Project Report published on December 18, 2000.

(4) Alameda Roadway Improvements. Three additional roadway improvements are planned to be constructed in the vicinity of Alameda Point, and will result in additional east-west

A Class I bikeway, that would provide a separate pedestrian path, is planned along the south side of Atlantic Avenue within the abandoned railroad right-of-way. Several pedestrian improvements are also planned within the Catellus Mixed Use Master Plan area on the FISC site.

Downtown Oakland. Downtown Oakland contains several areas with significant pedestrian activity. In particular, the Broadway Corridor and the Chinatown area (focused on Webster Street) experience high pedestrian volumes. Chinatown is a major pedestrian area with a dense population and it is also a major thoroughfare for vehicles. Oakland Chinatown has the highest concentration of pedestrian, bicycle and vehicle collisions in the City of Oakland.²¹¹ In recent years, the City of Oakland has taken significant steps toward improving pedestrian safety in Chinatown, including physical improvements to certain intersections, pedestrian and driver education efforts, and successful application for grant funds for a “Revive Chinatown” planning effort that will recommend additional measures to improve pedestrian safety and ensure the continued economic vitality of Chinatown.

e. On-Going Transportation Programs and Plans. Regional and local programs and plans that regulate transportation and circulation are briefly described below.

(2) Alameda County CMA Congestion Management Program. The Alameda County CMA is responsible for ensuring local government conformance with the Congestion Management Program, a short-range document that helps coordinate planning and funding of transportation improvements. Every two years the CMA prepares a 5-year ~~7-year~~ capital improvement program aimed at reducing traffic congestion. The Congestion Management Program (CMP) requires that each jurisdiction identify existing and future transportation facilities that will operate below an acceptable service level, monitor impacts to the regional network caused by development, and provide mitigation where future growth degrades service level. The CMA has review responsibility for proposed GPAs and development projects consistent with the General Plan that are expected to generate 100 or more additional PM peak hour trips and monitors impacts of land use development on the regional MTS. The required analysis of the GPA on the MTS network is provided at the end of this chapter. The CMA biennially monitors existing service levels on the CMP network. When roadways deteriorate below an acceptable LOS, the CMP requires the jurisdiction(s) which significantly contribute to the deficiency to adopt a deficiency plan.

(3) City of Alameda Transportation Systems Management (TSM) Programs. The City of Alameda has several programs related to TSM. Each program is described below.

Traffic Capacity Management Procedure (TCMP). On June 19, 2001, the City adopted a TCMP (see Appendix F) that provides a supplemental strategy to monitor and mitigate the potential capacity deficiency of the Posey and Webster Tubes. The TCMP requires that monitoring of traffic be performed in order to evaluate the remaining capacity of the Tubes. The TCMP requires any

²¹¹ City of Oakland Revive Chinatown Grant Application, November 2001.

(5) Trip Distribution. The trip distribution process estimates the direction of travel for each trip that is produced and attracted by the trip generation estimates. Trip distribution creates an origin TAZ and a destination TAZ for each trip made. The Countywide Model uses a conventional gravity model²¹³ to distribute trips among zones. The Alameda version of the Countywide Model applies the same gravity distribution equations as the Countywide Model. Table IV.J-7 shows the trip distribution patterns for the GPA in 2020.

(4) Network Assignment. Once the trips in the model have been generated, their destinations and origins determined in the trip distribution step, and their mode of travel chosen,²¹⁴ each trip can then be assigned an exact travel route on the model network. The model network contains both highway and transit links. Trips are assigned to the links on the network according to logical algorithms that take into account link capacities, free-flow link speeds, the amount of congestion on each link, and the directness of the route, in order to minimize each trip's travel time. The procedures for highway assignment for the Alameda version of the Countywide Model are unchanged from the Countywide Model.

Once the trips are assigned to each roadway (travel route on the model network), the projected level of service (LOS) can be determined for the roadway itself and for the adjacent intersections. The Countywide Model's projected volume level of service findings for roadways and intersections are provided in tables in the following section of this chapter.

b. Effects of the General Plan Amendment on Transportation and Circulation.

(1) Summary of Major Findings. A summary of the transportation analysis findings for the GPA is provided below.

Table IV.J-7: Estimated 2020 Trip Distribution of Alameda Point PM Vehicle Traffic (Project Conditions)

Vehicles Leaving an Alameda Point	Percentage
Vehicles Remaining within Alameda Point	10.0%
Vehicles Traveling to Alameda Elsewhere	25.0%
Vehicles Traveling to Oakland	29.7%
Vehicles Traveling North of Oakland	23.9%
Vehicles Traveling South of Oakland	11.4%
Vehicles Arriving to an Alameda Point	
Vehicles Remaining within Alameda Point	16.9%
Vehicles Arriving from Alameda	28.7%
Vehicles Arriving from Oakland	30.7%
Vehicles Arriving from North of Oakland	16.3%
Vehicles Arriving from South of Oakland	7.4%

²¹³ A conventional gravity model is based on the concept that the amount of travel between zones is proportional to the production and attractions in the zones, and inversely proportional to the square of the impedance (usually travel time) between zones.

²¹⁴ In the mode choice estimates, the method of travel is determined for each trip. For the Alameda version of the Countywide Model, the mode choice splits from the Countywide Model were replicated and directly applied to the trip tables.

reports prepared for the City of Oakland,²¹⁵ the high number of pedestrian accidents in Chinatown is due to several factors, including:

- The high number of pedestrians who frequent this international business, shopping and residential area. The City of Oakland estimates that over 20,000 shoppers, tourists, and residents walk in Chinatown each weekend.
- A large number of intersections without pedestrian walk signals.
- A lack of parking, which results in frequent double parking. The City of Oakland estimates that an additional 510 parking spaces are needed due to the fact that existing off-street parking facilities are at capacity and on-street parking meters are often broken or malfunctioning.
- Four-lane one-way streets, which encourage higher vehicle speeds and automobile turning movements from multiple lanes.
- Signal timing that is inadequate to accommodate slower (seniors and persons with disabilities) pedestrian crossings. The City of Oakland estimates that over 24 percent of Oakland's Chinatown residents are 65 years old and over.

The City of Oakland Pedestrian Master Plan, August 2002 includes an extensive analysis of the number and causes of pedestrian/vehicle collisions in Oakland and Chinatown. The Oakland Master Plan reports that:

1. No intersection in Chinatown has experienced sufficient numbers of pedestrian/vehicle collisions to be listed on the City of Oakland's top 10 ranked intersections by number of collisions (1996-2000), the City of Oakland's top 10 ranked intersections for pedestrian/vehicle collisions involving seniors, or the City of Oakland's top 10 ranked intersections for pedestrian/vehicle collisions involving children.
2. In approximately 50 percent of pedestrian/vehicle collisions in Oakland, the driver of the vehicle is not responsible for the collision.
3. The high rate of pedestrian/vehicles collisions in Oakland, Berkeley and San Francisco relative to other cities with high traffic volumes is attributable to the large number of pedestrians in these three cities.

The Master Plan's extensive data analysis of the pedestrian/vehicle collision problem in Oakland and Chinatown does not identify vehicle volume as a primary contributor to pedestrian/vehicle collisions, nor does the Plan recommend a reduction in traffic volumes on streets with a large number of vehicle/pedestrian collisions.

²¹⁵ City of Oakland Revive Chinatown Grant, November 2001.

In response to concerns about pedestrian safety and declining sales in Chinatown, the City of Oakland recently received \$250,000 in state funds to evaluate transportation and pedestrian facilities in Chinatown and recommend potential solutions to improve economic vitality and pedestrian safety. The grant funds will enable the City of Oakland to complete a comprehensive assessment of transportation conditions in Chinatown and recommend measures to improve pedestrian safety, such as redirecting traffic, changing streets from one-way to two-way, improving signalization and crossing facilities at key intersections, creating gateway features, improved parking facilities, and/or improving transit facilities and services.

The Alameda Point GPA will not have a significant impact on pedestrian safety in Chinatown or elsewhere in Oakland. Pedestrian safety is more directly related to local design features, pedestrian volumes, and the potential for incompatible land uses, rather than motor vehicle traffic volumes, as long as traffic volumes are within normal limits.²¹⁶ The Alameda GPA does not include any changes in Oakland that would alter local design features, pedestrian volumes, or land uses. Analysis of traffic conditions in Chinatown show that although traffic volumes are high, they are within the normal limits of the roadway design. The high traffic volumes can be attributed to several factors, including: the location of the Webster and Posey Tubes, signs on Broadway directing drivers to parallel routes within Chinatown for timed signals, configuration of streets within Chinatown for one-way traffic which facilitates high traffic volumes, and the commercial viability and vitality of Chinatown, which is the fourth largest Chinatown in the United States.

²¹⁶ Oakland Army Base Final EIR, August 2002.

that regulate future development consistent with the development intensity and density assumed in the Alameda Point GPA EIR.

Mitigation Measure TRANS-2f: The City shall work with the City of Oakland, BART, AC Transit, and other local and regional agencies to complete feasibility studies for a new alternative transportation corridor between Alameda and Oakland, including the use of technologies such as a people mover system or gondola between Alameda Point and West Oakland BART or other acceptable terminus. (SU)

Impact TRANS-3: Development under the buildout of the GPA would contribute to an unacceptable level of service (LOS) F within the Posey Tube in 2020. (S)

All of the Oakland/Alameda Estuary crossings are part of the MTS roadway network, which is analyzed in the following section of this chapter. However, because of Alameda's island setting, levels of service at the Estuary crossings are of particular interest to Alameda residents. Therefore, the result of the crossings analysis has been separated from the MTS analysis and presented below. Consistent with the MTS network analysis, a significant impact is identified if adoption of the GPA would cause a roadway or freeway segment on the MTS to operate at LOS F or increase the V/C ratio by 0.03 or more for a roadway segment that would operate at LOS F without the project.

In the year 2020, GPA-related development in combination with other development in Alameda, Oakland, and the larger region will cause increases in traffic volumes on all of the Oakland/Alameda Estuary crossings. Despite the increases in traffic, all of the Oakland/Alameda Estuary crossings are projected to continue to operate at acceptable level of services, with the exception of the Posey Tube in the PM peak hour commute. As shown in Table IV.J-10, the projected LOS F condition will not be caused by the GPA, but the GPA is projected to increase the V/C ratio in the Posey Tube by more than 3 percent.

Existing and proposed policies that would help minimize the significant unavoidable traffic-related impact are discussed below.

Proposed GPA Policies. Policy 4.2.c would help minimize this impact by requiring adherence to the TCMP (discussed below). Policies 9.3.b, 9.3.t, and 9.3.y would help minimize traffic-related impacts by encouraging the development of housing in Alameda Point in close proximity to employment centers. Policies 9.2.c, 9.2.g, 9.3.c, would help to minimize this impact by integrating Alameda Point into existing transit connections within the City. Policies 9.4.b, 9.4.e, 9.4.f, 9.4.n, 9.4.o, 9.4.p, 9.4.q, and 9.4.s would help to minimize this impact by supporting access to regional transit systems in order to reduce traffic on Oakland streets connecting to the Posey Tube.

- Through detailed operational studies undertaken by the City of Alameda Public Works Department for the Traffic Capacity Management Procedure,²²¹ a revised assumption for the capacity of the Webster/Posey Tubes was determined. These studies found that the maximum capacities of the Webster and Posey Tubes are 3,976 vehicles per hour, and 4,007 vehicles per hour, respectively. To account for actual roadway conditions, these capacities were computed based on the Highway Capacity Manual operational method.
- The capacity assumed for the Oakland/Alameda Estuary bridges was increased to 1,450 vehicles per lane based on the actual saturation flow rates of adjacent intersections.

For the CMP land use analysis, project impacts on the MTS are determined by comparing levels of service on regional roadways in 2005 and 2020 that would be expected with implementation of the GPA to the levels of services that may be expected in 2005 and 2020 without implementation of the GPA. The latter condition (Without GPA) in 2005 and 2020 assumes regional and local growth consistent with ABAG's *Projections 2000* outside of Alameda Point. At Alameda Point, this condition assumes that no additional jobs or housing units are added at Alameda Point. As shown in Table IV.J-11, in the year 2005, the GPA would not result in any significant impacts on any regional roadways. In all cases, the contribution would be less than 3 percent in the V/C ratio.

Impact TRANS-4: Development under buildout of the GPA would increase the V/C ratio by more than 3 percent on roadway segments that are projected to operate at LOS F in 2020 without the GPA. (S)

Results of the CMP analysis are shown below in Tables IV.J-11 and IV.J-12. The tables show that as a result of forecasted growth in Alameda, Oakland, and the larger region, levels of service on many segments of the MTS network are expected to worsen over the next 20 years. However the tables show that in no case would adoption of the GPA cause a roadway segment on the MTS to operate at LOS F in 2005 or 2020. In all cases, segments forecasted to operate at LOS F in 2005 or 2020 will operate at LOS F either with or without GPA implementation. Therefore, GPA adoption would not cause any roadway segment to operate at LOS F that is not already projected to operate at LOS F in either 2005 or 2020 without GPA implementation.

On the following three roadway segments, the level of service is projected to be LOS F in the year 2020 and adoption of the GPA is projected to increase the V/C ratio by more than 3 percent:

- SR 260 (Webster Street), Constitution Way in Alameda to 7th Street in Oakland (the Posey Tube).
- High Street, Howard Street to I-880 in Oakland.
- Alameda Avenue, Fruitvale Avenue to High Street in Oakland.

²²¹ City of Alameda Resolution No. 13345 adopted on June 19, 2001.

This increase in V/C ratio of more than 3 percent on a roadway projected to operate at LOS F is considered a significant impact on the MTS.

feasible mitigation measure because it would result in a General Plan that is internally inconsistent with the City of Alameda Housing Element and inconsistent with State planning and zoning law, which requires cities to amend their general plans to accommodate the Regional Housing Needs Determination. Therefore, this impact is considered significant and unavoidable. However, it is anticipated that when the BAAQMD next updates the CAP it will use population projections for local jurisdictions that are consistent with the most recent Regional Housing Needs Determination for local jurisdictions. Therefore, the inconsistency between the plans is considered significant, but temporary.

If population growth is greater than assumed in the CAP emission inventory, then population based emissions also are likely to be greater than assumed in the CAP. Consequently, attainment of the State air quality standards would be delayed.

The 1988 California Clean Air Act, Section 40919(d) requires regions to implement “transportation control measures to substantially reduce the rate of increase in passenger vehicle trips and miles traveled.” The projected population growth between 2000 and 2020 with the implementation of the proposed GPA is approximately 0.4 percent per year, while under ABAG projections it is 0.3 percent per year. The Vehicle Miles Traveled (VMT) growth rate is estimated at 0.5 percent per year,¹ which exceeds the projected population growth rate of the proposed GPA. (The VMT growth rate is based on 2000 and 2020 VMT estimates for Planning Area 1 of Alameda County (which includes Oakland, Berkeley, Alameda, Piedmont, Emeryville, and Albany) by dividing the VMT difference between 2020 and 2000 by 20 years.) A plan showing a VMT growth rate that is greater than the population growth rate would be considered to be hindering progress towards achieving this performance objective, and thus, be inconsistent with regional air quality planning. This represents a significant air quality impact.

Although population growth due to the proposed GPA is considered a significant air quality impact, it is important to note that proposed changes in land use designations that allow for this additional growth encourage new growth in proximity to public transit and other proposed policies promote the use of alternative transportation modes. The following policies set forth in the proposed GPA for Alameda point would help reduce regional and local air quality impacts associated with implementation of the proposed GPA: 9.2.c, 9.2.e, 9.2.f, 9.2.g, 9.2.o, 9.3.c, 9.3.u, 9.3.y, 9.3.aa, 9.3.cc, 9.3.mm, 9.3.oo, 9.4.o, 9.4.o, 9.4.p, 9.4.q, 9.4.r, 9.4.s, 9.4.t, 9.4.u, and 9.4.v.

In addition, mitigation measures recommended in the Draft EIR will further reduce the Air Quality impacts associated with this impact. Specifically, Measure AIR-2 (Developer funding for BAAQMD recommended TCMs), Mitigation Measure TRANS-2d (Developer funding for Alameda

¹ The VMT growth rate is based on 2000 and 2020 VMT estimates for Planning Area 1 of Alameda County (which includes Oakland, Berkeley, Alameda, Piedmont, Emeryville, and Albany) by dividing the VMT difference between 2020 and 2000 by 20 years.

Point Transportation Demand Management Plan), Mitigation Measure TRANS-4e (Gondola/ Alternative Transit Corridor Feasibility Studies) and Mitigation Measure TRANS-5c (Developer funding for transit services) will all contribute to reducing air quality impacts associated with the Alameda Point GPA. Implementation of the proposed policies in the GPA and the mitigation measures recommend to reduce automobile related trips and associated emissions detailed above would help minimize this impact, but not reduce it to a less-than-significant level.

Mitigation Measure AIR-3: No feasible mitigation is available. This impact would remain significant and unavoidable. (SU)

- Category 7: Areas that have not been evaluated or require additional evaluation.

Parcels in ~~CERFA~~ ~~CEQA~~ categories 1 through 4 are “CERFA-eligible” and may be transferred subject to a covenant of the federal government to remediate any contamination that may be discovered after the transfer. Other areas, where required investigation and/or remediation is not completed (CERFA categories 5 through 7), may be transferred under CERFA’s Early Transfer Authority if, in addition to the covenant to remediate contamination discovered following the transfer, the requirements of Section 120(h)(3)(C) of CERCLA (discussed above) are met.

FOSL/FOST Policies. Prior to the CERCLA-required completion of remediation, the DOD has established a policy for leasing contaminated or potentially contaminated properties. The DOD, with participation from regulatory agencies, can develop a site-specific or supplemental environmental baseline survey, or in specific cases, use the basewide Environmental Baseline Survey (EBS) and a Finding of Suitability to Lease (FOSL) or Finding of Suitability for Transfer (FOST) for the property. The FOSSL may include specific land use restrictions to protect human health and the environment, and to ensure government access for final investigations and remediation. With the exception noted above for leasing federal property prior to completion of remediation, a FOST may be issued only for properties on which all remedial actions necessary to protect human health and the environment have been taken pursuant to CERCLA 120(h)(3). Public notice and a 30-day comment period are required for issuance of a FOST.

Installation Restoration Program (IRP). In 1981, the US Navy initiated a program to evaluate health and environmental hazards at naval facilities where past hazardous materials operations and waste disposal activities had taken place. This direction resulted in the Installation Restoration Program (IRP), as currently defined by the *US Navy Environmental and Natural Resources Program Manual*.²⁴³ The purpose of the IRP is to identify, assess, characterize, and clean up or control contamination from past hazardous waste disposal operations and hazardous material spills at US Navy and Marine Corps facilities.

Federal Facility Agreement (FFA). An FFA is a negotiated legal agreement governing the CERCLA and RCRA administrative process for cleanup at NPL sites. The provisions of these agreements are both a factor in setting project execution priorities through risk management, and a tool for formalizing commitments so that selection of remedial action will be less adversarial. FFAs typically outline the working relationship among the states, USEPA, and the Department of Defense and clearly define mutual obligations.

Community Participation Programs. The NAS Alameda Restoration Advisory Board (RAB) provides public input to the US Navy’s cleanup program. In addition, there is a 30-day public comment period during each Draft RAP/ROD review process, as required by California law. At least

²⁴³ US Navy, 1994. *US Navy Environmental and Natural Resources Program Manual*.

also not required for emergency repairs of public infrastructure projects, although any excavated materials must be handled in accordance with applicable regulations.

Pursuant to a Memorandum of Agreement between the City and DTSC, by letter dated July 10, 2000, DTSC approved the City's map depicting the extent of the marsh crust/subtidal zone for the purposes of defining the limits of the City's Excavation Ordinance requirements.

Business Uses. Businesses that use, store, or dispose of hazardous materials are required to comply with federal, State, and local requirements for managing hazardous materials. Programs, plans, and permits required for businesses are listed in Appendix I-1.

(4) Project Site Regulatory Status.

RCRA Assessment. In 1991, a RCRA facility assessment of Alameda Point was performed for the USEPA as part of Alameda Point's RCRA Part B permit application. The purpose of this review was to identify and evaluate solid waste management units (SWMUs) and other areas of concern. Currently, approximately 180 SWMUs have been identified. Twelve facilities were permitted at the site, eight of which have been closed according to their closure plans. The DTSC required the US Navy to prepare RCRA facility investigation plans for remediation or closure of hazardous waste generator accumulation points, abandoned USTs, and fuel spill sites. As the facility investigations are completed, some sites could become additional IRP sites. Some of the facility investigation sites are in areas already under investigation as IRP sites, discussed below.

For the non-permitted areas, approximately 54 have previously achieved concurrence for no further action, approximately 78 have been recommended for no further action, and approximately 19 require further action (including two additional units not identified in the RFA). All oil water separators and wash-down areas are recommended for no further action under the RCRA program.²⁴⁴

CERCLA Investigation/IRP Sites. The Alameda Point IRP is being carried out in coordination with other federal regulatory programs, including CERCLA. Twenty-three IRP sites were identified at Alameda Point during the initial environmental assessments. Subsequent studies and evaluations added two additional IRP sites in 1998, three more sites in 2000, ~~and~~ one site in 2001, and three sites in 2002 for a total of 32 ~~29~~ sites²⁴⁵. To simplify the investigation process, one of the original IRP sites, the storm drainage system (IRP Site 18), was removed in November 1999. As a result, any portion of the storm drainage system underlying a particular IRP site will be considered part of that IRP site,

²⁴⁴ Tetra Tech, Inc. for Southwest Division, Naval Facilities Engineering Command., 2002. Technical Memorandum. *Evaluation of Issues Related to the RCRA Facility Permit EPA ID CA 2170023236, Tiered Permits, and the Non-Permitted Areas at Alameda Point.* Draft October 8.

²⁴⁵ ~~HF Corporation, 2001. Final Comprehensive Guide to the Environmental Baseline Study. June 29.~~

NPL Status. On July 22, 1999, Alameda Point was listed on the National Priorities List (NPL), a list of national priorities among the known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States, commonly referred to as Superfund sites. The list is intended to guide USEPA in determining which sites warrant further investigation under CERCLA to assess the nature and extent of public health and environmental risks associated with a release of hazardous substances.

By definition, NPL sites consist of locations where releases of hazardous substances have occurred. Therefore, property that has been identified as uncontaminated at Alameda Point by the US Navy pursuant to CERCLA Section 120(h)(4)(a) and has received regulatory agency concurrence pursuant to 120(h)(4)(b) is not part of the NPL site. Parcel Numbers 39, 60, 63, 93, 101, and 194 (see Appendix I-3) were identified and received concurrence as uncontaminated, and therefore, are not part of the Alameda Point NPL site. If additional uncontaminated property at Alameda Point is identified in the future and receives appropriate regulatory agency concurrence, it will not be considered part of the NPL site. Conversely, if information becomes available indicating that hazardous substances in fact impact parcels previously thought to be uncontaminated, these parcels will be considered part of the NPL site.

The NPL listing is not intended to include the subsurface soil contamination layer known as the former marsh crust and subtidal zone. Further discussion of regulation of the marsh crust and subtidal zone is included below. All other hazardous substances in Alameda Point are included in the NPL listing.

In July 2000, USEPA selected Alameda Point as a pilot site for the Superfund Redevelopment Initiative (SRI). The SRI is a nationally coordinated effort to facilitate the return of Superfund sites to productive use by selecting response actions consistent with anticipated use. The Pilot project is focusing on two portions of Alameda Point: the Seaplane Lagoon (OU-17) and the 1943-1956 Disposal Area Landfill (OU-1). The USEPA is providing funding to the City of Alameda to hire consultants to recommend a remediation design concept for the lagoon and the landfill.

CERFA/EBS Process. A basewide EBS for NAS Alameda was completed in October 1994 and a Base Closure Plan (BCP) was prepared in March 1995. Additional phases of the EBS investigation were completed between 1994 and 2000, and a Final EBS was completed in June 2001. The Final EBS divides the property into 246 parcels, 237 of which are in or immediately offshore of the project site. A map showing parcel numbers and a table showing the current parcel classifications are shown in Appendix I-23.

During the initial phase of the EBS process, the final basewide Alameda Point EBS, published in October 1994, six parcels were identified as "CERFA-eligible" or category 1 parcels. The status of these and other sites is currently being re-evaluated due to concern over potential polynuclear aromatic hydrocarbon (PAH) contamination in fill materials, which is under investigation by the US Navy.

3. Alternatives Considered and Rejected in this EIR

During the preparation of the proposed GPA, and in response to comments from the public on the Notice of Preparation for this EIR, the City considered a number of ideas that were not carried forward as formal alternatives. Each alternative that was considered by the City during the preparation of the proposed GPA, but rejected as infeasible during the scoping process, is briefly described below. An explanation of why the City determined each of these alternatives to be infeasible and not necessary to provide a reasonable range of alternatives is also provided.

The following alternatives were determined to be infeasible and rejected for further in-depth analysis:

- Transit Alternative
- Maximize Housing Alternative

a. Transit Alternative. The Transit alternative was proposed by a member of the public during the EIR scoping process. This alternative was proposed to include an average housing density of 40 units per acre (which is almost 100 percent higher than the current maximum density permitted within the City and beyond the authority of the City to adopt), limit residential parking to one space per housing unit, elimination of free parking for single occupancy non-residential vehicles, mandatory BART and ferry shuttle service, elimination of free parking for ferry users, a land use pattern which would produce a jobs/housing balance of 2.5 to 1, and a system of providing incentives for employers to hire Alameda residents.

A number of the features identified in this alternative are similar to or are included within the project or one or more of the alternatives fully evaluated in this EIR. The project's proposed jobs housing ratio is approximately 3.1 to 1. The proposed GPA also includes transit policies that include the establishment or expansion of transit shuttles to BART and ferry terminals, and the establishment of a TSM program that could include parking restrictions and/or other incentives to reduce single occupancy vehicle use. The key feature of this alternative that differs from the project and all the other alternatives, is the combination of residential densities averaging 40 units per acre and the requirement to maintain a 2.5 to 1 jobs to housing ratio. Under such requirements, the Transit alternative would likely produce housing in the range of 5,000 to 6,000 units and corresponding job production of 12,500 to 15,000 jobs. In combination with aggressive TSM programs proposed, such an alternative would not be feasible without the construction of high a capacity transit system ~~almost certainly requiring a fixed guide way~~ between the cities of Alameda and Oakland. Such a system does not currently exist within the City of Alameda and cannot, within the scope of this EIR, be determined to be feasible. Consequently, this alternative was not brought forward for additional analysis.

Table VI-1: Plans and Probable Future Projects used in Cumulative Impact Analysis

Project Name	Agency	Description	Status	Environmental Factors Analyzed
Plans				
General Plan	City of Alameda	City-wide plan.	Element update and EIR certified 1991, current through 2010.	Public services Traffic Air quality Noise
General Plan	City of Oakland	City-wide plan.	Last updated to include Estuary Policy Plan Element 1999, current through 2015.	Public services Traffic Air quality Noise
Projects				
Alameda Point Wildlife Refuge	USFWS	Wildlife refuge consisting of 565 upland acres and 413 submerged acres of land at Alameda Point. (CA least tern colony).	EA adopted 2000.	Land Use Biology
Catellus Mixed Use Development	City of Alameda	215-acre project involving reuse of FISC Alameda; mixed use.	Buildout in 2015.	Land use, Population, employment, housing Visual
Oakland Army Base Redevelopment District	City of Oakland	1,731-acre project. Light industrial and business reuse of OARB and surrounding area; rail and marine terminals.	EIR certified in July 2002	Land use Visual Cultural resources
-50 Foot Navigation Improvements	Corps of Engineers and Port of Oakland	Project to dredge Oakland Outer and Inner harbors to -50 MLLW. Construct 1,500-foot diameter turning basin near Alameda Gateway.	EIS/EIR complete. Construction in progress. Completion by approximately 2005.	Biology Water quality
Bay Bridge Replacement	Caltrans	Replacement of the Bay Bridge from Yerba Buena Island to Oakland.	EIS complete. Construction approximately 2002-2006.	Biology Water quality
Reuse of Bay Area Military Bases	Multiple agencies	Conversion from military to community uses, including demolitions.	In various stages of reuse; Buildout: Unknown.	Land use Cultural resources
<u>Nothern Alameda Waterfront Specific Plan</u>	<u>City of Alameda</u>	<u>Redevelopment of Northern Waterfront area.</u>	<u>Plan in progress.</u>	<u>Population</u> <u>Employment</u> <u>Housing.</u> <u>Transportation</u> <u>Air quality</u>

Source: City of Alameda, 2001.

m. Hazardous Materials and Waste. The project area includes areas of contamination, as described in Chapter IV.M, Hazards. Implementation of each component project under the proposed project would remediate site contamination, a cumulative environmental benefit to Alameda Point. Throughout the Bay Area, redevelopment of military bases for community use would result in widespread remediation of hazardous waste, a substantial cumulative environmental benefit.

Additional hazardous materials may be transported, handled and disposed as a result of project implementation. These materials must be transported, handled and disposed pursuant to existing state and federal regulation protective of human health and the environment, minimizing the risk of accidental release and public exposure. Cumulative impacts related to public exposure to hazardous materials would not be considered significant.

D. EFFECTS FOUND NOT TO BE SIGNIFICANT

Each of the CEQA-defined environmental factors is considered within Chapter IV, Setting, Impacts and Mitigation Measures, of this EIR with the exception of agricultural and mineral resources. There are no known mineral resources at Alameda Point, nor has the area ever been under cultivation or considered as Farmland of Significance. Therefore, the GPA would have no effect on agricultural or mineral resources.

E. SIGNIFICANT AND UNAVOIDABLE IMPACTS

As discussed in Chapter IV of this EIR, buildout of the GPA could result in significant unavoidable impacts in the following topics:

- Air Quality; and
- Transportation and Circulation.

~~The project would also result in a cumulative regional housing impact.~~

APPENDIX I-1

**REGULATORY AGENCY FRAMEWORK AND
EXISTING PROGRAMS, PLANS, AND PERMITS
HAZARDOUS MATERIALS AND WORKER HEALTH & SAFETY
CITY OF ALAMEDA GENERAL PLAN AMENDMENT
FOR ALAMEDA POINT**

Appendix I is revised as shown on the following pages.

(5) **California Fish and Game Commission.** This agency responds to surface water pollution incidents.

(6) **California Office of Emergency Services (OES).** The OES State Warning Point acts as the Governor's 911 Dispatch Center. The State Warning Point, under Federal SARA Title III requirements must be notified as soon as possible. OES compiles statistics statewide on spills and releases, and will dispatch other regional, state and federal agencies to the scene, if necessary.

(7) **California Integrated Waste Management Board (CIWMB).** The CIWMB consults with the Department of Toxic Substances on landfill site clean-up requirements.

(8) **Department of Health Services (DHS).** The DHS consults with the Department of Toxic Substances on site clean-up requirements for sites potentially containing radiological substances.

b. Local Agencies.

(1) **ACDEH.** ACDEH is the Certified Unified Program Agency (CUPA) for the project site, and in that role enforces state and local hazardous materials and hazardous waste regulations in the City of Alameda. In addition, the ACDEH may also act as lead agency to ensure proper remediation of leaking underground petroleum product tank sites and certain other contaminated sites.

(2) **Alameda Fire Department.** The City of Alameda Fire Department does not enforce any hazardous materials regulations, but has a role as a first responder to hazardous materials incidents within the City.

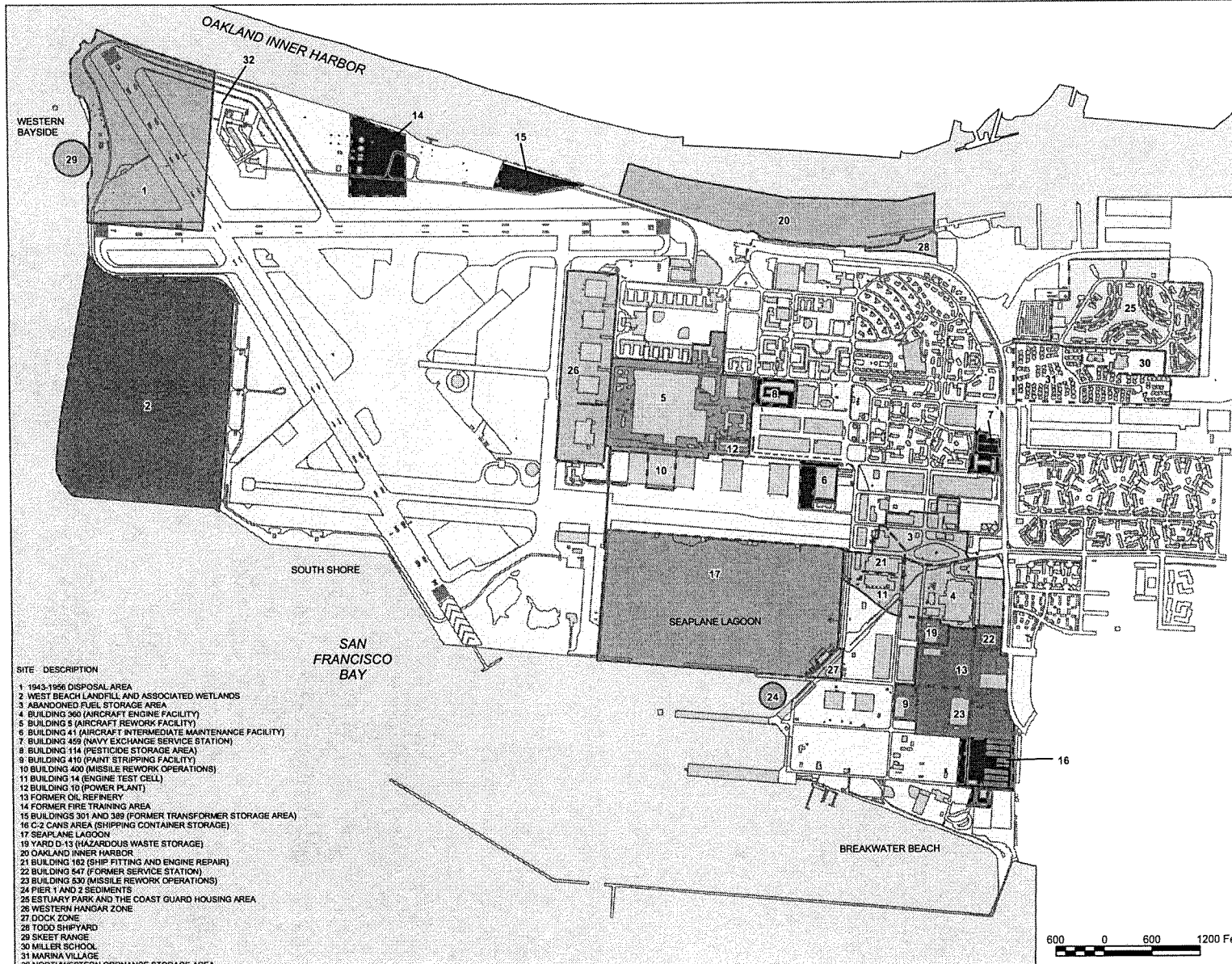
2. Worker Health and Safety

Worker health and safety is protected by federal and state regulations. The Occupational Safety and Health Administration (OSHA) is the federal administering agency for worker health and safety regulations. The California Department of Industrial Relations, Division of Occupational Safety and Health (DOSH) enforces state regulations. A description of agency jurisdiction is summarized below.

a. OSHA. The Occupational Safety and Health Administration (OSHA) is responsible for enforcement and implementation of federal laws and regulations pertaining to worker health and safety. Under its jurisdiction, the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations, in 29 CFR 1910.120, require training and medical supervision for workers at hazardous waste sites. Additional regulations have been developed for construction workers pertaining to exposure to lead (29 CFR 1926.62) and asbestos (29 CFR 1926.1101) during construction activities.

b. DOSH. At the state level, the California Department of Industrial Relations, Division of Occupational Safety and Health, formerly known as Cal/OSHA, is charged with enforcement of state regulations and supervision of workplaces in California that are not under direct federal jurisdiction.

State worker health and safety regulations applicable to construction workers include training requirements for hazardous waste operations and emergency response (8 CCR 5192) and lead (8 CCR 1532.1) and asbestos (8 CCR 1529) regulations, which equal or exceed their federal counterparts.



- CERCLA SITE
- OPERABLE UNIT 1
- OPERABLE UNIT 2A
- OPERABLE UNIT 2B
- OPERABLE UNIT 2C
- OPERABLE UNIT 3
- OPERABLE UNIT 4A
- OPERABLE UNIT 4B
- OPERABLE UNIT 4C
- OPERABLE UNIT 5
- OPERABLE UNIT 6
- BUILDING
- LAND COVER
- OPEN WATER

Notes:
 CERCLA = Comprehensive Environmental
 Response, Compensation, and
 Liability Act of 1980

SITE DESCRIPTION

- 1 1943-1956 DISPOSAL AREA
- 2 WEST BEACH LANDFILL AND ASSOCIATED WETLANDS
- 3 ABANDONED FUEL STORAGE AREA
- 4 BUILDING 360 (AIRCRAFT ENGINE FACILITY)
- 5 BUILDING 5 (AIRCRAFT REWORK FACILITY)
- 6 BUILDING 41 (AIRCRAFT INTERMEDIATE MAINTENANCE FACILITY)
- 7 BUILDING 459 (NAVY EXCHANGE SERVICE STATION)
- 8 BUILDING 114 (PESTICIDE STORAGE AREA)
- 9 BUILDING 410 (PAINT STRIPPING FACILITY)
- 10 BUILDING 400 (MISSILE REWORK OPERATIONS)
- 11 BUILDING 14 (ENGINE TEST CELL)
- 12 BUILDING 10 (POWER PLANT)
- 13 FORMER OIL REFINERY
- 14 FORMER FIRE TRAINING AREA
- 15 BUILDINGS 301 AND 389 (FORMER TRANSFORMER STORAGE AREA)
- 16 C-2 CANS AREA (SHIPPING CONTAINER STORAGE)
- 17 SEAPLANE LAGOON
- 18 YARD D-13 (HAZARDOUS WASTE STORAGE)
- 20 OAKLAND INNER HARBOR
- 21 BUILDING 162 (SHIP FITTING AND ENGINE REPAIR)
- 22 BUILDING 547 (FORMER SERVICE STATION)
- 23 BUILDING 530 (MISSILE REWORK OPERATIONS)
- 24 PIER 1 AND 2 SEDIMENTS
- 25 ESTUARY PARK AND THE COAST GUARD HOUSING AREA
- 26 WESTERN HANGAR ZONE
- 27 DOCK ZONE
- 28 TODD SHIPYARD
- 29 SKEET RANGE
- 30 MILLER SCHOOL
- 31 MARINA VILLAGE
- 32 NORTHWESTERN ORDNANCE STORAGE AREA



Tetra Tech EM Inc.

Alameda Point
 U.S. Navy Southwest Division, NAVFAC, San Diego

OPERABLE UNITS & CERCLA SITES

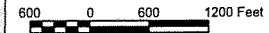


Table I-1: CERCLA Sites

CERCLA SITE	AREA DESIGNATION	PARCELS	SOIL	GROUNDWATER	OTHER
OPERABLE UNIT 1					
6	Building 41 (Aircraft Intermediate Maintenance Facility)	71A, 196	PAH	CHCs	N/A
7	Building 459 (Navy Exchange Service Station)	112, 113, 114	Benzene, PAHs, metals	Benzene, ethylbenzene, PAHs, TPH, MTBE	N/A
8	Building 114 (Pesticide Storage Area)	75, 76	metals, PAHs	Benzene, CHC	N/A
14	Former Fire Training Area	3, 12A, 12B, 13, 14, 15, 16A, 17A, 23A	SVOCs, PAHs	CHCs	N/A
15	Buildings 301 and 389 (Former Transformer Storage Area)	22, 23B	Metals, PCBs, PAHs	None	Partial soil removal completed
16	C-2 CANS Area (Shipping Container storage)	149, 150A, 168	PAHs	CHCs	Soil removal action completed - NFA
OPERABLE UNIT 2A					
9	Building 410 (Paint Stripping Facility)	152, 153A	CHCs, PAHs	SVOCs, CHCs, benzene	N/A
13	Former Oil Refinery	146, 147, 210, 214	benzene, TPH, PAHs	CHCs, benzene, TPH	N/A
19	Yard D-13 (Hazardous Waste Storage)	142, a part of 134A	TPH, PAHs	SVOCs, CHCs, benzene, TPH	N/A
22	Building 547 (Former Service Station)	145	benzene, TPH, PAHs	Benzene, TPH	N/A
23	Building 530 (Missile Rework Operations)	148, 211	TPH, PAHs	Benzene, TPH, VC	N/A
OPERABLE UNIT 2B					
3	Abandoned Fuel Storage Area	116, 117, 118, 120, 122, 128, 129, 131, 209	metals, PAHs, TPH	CHCs, benzene, TPH	N/A
4	Building 360 (Aircraft Engine Facility)	133, 143, 144, 164A, a part of 134A	metals, PAHs, TPH	CHCs, PAHs, benzene, TPH	N/A
11	Building 14 (Engine Test Cell)	137, 138A, 140A	CHCs, PAHs, TPH	CHCs, benzene, TPH	N/A
21	Buildings 162 (Ship Fitting and Engine Repair)	127, 135, 136, 200, 155A	PAHs	CHCs, PAHs, metals, benzene	N/A
OPERABLE UNIT 2C					
5	Building 5 (Aircraft Rework Facility)	23C, 28A, 29A, 30A, 45A, 46, 47, 48, 49, 50A, 50B, 51A, 51B, 53A, 54-59, 66, 67, 68, 186	metals, TPH, PAHs	CHCs, PAHs, cyanide, xylenes, TPH	RAD (drain lines)
10	Building 400 (Missile Rework Operations)	52	PAHs	CHCs, TPH	RAD (drain lines)
12	Building 10 (Power Plant)	69	PAHs	None	N/A
OPERABLE UNIT 3					
1	1943 - 1956 Disposal Area	1, 2, 5A	PAHs, PCBs, metals, RAD	VOCs, SVOCs	UXO from Pistol range, Rad 226, Rad 228 from dials
OPERABLE UNIT 4A					
2	West Beach Landfill and Associated Wetlands	5B, 5C, 6, 7	PAH, PCBs, RAD	VOCs, SVOCs, metals	RAD
OPERABLE UNIT 4B					
17	Seaplane Lagoon	N/A (offshore)	N/A	N/A	PCBs, cadmium, DDXs
24	Pier 1 and 2 Sediments	N/A (offshore)	N/A	N/A	PCBs, cresols, and metals
OPERABLE UNIT 4C					
20	Oakland Inner Harbor	N/A (offshore)	N/A	N/A	METALS, PCBs, PAHs, Pesticides, organotins, and TPH
29	Skeet Range	N/A (offshore)	N/A	N/A	(radionuclides)
OPERABLE UNIT 5					
25	Estuary Park and the Coast Guard Housing	181, 182, 183	PAHs	Benzene and naphthalene	N/A
OPERABLE UNIT 6					
26	Western Hangar Zone	30-36, 190-192, 204A, 204	VOCs	Benzene, CHCs, metals	RAD (drain lines), PAH
27	Dock Zone	138B, 139A, 155B	TBD	CHCs	
28	Todd Shipyard	215	Metals, PAHs	Metals, pesticides, PCBs	
NEW SITES					
30	Miller Elementary School and Woodstock Child Development Center	179, 180	PAHs	Benzene, naphthalene	N/A
31	Marina Village Housing	178, 184	PAHs (in deep soils)	Benzene, naphthalene	N/A
32	Northwestern Ordnance Storage Facility	8	TBD	VOCs	N/A

Notes (HHRA Risk Drivers):

BTEX Benzene, toluene, ethylbenzene, and xylenes
 CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
 CHCs Chlorinated Hydrocarbons (e.g., PCE, TCE, 1,2-DCE, vinyl chloride)
 DDX Combined concentrations of dichlorodiphenyldichloroethane, dichlorodiphenyldichloroethene, and dichlorodiphenyltrichloroethane
 Metals (e.g., Chromium, arsenic, beryllium, thallium, lead, manganese, nickel, and/or cadmium)
 N/A Not applicable
 NFA No further action

PAHs Polycyclic aromatic hydrocarbons (e.g., benzo(a)pyrene, ideno(a)pyrene)
 PCBs Polychlorinated biphenyls (e.g., Aroclor)
 pesticides (e.g., chlordane, DDT, DDE, DDD, Aldrin)
 RAD Radionuclides
 SVOCs semi-volatile organic compounds (e.g. dioxins, carbazol, PCP)
 TBD To be determined
 UXO Unexploded ordnance

* CERCLA Site 18 has been reconfigured and each section of storm sewer will be evaluated with the associated IR site.