

# Appendix E: Community Health

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## CHECKLIST APPROACH

The West Oakland Specific Plan includes a 'Checklist' approach to identifying the potential health issues or impacts associated with the Plan.

As an alternative, a comprehensive 'Health Impact Assessment' (HIA) would typically include:

- comprehensive consideration of all potential health effects, including positive and negative effects,
- participation and oversight by multiple stakeholders or community members in partnership with public institutions,
- integration within existing regulatory and non-regulatory assessment processes, and
- collection and analysis of new data using multiple quantitative and qualitative methods.

Within the timeframe and budgetary constraints of this Plan, there are simply not the resources available to conduct such a comprehensive HIA.

The checklist approach is a streamlined process that supports the identification of potential health issues or impacts associated with the Specific Plan through a screening process; and provides a preliminary assessment as to whether the Specific Plan is supportive and beneficial, silent, or potentially detrimental to certain community health indicators.

This Community Health Checklist provides an overview of the prospective health impacts associated with policies and strategy recommendations included in the Specific Plan, particularly as they relate to the following selected community health indicators:

- air quality and diesel particulate matter exposure
- exposure to toxic chemicals and hazardous materials

- access to healthy food
- access to parks and recreation, and
- exposure to excessive noise

These health indicators have been chosen from among a broad spectrum of such indicators because they are the most directly affected and influenced by land use decisions recommended in the Specific Plan.

The Community Health Checklist includes a brief overview of current conditions in West Oakland relative to each of these community health indicators, and identifies the health-related concerns associated with each indicator. It also includes a list of those Specific Plan policies and strategies that directly address or affect each of these indicators, providing an explanation as to the level of benefit to community health of each these policies and strategies. Finally, this Checklist includes (in certain cases) suggestions and recommendations for further, future efforts by the City and others that may better address important community health concerns but that are beyond the scope and feasibility of this Specific Plan.

The community health indicators addressed in this Checklist are not a complete and comprehensive list. Additional discussion of other community health indicators can be found in the following chapters and sections of this Specific Plan:

- Illegal dumping and blight – see Chapter 7.1
- Crime and safety – see Chapter 7.2
- Land use conflicts and proximity of residential and industrial land uses – see Chapter 4.1
- Bike-able and pedestrian streets – see Chapter 5.1
- Mobility and access to transit – see Chapter 5.2
- Community stability and vulnerability to housing displacement – see Chapter 10.1

- Access to new jobs and equity in job opportunities– see Chapter 10.2

Furthermore, there are many community health indicators that are critical and vital to overall community health in West Oakland, but that are not directly addressed in the Specific Plan. Although the Specific Plan attempts to be comprehensive and multi-faceted, there are numerous issues and relevant community concerns that cannot be addressed within the limits of this Plan. Some of the larger, important community health indicators which require and deserve a different forum other than this Specific Plan for community-wide discussion include:

- Greater access to health care
- Access to quality educational opportunities
- Voting power
- Youth engagement and empowerment
- Homelessness and joblessness, and
- Poverty

Finally, the Health Impact Assessment prepared in 2010 for the Port of Oakland provides a comprehensive assessment of the health of the West Oakland community associated with growth at the Port of Oakland.<sup>1</sup> That HIA provides a link between the issues of air quality, traffic, noise, hazardous waste and land use, and presents numerous mitigation measures that are intended to comprehensively address these inter-related issues. While this Specific Plan has neither the jurisdictional reach nor the authority to establish policies or regulations pertaining to the Port of Oakland or to the former Oakland Army Base, this Plan does support and echo those measures recommended in the 2010 Port of Oakland HIA, particularly given the health disparities indicated within the West Oakland population.

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<sup>1</sup> UC Berkeley Health Impact Group, “Health Impact Assessment of the Port of Oakland”, University of California, Berkeley, CA, March 2010

## AIR QUALITY AND DIESEL PARTICULATE MATTER EXPOSURE

This section of the Community Health Checklist provides some important background information and context about air quality and the adverse community health implications that poor air quality has in West Oakland. Specifically, the Checklist addresses the following three questions pertaining to the Specific Plan’s response to air quality concerns:

1. Does this Specific Plan include policies, strategies or other efforts to reduce the amount of diesel particulate matter and other toxic air contaminants that are emitted in and around West Oakland?
2. Does this Specific Plan include policies, strategies or other efforts to ensure that new development adequately protects future residents from the harmful effects of poor air quality?, and
3. Does this Specific Plan include policies, strategies or other efforts that can make a direct positive contribution to the health of existing residents and employees who are already adversely affected by poor air quality?

### *Ambient Air Quality Conditions*

As referenced in previous sections of the Plan, air quality in West Oakland is adversely affected by a number of contributing sources, including industrial uses and a large array of mobile sources. The mobile sources include the three interstate freeways (I-580, I-880 and I-980), the Port of Oakland, two rail yards and rail tracks, numerous trucking-based distribution centers and a host of truck-related businesses.<sup>2</sup>

Diesel engines from these mobile sources emit a complex mixture of air pollutants commonly known as soot, which includes Diesel Particulate

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<sup>2</sup> Pacific Institute (Swati Prakash), Community Strategies for Sustainability & Justice, Ditching Dirty Diesel Collaborative, with the West Oakland Environmental Indicators Project, “Clearing the Air in West Oakland: Port Impacts, Freight Transport & Environmental Justice” 2004

Matter (DPM). In 1998, the California Air Resources Board (CARB) identified DPM as a Toxic Air Contaminant (TAC) based on its potential to cause cancer and other health problems. Health risks from DPM are highest in areas of concentrated emissions, and exposure to DPM is particularly hazardous to children and to the elderly. The health impacts of exposure to DPM include premature death and a number of heart and lung diseases including asthma.

West Oakland has been identified under the Bay Area Air Quality Management District's (BAAQMD) Community Air Risk Evaluation (CARE) Program as a community with particularly high ambient toxic air contaminant concentrations, as well as a high concentration of sensitive populations.<sup>3</sup> This study also found that, of the toxic air contaminants responsible for cumulative cancer risk, DPM accounts for about 80% of this risk.

Several additional studies conducted by state, regional and local government agencies, research institutions and community groups have identified the sources of West Oakland's toxic air contaminants and DPM emissions, and measured the concentrations of these emissions.<sup>4,5,6</sup> The results of these studies are generally similar in their conclusions.

#### *Associated Community Health Risks*

Many of these previous studies have also assessed the current health risks to West Oakland residents associated with known emission

sources - finding, among other conclusions, that West Oakland has one of the highest rates of asthma hospitalization in Alameda County.

#### *On-Going Efforts by Others to Address DPM-Related Health Risks*

In response to these and other similar studies conducted in areas near ports and freeways throughout the state, the California Air Resources Board (CARB), the BAAQMD and the Port of Oakland have each adopted policies and regulations intended to significantly reduce emissions from port operations and from on-road drayage (hauling or transport) trucks. Notably, these policies and regulations include:

- A current statewide ban on older model trucks (pre-1994) from entering ports and rail yards;
- Pending CARB regulations which require all ocean-going ships to use cleaner fuels;
- Current Port of Oakland requirements that newer model trucks (post-1994) be retrofit with diesel particle filters before being allowed to enter the Port (this regulation began in 2010, and eventually will require all trucks to be retrofitted with a diesel particulate filter or be replaced to meet higher engine emission standards); and
- On-going Port of Oakland actions to reduce diesel emissions through implementation of its Maritime Air Quality Improvement Program, a master plan of long-term air quality strategies, initiatives, programs and projects to achieve the Port's goal of reducing health risk related to seaport sources of diesel pollution.

Along with these regulations and programs, the CARB, BAAQMD, US EPA and the Port of Oakland have all funded grant programs for truck retrofits and replacements.

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<sup>3</sup> BAAQMD, CARE Program, as accessed at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CARE-Program.aspx>

<sup>4</sup> The Air Resources Board, in cooperation with the BAAQMD, the Port of Oakland and the Union Pacific Railroad, "West Oakland Health Risk Assessment", Final Report, December 2008

<sup>5</sup> Pacific Institute, West Oakland Environmental Indicators Project, Sonoma Technologies, Inc., and Wiltec, "West Oakland Diesel Emission Inventory and Air Quality Monitoring Study", 2009

<sup>6</sup> Desert Research Institute, Division of Atmospheric Sciences of the Nevada System of Higher Education, "West Oakland Monitoring Study, Draft Report", October 7, 2010

### Initial Results

According to a recent UC Berkeley study<sup>7</sup>, since the emission control programs for trucks entering the Port of Oakland took effect in early 2010, black smoke emissions from diesel trucks have been reduced by about half, and nitrogen oxide (NOx) emissions have dropped by 40%. The direct improvements to the health of West Oakland's residents have yet to be modeled, but CARB expects reduction in DPM emissions and commensurate reductions in resulting average health risk of between 75% and 80% by year 2020.

Despite these seemingly encouraging initial results, the current health risk to West Oakland residents from DPM emissions remains high. Continued efforts to monitor and better address toxic air contaminants of all types, but in particular DPM, remains crucial for to the health of existing and future West Oakland residents.

### DPM and other TAC Emission Reductions

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**Q Air-1: Does the Specific Plan seek to reduce emissions of toxic air contaminants (particularly DPM) that adversely affect the health of existing and future West Oakland residents?**

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- Beneficial
- Silent
- Detrimental
- Other – More direct action needed

### Specific Plan Policies and Strategies

#### Truck Traffic

One of this Specific Plan's most direct objectives for addressing air quality concerns throughout

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<sup>7</sup> Environmental Science and Technology, "Effects of Diesel Particle Filter Retrofits and Accelerated Fleet Turnover on Drayage Truck Emissions at the Port of Oakland", Robert A. Harley et.al., 2011. Accessed at: <http://its.berkeley.edu/sites/default/files/Dallmann%20port%20trucks%20EST%202011-1.pdf>

West Oakland is found in the Transportation and Complete Streets Strategies (found in Chapter 8: Supporting the Plan). This objective is specifically intended to reduce the adverse effects of freight-related truck traffic (including the emission of DPM) impacting West Oakland's residential neighborhoods. Plan policies (in parenthesis) pursuant to this objective include:

- maintaining those truck routes necessary to serve Port of Oakland activities, but prohibiting additional encroachment of truck routes into West Oakland neighborhoods (Truck Traffic-1);
- relocating truck parking and services from West Oakland neighborhoods to a consolidated site or sites in the Port/Oakland Army Base area (Truck Traffic-2);
- implementing a traffic calming program in residential neighborhoods that could include vehicle lane reductions, speed humps, neighborhood traffic circles, pedestrian crossing improvements, etc., to discourage truck traffic from entering the neighborhoods (Truck Traffic-3);
- enhancing truck route enforcement and education to keep trucks off of neighborhood streets (Truck Traffic-4); and
- continuing, expanding and improving the Port's Diesel Truck Replacement Program (Truck Traffic-5), including:
  - encouraging Port operations to provide sufficient staff and funding to enable more replacement and retrofit of diesel trucks,
  - including community and industry input on the program design and ongoing implementation, and
  - collaborating with the Port of Oakland's research efforts on the independent trucker market to more effectively target and attract drivers/owners that operate cleaner burning rigs.

#### Stationary Sources

Another of this Specific Plan's objectives for addressing air quality concerns in West Oakland is found in the Commercial/Industrial Land Use Strategies (found in Chapters 4.1 and 4.8. This objective is specifically intended to attract new

businesses and different business market sectors to West Oakland and to ensure that such new development projects contribute to the economic and environmental health of the West Oakland community. Plan policies (in parenthesis) pursuant to this objective include:

- discouraging removal of existing structures for surface parking for cars or trucks, or for storage of shipping containers (Business Enhance-6); and
- further restricting the expansion or introduction of new freight/truck terminals, truck yards and primary waste collection centers (Business Enhance-7 and Low Intensity Bus -5).

Implementing these strategies would have the effect of reducing truck traffic on local roads that is inherent with these land uses, thereby reducing emissions of DPM within the interior of the West Oakland community.

- Commensurate with the objective of attracting new businesses and different business market sectors is the need to identify relocation options for existing heavier industrial (and potentially higher pollutant emitting) land uses. The relocation of I-880 to the western edge of the district has created a potential new boundary between heavier industrial and truck-intensive uses, and lighter industrial business and residential uses. Strategies pursuant to this objective include:
  - capitalizing on the expected relocation of existing recycling facilities to the former Oakland Army Base, and redeveloping these properties with new, higher-intensity commercial business and light industrial uses (M/WG 1C-2); and
  - seeking to identify new location options for those heavier industrial and truck intensive businesses that contribute to the economy, provide jobs, and support nearby Port operations, but that are now more suitable to the west of the freeway and in other parts of Oakland.

#### *Reductions in Vehicle Miles Travelled*

West Oakland is also adversely affected by emissions from standard vehicles and light-duty

trucks traveling on local roads and the surrounding freeway system. Emissions from these vehicles include:

- reactive organic gases (ROG) - an ozone precursor that contributes to respiratory irritation, susceptibility to respiratory infections and reduced lung function,
- nitrogen oxides including nitrogen dioxide (NO<sub>2</sub>) - a primary component of smog which acts as a respiratory irritant, decreasing lung function and may reduce resistance to infection
- particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) – including small and very small particulates that may transport carcinogens and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

The Specific Plan's objectives for addressing air quality concerns from vehicle emissions in West Oakland are found in the Plan's transit strategies (included in Chapter 8: Supporting the Plan). These transit strategies are intended to foster greater use and reliance on transit as an alternative to the private automobile. This Specific Plan additionally identifies funding sources that are able to enhance existing transit service and to develop a new, high quality West Oakland transit system for all residents, employees and visitors traveling to, from and within West Oakland. Specific strategies include:

- improving West Oakland BART station access and public safety (Existing Transit Enhance-3);
- studying the potential for expanded shuttle/transit service in West Oakland, similar to the Emery-Go-Round in Emeryville (Existing Transit Enhance-4); and
- working toward development of an enhanced transit system providing fast, frequent, safe and reliable transit service in pleasant and aesthetically pleasing vehicles and facilities, including:
  - a network of circular routes seamlessly interconnecting West Oakland to nearby neighborhoods, job destinations, and to other city and regional transit systems (Enhanced Local Transit-2), and

- one or more of the many potentially appropriate transit modes, including but not limited to local buses, rapid buses, express buses, streetcars, light rail, and additional modes (Enhanced Local Transit-4).
- The Specific Plan also strongly advocates for, and includes a step-by-step process to identify potential funding sources for enhanced transit service within West Oakland (Enhanced Local Transit-5).

Through implementation of these strategies, future growth within West Oakland would occur under policies encouraging greater use of transit, alternative transportation modes and sustainable development patterns which reduce transportation demand.

#### *City of Oakland Standard Conditions of Approval*

The following City of Oakland development standard, also known as Standard Conditions of Approval (SCAs), currently applies to all development projects in throughout the city and will continue to apply to any projects resulting from the Specific Plan.

#### *SCA #24: Parking and Traffic Management Plan*

The City of Oakland Standard Condition of Approval No. 24 (SCA #24) requires that projects which include 50 or more new residential units or 50,000 square feet or more of new non-residential space prepare and implement a Transportation Demand Management Plan capable of reducing single-occupant vehicle use at the site through a variety of strategies, including enhancement and promotion of transit and other alternative modes of travel.

Implementation of this Standard Condition of Approval for development projects throughout West Oakland would reduce criteria air pollutants and ozone precursor emissions, and their associated adverse health effects.

#### *BAAQMD Stationary Source Controls*

As a regulatory matter, all new development pursuant to the Specific Plan, including new industrial and commercial uses (such as manufacturing facilities, refineries, dry cleaners, auto body shops, gas stations, etc.), will be

required to comply with all measures that the BAAQMD adopts and enforces to control emissions from stationary sources. These stationary source measures will provide for reductions in emissions of ozone precursors, particulate matter, air toxics and greenhouse gases.

#### *Recommendations for Further Action*

This Specific Plan includes numerous policies, strategies and development requirements that will effectively help reduce DPM and other toxic air contaminant emissions that are adversely affecting the health of West Oakland residents. Other state-wide and regional rules have already begun to reduce cancer and non-cancer health risks in West Oakland, and will continue to reduce risks in the future.

However, this Specific Plan does not, and was not intended to provide a comprehensive, multi-faceted and focused plan specifically targeted to the issue of reducing health risks to West Oakland residents associated with poor air quality. Achievement of such a goal requires a much more detailed and targeted effort involving multiple organizations and agencies, and is beyond the scope of this Plan.

#### *Clean Air Communities Initiative*

The BAAQMD has developed a framework for comprehensive air quality and health risk reduction planning, known as the Clean Air Communities Initiative.<sup>8</sup> The objective of this Initiative is to focus efforts on health risk reduction within impacted communities such as West Oakland. The Clean Air Communities Initiative provides a framework within which the District, CARB, local governments and other agencies, as well as affected community members can work together toward the goal of reducing poor air quality and associated health risks. This Initiative provides opportunities for the City of Oakland and West Oakland organizations and residents to participate and more fully

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<sup>8</sup> accessed at:  
<http://www.baaqmd.gov/Divisions/Planning-and-Research/CARE-Program.aspx>

address the health risks associated with DPM and toxic air contaminants.

Based on the stated efforts of this Initiative, the following strategies are recommended as further actions taken to address West Oakland health concerns related to air quality emissions.

Clean Air Initiative-1: The City and stakeholders should continue to assist in scientific research efforts and provide feedback on how best to address and reduce Toxic Air Contaminant (TAC) emissions.

Clean Air Initiative-2: The City and stakeholders should seek all available grants and incentives aimed at achieving emission reductions and improving West Oakland's air quality. Sample funding programs include:

- The BAAQMD's Community Grant Fund, which provides financial assistance for efforts to actively engage and inform the community on ways of reducing air pollution and improving their health.
- Mobile grant programs such as the Carl Moyer Program, I-Bond/Goods Movement Bond, TFCA Regional Fund, and TFCA County Program Managers Funds, which are focused on entities that operate in priority communities (such as West Oakland) to replace and retrofit heavy duty diesel engines with cleaner burning engines.
- Climate Protection Grants, which are available to local governments and non-profits for implementation of innovative projects to reduce greenhouse gas emissions.

Clean Air Initiative-3: Collaborate with BAAQMD in development of new rules and regulations that require reduction of TAC emissions from significant sources.

Clean Air Initiative-4: Consider developing a West Oakland-specific Community Risk Reduction Plan (CRRP) as a proactive approach to achieve the greatest reductions in emissions and exposure to Toxic Air Contaminants (TACs) and particulates. The Air District has indicated their commitment to assist local jurisdictions that chose to develop CRRPs by

providing technical expertise in developing emission inventories, modeling assistance, and monitoring.

Clean Air Initiative-5: Partner with BAAQMD, CARB, the US EPA and the County Health Department to help:

- develop additional information on the sources and emissions of TACs in West Oakland,
- ensure with existing regulations and permit conditions, and help develop new enforcement agreements for CARB diesel regulations,
- monitor TAC concentrations at special-study sites, and
- assess the effectiveness of on-going programs and regulations in achieving reductions in TAC concentrations and overall cancer risk levels.

### Introduction of New Sensitive Receptors

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**Q Air-2: Does the Specific Plan introduce new sensitive receptors into areas where poor air quality is highly concentrated? Does the Specific Plan include measures that seek to mitigate this effect?**

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- Beneficial
- Silent
- Detrimental
- Other – Mitigation Measures Included

### *Proposed Urban Infill and TOD*

Urban infill and Transit-Oriented Developments (TODs) seek to create compact, mixed-use, pedestrian-friendly communities in already urbanized areas. These strategies are encouraged by State legislation and are specifically recommended in this Plan as a means of aligning land use, housing, and transportation planning priorities. On a broad scale, urban infill and TODs aim to reverse the trend of sprawling regional development by encouraging the use of available urban land and public transportation. Within West Oakland, the Specific Plan advocates

for focused urban infill development, and especially for TOD at the West Oakland BART station. The West Oakland BART station TOD is intended as a mixed use, compact development that includes new residential and commercial space in tall, high-density buildings located in close proximity to the I-880 freeway and subject to emissions of freight-related DPM emissions and other vehicle emissions. These emissions have the potential to subject future residents to increased health risks.

Similarly, infill mixed-use development is proposed along the 7th Street corridor, at the former Phoenix Iron Works Site (along Wood Street between 8th Street and 9th Street), at the Roadway Site (between 17th and 18th Streets and between Wood Street and Campbell Street) and at the 12th and Mandela Site. Each of these sites is subject to emissions from the I-880 freeway and/or stationary sources of pollutants that have the potential to increase risk of contracting cancer and/or other health concerns.

#### *Specific Plan Policies and Strategies*

The Specific Plan's approach for addressing air quality and other environmental concerns at the West Oakland BART Station TOD and other urban infill sites near freeways is found in Chapter 4.4 of the Plan. This approach requires new development of all sensitive receptor uses at the West Oakland BART Station TOD and other sites exposed to toxic air contaminants to mitigate anticipated health risks and air quality hazards through implementation of Best Management Practices (BMPs) for air quality, including but not limited to:

- Installing and maintaining air filtration units to achieve BAAQMD effectiveness performance standards for removing PM<sub>2.5</sub> from indoor air. The system effectiveness requirement will be determined during final design when the exact level of exposure is known, based on proximity to emission sources;
- prohibiting sensitive receptor uses on the first floor of buildings (diesel exhaust emissions generally decrease with elevation); and
- locating operable windows, balconies and the air intake for air ventilation system as far away

as possible from high volume roadways or other stationary sources of TAC pollution (7th Street TOD Env.-4).

#### *City of Oakland Standard Conditions of Approval*

The following City of Oakland development standards, also known as Standard Conditions of Approval (SCAs), currently apply to all development projects in throughout the city and will continue to apply to any projects resulting from the Specific Plan.

#### *SCA B: DPM Exposure*

The City of Oakland Supplemental Standard Condition of Approval B (SCA B) applies to all residential uses (new dwelling units) or new or expanded schools, daycare centers, parks, nursing homes, or medical facilities at sites which exceed the health risk screening criteria and that are located within 1,000 feet of a freeway; a roadway with significant traffic (at least 10,000 vehicles/day); a rail line (except BART) with over 30 trains per day; a distribution center that accommodates more than 100 trucks per day, more than 40 trucks with operating refrigeration units (TRU) per day, or where the TRU unit operations exceed 300 hours per week; a major service and maintenance rail or truck yard; or the Port of Oakland.

This SCA requires that appropriate measures be incorporated into the project design in order to reduce the potential health risk due to exposure to diesel particulate matter to achieve an acceptable interior air quality level for sensitive receptors, including:

- Redesign the site layout to locate sensitive receptors as far as possible from any freeways, major roadways, or other sources of air pollution (e.g., loading docks, parking lots).
- Do not locate sensitive receptors near distribution center's entry and exit points.
- Incorporate tiered plantings of trees (redwood, deodar cedar, live oak, and/or oleander) to the maximum extent feasible between the sources of pollution and the sensitive receptors.
- Install, operate and maintain in good working order a central heating and ventilation (HV) system or other air take system in the

building, or in each individual residential unit, that meets or exceeds the current efficiency standard.

- Install indoor air quality monitoring units in buildings.
- To the maximum extent practicable, individual and common exterior open space areas including playgrounds, patios, and decks shall either be shielded from the source of air pollution by buildings or otherwise buffered to further reduce air pollution for project occupants.

#### *SCA C: Toxic Air Contaminants*

The City of Oakland Supplemental Standard Condition of Approval C (SCA C) applies to all residential uses (new dwelling units) or new or expanded schools, daycare centers, parks, nursing homes, or medical facilities at sites which exceed health risk screening criteria; and where the project is located within 1,000 feet of an electroplating or chrome plating facility; a dry cleaner using perchloroethylene; an auto body shop, or other source of gaseous TAC requiring a permit from the BAAQMD.

This SCA requires that appropriate measures be incorporated into the project design in order to reduce potential risk due to exposure to toxic air contaminants to achieve an acceptable interior air quality level for sensitive receptors. It also requires that, to the maximum extent practicable, individual and common exterior open space including playgrounds, patios, and decks shall either be shielded from the source of air pollution by buildings or otherwise buffered to further reduce air pollution for project occupants.

#### *Other Recommendations*

This Specific Plan includes policies, strategies and development requirements that will effectively reduce the risk of exposure of new sensitive receptors to DPM and toxic air contaminants.

### **Air Quality Mitigation**

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#### **Q Air-3: Does the Specific Plan include strategies that can mitigate the adverse health effects of existing on- and off-site sources of toxic air contamination?**

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- Beneficial
- Silent
- Detrimental
- Other – Partial Benefits

#### *Specific Plan Policies and Strategies*

##### *Urban Forests*

The Specific Plan includes several strategies for increasing the amount of trees and other landscaping that can positively affect community health and the aesthetics of West Oakland's neighborhoods. These strategies include:

- Providing policy support and implementation recommendations for the West Oakland Reforestation Plan.<sup>9</sup> This Reforestation Plan provides mechanisms for developing a thriving sustainable urban forest encompassing West Oakland's streets, parks, other publicly owned facilities and private properties. Expanding West Oakland's urban forest can help improve air quality by reducing air temperature, by directly removing pollutants from the air, and by reducing energy consumption in buildings;
- Seeking to incorporate innovative "green infrastructure" standards into City development policy, consistent with those standards recommended under the *Adapt*

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<sup>9</sup> The West Oakland Reforestation Plan has been prepared for the City of Oakland by PGA Design with H.T. Harvey Associates under contract to the West Oakland Green Initiative (WOGI), a private nonprofit tree advocacy organization representing West Oakland residents and businesspeople, in partnership with other tree advocacy organizations, the City of Oakland, the Port of Oakland and the California Department of Forestry and Fire Protection

*Oakland* project.<sup>10</sup> The Adapt Oakland project seeks new opportunities to provide for ecological designs and planning strategies that better integrate West Oakland with the redevelopment plans for the former Oakland Army Base. *Adapt Oakland* is specifically focused on the freeway area between the Port and West Oakland and explores the potential for creating a dense urban forest at the edge of the industrial zone. The goals of the *Adapt Oakland* project are to utilize this urban forest to inhibit the movement of polluted air, mitigate contamination, reduce dust, fumes and noise, and to provide an aesthetically pleasing edge along the neighborhood;

- Requiring that new, larger-scale private development projects incorporate urban open space into the fabric of West Oakland. The open space elements of new development projects should be predominantly outdoors and inviting to the public, and promote physical, social, and economic health of the larger community (see Chapter 9 of the Plan; and
- Recommending that portions of the former AMCO Chemical/DC Metals site near the West Oakland BART station should be considered for permanent use as an open space buffer adjacent to the South Prescott neighborhood. This buffer could include a bamboo forest that could facilitate groundwater cleanup, provide a cap for known lead present within the soil, help reduce air pollution from nearby I-880 freeway traffic, and provide an aesthetic screen around the site (see Chapters 7.3 and 9).

### **Other Recommendations for Further Consideration**

Data collected by others has shown that the total West Oakland DPM exposure risk is derived from emissions from Port seaport operations, Union Pacific railyard sources, heavy-duty trucks on the roadway within West Oakland and on the

freeways surrounding West Oakland and from stationary sources located within West Oakland. This Specific Plan includes policy recommendations and strategies to positively affect emission sources from within West Oakland (i.e., vehicle emissions on local roadways and stationary sources). The urban forest strategies of this Plan are measures that can be implemented within West Oakland to have a direct positive effect on these off-site sources. However, this Plan has neither the jurisdictional reach nor the authority to establish policies or regulations pertaining to locations and emission sources outside of West Oakland.

Separate on-going planning programs are in the process of being implemented at the Port of Oakland and at the former Oakland Army Base. These other programs and their environmental review documents establish the rules under which emissions of toxic air contaminants that affect West Oakland are regulated. This Plan does not recommend the establishment of new regulations that would be applicable to sources of toxic air contaminants outside of West Oakland. Further efforts to reduce the total emissions from these off-site sources will have positive implications in the future, as cleaner burning fuels and emission controls take effect. As better information on the sources and emissions of toxic air contaminants in West Oakland is developed, and the effectiveness of on-going programs and regulations in achieving reductions in TAC concentrations are assessed, further strategies for addressing community health risks – particularly at highly impacted locations – may be evaluated. Such strategies may become integral components of a Community Risk Reduction Plan (CRRP) that is specific to West Oakland.

Proactive approaches to achieving the greatest reductions in exposure of West Oakland residents to toxic air contaminants could potentially include:

- Retro-fitting existing homes in sensitive receptor locations with new air filters (i.e., HEPA filters, electrostatic air filters and electronic air cleaners);
- Further restricting truck traffic on certain sensitive routes; and

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<sup>10</sup> Adapt Oakland is a separate planning effort being conducted by the firm Urban Biofilter, under an Urban Greening Planning Grant from the State Office of Planning and the Strategic Growth Council.

- For Transit-Oriented Development (TOD), further restricting truck parking (i.e. establishing a “buffer zone” between truck parking and housing).

## EXPOSURE TO TOXIC CHEMICALS AND HAZARDOUS MATERIALS

This section of the Community Health Checklist provides important background information and context about soil and groundwater contamination and the adverse community health implications that exposure to such contaminants may have in West Oakland. Specifically, this section of the Checklist addresses the following questions:

1. Does this Specific Plan include policies, strategies or other efforts to reduce the extent of known toxic sites within West Oakland?
2. Does this Specific Plan include policies or strategies intended to minimize the risk of exposure to on-going uses of hazardous materials?
3. Does this Specific Plan include policies or strategies that seek to resolve the health risks to the surrounding community posed by previous contamination at the AMCO Chemicals/DC Metals site?
4. Does this Specific Plan (or other City requirements) reduce the health risks associated with exposure to hazardous building materials?

### *The Current Status of Toxic Sites in West Oakland*

Contaminated or hazardous sites within West Oakland include older land uses which involved the use of hazardous materials, older buildings which were constructed with materials now identified as being hazardous (i.e., asbestos, lead-based paint, etc.), as well as current uses that include the handling of hazardous materials that have at times resulted in leakage into the ground, including leaking underground storage tanks. According to current database lists, the majority of such sites are attributed to leaking underground storage tanks, most of which contain or used to contain motor oil, gasoline or other similar petroleum products. However, there are also a number of reported cases of more complex and hazardous incidents where

toxic chemicals have been spilled or otherwise released into the soils and groundwater, resulting in potential health and safety concerns for residents and employees of the area.

As presented in Chapter 7.3 of this Specific Plan, there are as many as 235 reported cases of environmental contamination that have occurred within West Oakland's Opportunity areas. However, more than half (138 cases) have been closed by the respective oversight agencies.

- Within the Mandela/West Grand Opportunity Area, there are a total of 123 reported environmental cases. Of that total, there are 54 sites that currently remain open or unresolved, indicating that 69 sites (or nearly 60% of all reported environmental cases within this Opportunity Area) have been remediated and closed in a manner that meets regulatory agency standards for the protection of environmental health and safety.
- Within the 7th Street Opportunity Area, there are a total of 52 reported environmental cases. Of that total, there are 18 sites that currently remain open or unresolved, indicating that 34 sites (or nearly 65% of all reported environmental cases within this Opportunity Area) have been remediated and closed.
- Within the 3rd Street Opportunity Area, there are 31 reported environmental cases. Of that total, there are 12 sites that currently remain open or unresolved, indicating that 19 sites (or over 60% of all reported environmental cases within this Opportunity Area) have been remediated and closed.
- Within the San Pablo Avenue Opportunity area, there are 29 reported environmental cases. Of that total, there are 13 sites that currently remain open or unresolved, indicating that 16 sites (or over 55% of all reported environmental cases within this Opportunity Area) have been remediated and closed.

As a result of new development that has occurred on previously contaminated sites, together with regulatory agency intervention and the advocacy and activism of many West Oakland community members, well over one-half

of the known contaminated sites that once existed in West Oakland have now been "closed" (i.e., remediation or clean-up has been completed to appropriate standards and approved by the regulatory agency). However, on-going efforts still are needed to continue the clean-up of hazardous materials spills and contamination.

### *Associated Community Health Risks*

From an economic development perspective, soil and/or groundwater contamination poses a constraint to redevelopment of affected properties. Federal, state and local regulations prohibit activities such as grading or new development prior to cleanup or remediation at sites where contamination may present hazards to human health or the environment.

More specific to the issues of community health, emergency incidents involving hazardous materials can threaten human life, damage property, contaminate the environment, and even require the evacuation of nearby populations. Residents neighboring contaminated sites contend with health problems associated with significant levels of exposure to environmental contamination. These health problems can range from breathing problems or other types of allergic reactions, to more serious effects such as cancer, long-term nerve damage, or even death.<sup>11</sup>

Potential hazards include accidental releases of toxic substances, industrial fires and explosion of petroleum products and other chemicals.

### *Hazardous Building Materials*

In addition to sites with prior environmental contamination, many older buildings within West Oakland have been constructed with building materials now considered to be hazardous, including asbestos, lead-based paint and polychlorinated biphenyls (PCBs).

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<sup>11</sup> West Oakland Environmental Indicators Project, "Neighborhood Knowledge for Change", January 2002

## Brownfield Remediation

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### Q Toxics-1: Does this Specific Plan include policies, strategies or other efforts to reduce the extent of known toxic sites within West Oakland?

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- Beneficial
- Silent
- Detrimental
- Other

Chapter 7.3 of this Plan is dedicated to the topic of contaminated sites (or “brownfields”). Although Chapter 7.3 focuses on contaminated sites as representing a barrier to economic development, the community health implications of these sites is also well identified. Consistent with this Plan’s intent to facilitate new development, those strategies indicated in this Plan to help redevelop brownfield sites is also effective in reducing the health risks to adjacent neighborhoods associated with contaminated properties.

#### *Specific Plan Policies and Strategies*

##### *Funding Strategies*

As suggested in Chapter 7.3 of the Plan, the investigation and clean-up of contaminated sites in West Oakland is an issue that can be almost fully addressed with additional funding. While government grants and loans may provide needed stimulus, the catalytic land use changes envisioned under this Plan are intended to increase the economic likelihood that property owners and developers will invest private money into efforts needed to redevelop brownfield sites. Objectives and strategies that are included in this Plan (in parenthesis) that seek to further the economics of brownfield development include:

- Seeking the means by which to facilitate private brownfield investments and to use new private development projects as a means to achieve remediation of remaining open environmental cases, and effectively partnering with public and private initiatives which seek to clean up sites that have been previously contaminated and where

remediation efforts may be stalled or not yet initiated (Brownfield Investment-1 through 3);

- Continuing to pursue all available federal and state brownfield grants, loans and other funding sources to help off-set the costs of site characterization and clean-up efforts, and to support related job training activities (Brownfield Grants and Loans-1 through 3).

##### *Addressing Legal Liabilities and Delay*

Once the economics of private brownfield remediation “pencil out”, additional steps are needed to overcome the obstacles associated with legal liability exposure and the perception of excessive time associated with regulatory reviews and approvals. Policies included in this Plan (in parenthesis) that the City can take to advocate, promote and motivate private investors to take advantage of funding programs include:

- Utilizing the tools and powers of AB 440 to actively compel those responsible parties to clean-up contaminated sites (AB 440-1);
- Taking all legal and appropriate steps to reduce CEQA-related delays without increasing the risks to the public or the environment and without reducing public disclosure and transparency (Facilitate CEQA-1 through -3);
  - Reducing and minimizing the public’s exposure to contamination by:
  - Retaining commercial and/or industrial land use designations on those sites which have been remediated, but only to commercial/industrial standards, and limiting the exposure of sensitive land uses by restricting or limiting new residential development at those sites known to have been previously environmentally contaminated (Reduce Exposure-1),
- Identifying additional steps that may be necessary to further investigate and remediate sites proposed for more sensitive uses ( Reduce Exposure-2),
- Recognizing that certain sites carry deed restrictions which prevent development of more sensitive (e.g., residential) land uses,

and restricting development of more sensitive (e.g., residential) land uses on those sites which carry deed restrictions prohibiting such uses. If sensitive uses are proposed on such sites, additional remediation requirements will be required (Reduce Exposure-3), and

- Acknowledging the longer-term development phasing requirements associated with certain sites that have lengthy site characterization and remediation programs (Reduce Exposure-4).

In almost all instances, continued economic investment in the conversion of remaining brownfield sites to new, economically productive land uses can remove both the real and the perceived environmental and community health concerns associated with these sites.

### Industrial/Residential Interface

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#### Q Toxics-2: Does this Specific Plan include policies or strategies intended to minimize the risk of exposure to on-going uses of hazardous materials?

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- Beneficial
- Silent
- Detrimental
- Other

#### *Specific Plan Policies and Strategies*

An important objective of this Specific Plan is to retain those industrial and business uses that are important contributors to the West Oakland economy, while addressing the sensitive relationship between these uses and adjacent neighborhoods. Strategies included in the Plan to address the interface between industrial and residential land uses include:

- Encouraging the relocation of those types of land uses which are known to generate toxic hazard concerns (i.e., waste recycling operations, heavy truck-dependent uses, and large quantity generators of hazardous materials) to alternative locations outside of

and distant from residential neighborhoods (Ind./Res. Interface-1);

- Ensuring that new industrial and commercial development which may use or generate hazardous materials provides appropriate buffers between adjacent sensitive uses. The City should retain and rigorously enforce the current S-19 Health and Safety Protection Combining Zone regulations. Among other requirements, these regulations:
  - prohibit certain activities (such as manufacturing, storing or use of explosives, electroplating; hazardous waste management, industrial/transfer storage, and residuals repositories); and
  - preclude the storage or use of hazardous materials and waste within 300 feet of a residential, institutional or open space zoning district without written approval or consent of the Fire Department (Ind. /Res. Interface-2);
- Continuing to implement those regulatory mechanisms which seek to minimize the potential for spills and contamination of soils and groundwater. Under these regulations any new use which handles or generates hazardous materials must submit a Hazardous Materials Business Plan for review and approval (Ind. /Res. Interface-3).

### AMCO Chemicals/DC Metals Site

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#### Q Toxics-3: Does this Specific Plan include policies or strategies that seek to resolve the health risks to the surrounding community posed by previous contamination at the AMCO Chemicals/DC Metals site?

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- Beneficial
- Silent
- Detrimental
- Other

#### *Specific Plan Policies and Strategies*

Within the 7th Street Opportunity Area and approximately one block south of the West Oakland BART Station is the former AMCO

Chemical facility located at 1414 3rd Street. This property has a long history of documented contamination, is listed on the National Priorities List (NPL) of federal Superfund sites, and is currently under site investigation and characterization efforts by the US EPA. Once these investigations are completed, the EPA will be identifying and selecting a Remediation Plan for the site.

Important planning considerations for this site which are addressed and incorporated into this Specific Plan include:

- Coordinating with the US EPA to ensure that remediation plans for this site anticipate and allow for adaptive redevelopment that can occur in as reasonable a time frame as possible.
  - The former AMCO property is located on a block that is planned as a transition zone between the West Oakland BART Station TOD and the core residential area of the South Prescott neighborhood.
  - Adaptive redevelopment should weigh costs and time frames for the variety and desirability of future land use options (AMCO Superfund Site-1);
- Recognizing that cleanup activities at the site may influence how this site may ultimately be developed.
  - Future development may need to accommodate land use restrictions as needed to ensure protection of human health.
  - Options may include restricting residential uses on the ground floor, while allowing upper story residential uses (AMCO Superfund Site-2);
- Acknowledging and accommodating long term clean-up actions which may require phased and/or limitations to development of the property.
  - Technical expertise should be applied to explore the potential benefits of a bamboo forest as an interim (or potentially permanent) use at the AMCO site. Such an interim use could facilitate groundwater cleanup, provide a cap for known lead present within the soil, help reduce air

pollution from nearby I-880 freeway traffic, and provide an aesthetic screen around the site while cleanup is ongoing.

- Consider commercial-only alternatives as a viable development scenario, rather than residential, due to cost of contamination remediation.
- Provide an appropriate land use buffer to ensure compatibility with the adjacent South Prescott neighborhood (AMCO Superfund Site-3).

### Hazardous Building Materials

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#### Q Toxics-4: Does this Specific Plan (or other City requirements) reduce the health risks associated with exposure to hazardous building materials?

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- Beneficial
- Silent
- Detrimental
- Other – Addressed in City of Oakland Condition on New Development

Existing older structures and sites within West Oakland may have asbestos-containing insulation, siding, finishes and other asbestos-containing building materials, and may contain lead based paint. Residual asbestos or lead-based paint can be inhaled or ingested, particularly during construction or demolition activities, posing a health risk to construction workers, future occupants and nearby residents.

#### *City of Oakland Standard Conditions of Approval*

All new development pursuant to the Plan will be managed in accordance with existing laws and regulations, including the following conditions of approval applicable to all new development within the City:

#### *SCA 63: Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment*

Prior to issuance of any demolition, grading or building permits, the project applicant is required to submit a comprehensive assessment report to the Fire Prevention Bureau, Hazardous

Materials Unit, signed by a qualified environmental professional, documenting the presence or lack of asbestos-containing materials (ACM), lead-based paint, and any other building materials or stored materials classified as hazardous waste by State or federal law.

#### *SCA 65: Lead-Based Paint Remediation*

If lead-based paint is present, project applicants are required to submit specifications for the stabilization and/or removal of identified lead paint in accordance with all applicable laws and regulations.

#### *SCA 67: Health and Safety Plan per Assessment*

If the required lead-based paint/coatings, asbestos, or PCB assessment finds presence of such materials, project applicants must create and implement a Health and Safety Plan to protect workers and others from risks associated with hazardous materials during demolition, renovation of affected structures, and transport and disposal.

#### *Other City Programs*

##### *Lead-Safe Housing and Paint Program*

The City of Oakland offers a free risk assessment for lead hazards along with free contracted painting services to qualified owner-occupied low and moderate income households. Eligible applicants for the program must be Oakland property owners living in the unit and, must meet other financial eligibility sensitive population requirements, and the property must be located within one of Oakland's Community Development Districts.

## **ACCESS TO HEALTHY FOOD**

As indicated earlier in the Plan, West Oakland is considered a "food desert" because there are few supermarkets or other retail outlets selling affordable, nutritious food. The lack of access to healthy, affordable food is a major contributor to higher levels of obesity and other diet-related diseases. This problem goes beyond health and limits West Oakland's economic development opportunities that arise from local grocery stores.

#### *Assessing the Market Potential*

The retail market study presented in Chapter 6 of this Specific Plan found that supermarket and food stores sales in West Oakland are about \$19.3 million less than the estimated expenditure potential of existing West Oakland residents. In contrast, liquor store sales are actually \$7.5 million more than the projected demand. This data indicates that liquor stores are over-represented and account for a large share of West Oakland's food sales, despite more than enough spending power to support a new grocery store by existing residents.

Furthermore, the potential increases in employment and residences expected under this Plan at build out are set to expand the West Oakland trade area by as many as 14,000 new residential consumers and by 5,000 new employees. When combined with the potential capture of current economic leakage, there will be enough additional spending potential at this Plan's buildout to support more than 100,000 square feet of retail space in the grocery store category.

#### *Associated Community Health Risks*

Studies show that residents with limited resources and/or limited access to healthy food are more susceptible to diet-sensitive chronic diseases such as obesity, hypertension, and diabetes, as well as increased doctor visits and hospitalizations.

These studies clearly show that many predominantly low-income, urban communities of color (such as West Oakland) lack adequate access to healthy food, and that the lack of access negatively impacts the health of residents

and neighborhoods. Studies of health concerns related to food deserts also find that:

- Produce quality is lower in low-income communities of color compared to more affluent or racially mixed neighborhoods;
- Nationally, low-income zip codes have 30% more convenience stores, which tend to lack healthy items, than middle-income zip codes;
- Residents with greater access to supermarkets or a greater abundance of healthy foods in neighborhood food stores consume more fresh produce and other healthful items;
- Residents who live near supermarkets or in areas where food markets selling fresh produce (supermarkets, grocery stores, farmers' markets, etc.) have lower rates of diet-related diseases than their counterparts in neighborhoods lacking food access.

### Grocery / Retail Space Allocation

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**Q Healthy Food-1: Does the Specific Plan promote and provide adequate locations for the establishment of new retail uses, especially grocery stores, within West Oakland?**

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- Beneficial
- Partial – More direct action needed
- Silent
- Detrimental

### Specific Plan Policies and Strategies

#### Total Retail Development Potential

This Specific Plan recognizes that existing retail uses in West Oakland do not fully meet the needs of residents. Within the West Oakland Opportunity Areas, there is a below-market supply of only approximately 27 acres of land accommodating about 445,000 square feet of neighborhood-serving (i.e., grocery, small professional services and retail services establishments, cafes and restaurants, etc.) retail space. In comparison, the Plan envisions a market-supportable increase to nearly 1 million square feet of retail space, providing for growth of approximately 1,200 new retail jobs.

Neighborhood-serving retail use is envisioned under this Plan within many new development sites. The transit-oriented development near the West Oakland BART Station and many infill parcels along 7th Street, and the commercial corridors along West Grand Avenue and San Pablo Avenue are all planned to accommodate new neighborhood-serving retail uses.

#### Specifically Identified Grocery Retail Spaces

Specific land use strategies pertaining to neighborhood-serving retail land uses, particularly grocery stores, include:

- Establishing West Oakland BART Station area as an active, 24-hour community. Uses that are specifically desired and which should be actively sought include grocery stores, restaurants, music venues, neighborhood-serving retail shops, food and beverage sales, and professional services. (7th Street TOD Non-Residential-2);
- Exploring the potential for a mixed use development on the northerly block of West Grand Avenue between Myrtle Street and Market Street, potentially anchored by a grocery store on West Grand Avenue at Myrtle Street (see Chapter 4.6; and
- Redeveloping the existing shopping center on the south side of West Grand Avenue is envisioned to make full use of the potential of this site, encouraging uses that provide services and goods particularly sought by West Oakland residents including banks, healthy foods and groceries, and specialty retail (West Grand/Market-1).

### Greater Access to Grocery Stores

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**Q Healthy Food-2: Does the Specific Plan include urban design strategies intended to provide greater access to grocery-based retail space from West Oakland's neighborhoods?**

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- Beneficial
- Silent
- Detrimental
- Other

### Specific Plan Policies and Strategies

An important objective of the Specific Plan is to use new development as a means to create better physical connections to and within residential neighborhoods.

- The Specific Plan encourages new commercial development, specifically grocery stores, to contribute to a cohesive neighborhood form rather than being developed as isolated ‘strip centers’ (Re-Knitting Neighborhoods-5);
- The Specific Plan identifies multiple sites for smaller grocery stores, notwithstanding the fact that traditional grocers are moving towards larger store sizes:
  - Grocery stores are seen as forming the core of a future, fully functioning neighborhood center for West Oakland.
  - Because of the large share of West Oakland grocery store sales currently diverted to liquor stores, corner stores and mini marts, new grocery stores have the potential to capture those sales as well, and support more space than may be indicated by the leakage analysis (Grocery-1).
- The Specific Plan recommends adding other important missing retail uses, including a drug store or other convenience use, most effectively co-located with a grocery store.
  - Since grocery stores act as anchors for other convenience store tenants, at least one new grocery store should be sited where other convenience service shops, including service retail shops, small specialty retail stores, and restaurants, can be successfully co-located (Neigh. Retail-3).

### Greater Availability of Healthy Food

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**Q Healthy Food-3: Does the Specific Plan include strategies specifically intended to increase the availability of healthy foods to West Oakland residents?**

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- Beneficial
- Silent

- Detrimental
- Partial – greater emphasis necessary over the longer term

### Specific Plan Policies and Strategies

The Specific Plan includes policies and strategies intended to increase access to healthy food that can improve people’s diet and can contribute to community economic development, including:

- seeking to attract and develop new grocery stores and supermarkets (as more fully discussed above);
- encouraging and promoting the development of other healthy food outlets such as farmers’ markets, public markets, cooperatives and community-supported agriculture programs such as the People’s Market and Mandela MarketPlace/Mandela Foods (see Chapter 8: Supporting the Plan); and
- supporting the growing of healthy food locally through community gardens and larger scale urban agriculture such as City Slicker Farms in West Oakland (see Chapter 9; and
- improving transit options throughout West Oakland, thereby increasing public access to all locations including food outlets, grocery stores and urban gardens [insert citation re: where this is covered in the Plan, similar to above].

### Other Recommendations for Further Consideration

Improving access to healthy food in West Oakland is a much broader public agenda than just the land use and economic development strategies that can be presented in this Specific Plan.

The following issues may be among the barriers to establishment of more healthy food outlets in West Oakland:

- Retailers may lack good information on the true purchasing power or demand for healthy food,
- Construction and operating costs (e.g., rent, real estate taxes, security costs) may be

higher in an urban area such as West Oakland than in suburban locations, and

- Traditional retailers and their banks/financing partners may be reluctant to invest in less affluent urban locations.

A number of funding and financing strategies can be pursued or furthered within West Oakland to overcome these barriers.

#### *Outside Funding Sources*

##### Federal Healthy Food Financing Initiative: In

2009, the federal government created the Healthy Food Financing Initiative to support fresh food retail in underserved communities. This inter-agency initiative involves the U.S. Department of the Treasury's Community Development Financial Institutions Fund, the U.S. Department of Agriculture, and the U.S. Department of Health and Human Services, and represents a coordinated federal effort to expand access to healthy, fresh food in underserved communities.

- Since the launch of this Initiative in 2011, nearly \$118 million has been awarded through grants and augmented loans and with tax credit financing for healthy food access projects across the country.
- In 2013, Mandela MarketPlace Inc. (in West Oakland) received a \$400,000 grant from this program.

##### California Healthy Food Financing Initiative

Council: The California Healthy Food Financing Initiative Council was established in 2011 as a public/private partnership program intended to increase access to healthy foods in underserved communities, and to inspire innovation in healthy food retailing. Funding for the Initiative includes federal, state, philanthropic, and private funds that finance grocery stores and other forms of healthy food retail and distribution by providing capital to eligible applicants.

#### *Alternative Grocery Store and Healthy Food Market Funding Strategies*

Direct Public Offerings are a form of fund raising that enables investments in local groceries to

come directly from the local community rather than relying on outside venture capital.

- This form of financing is currently being used to help launch the Portside Community Market in Oakland's Jack London Square District.

Founding Shareholders Financing (or "crowd-funding") enables grocery stores to operate as an independent business with high engagement of employees and smaller-scale investors.

- A current West Oakland example of this type of financing strategy is the People's Community Market, which is seeking to establish a new, 15,000 square-foot grocery supported by smaller investment shareholders.

Food Cooperatives are non-profit organizations that work in partnership with local residents, family farmers, and community-based businesses to improve health, create wealth, and build assets through cooperative food enterprises.

- Mandela Foods is a worker- and community-owned retail grocery store and nutrition education center in West Oakland that fosters economic empowerment and community health.
- Though independently owned, Mandela Foods has a synergistic relationship with Mandela MarketPlace, which serves as its entrepreneurship and food retail incubator. This innovative project developed from a community vision to address a lack of access to healthy food, healthy jobs, and economic development to benefit West Oakland residents by increasing their access to healthy food, the local economy, and business ownership.

#### *Healthy Food Ordinances*

The City could consider enacting new ordinances and changing business licensing policies to require all food stores to carry a minimum selection of healthy food and to meet other basic operating standards. Such an ordinance would set a "healthy baseline" to improve food quality

and accessibility at food stores across the West Oakland community. 12

- An example of a successfully passed ordinance is the City of Minneapolis' Staple Food Ordinance (Minneapolis Code of Ordinances Chapter 203.20c), which requires that all licensed grocery stores must offer, on a continuous basis, specific varieties of healthy foods for home preparation and consumption.<sup>13</sup>

#### *Grocery Store Attraction Strategies*

The City of Oakland can also further develop a list of "tools" for attracting healthy food and grocery outlets, including:

- Establishing one main point of contact at the City to convene and build incentive packages, and to more fully engage elected officials;
- Potentially better understanding those issues facing the grocery industry, and enacting additional strategies against real and/or perceived retail market obstacles(i.e., public safety);
- Creating marketing and incentive packages that may include a fast-track development process, use of Enterprise Zone tax credits, and pre-development assistance with site identification and acquisition;
- Providing operations assistance such as property management support, integrated workforce development strategies, façade improvement funding, and energy efficiency; and

- Establishing greater business partnerships with private banks, which are required by a federal law to invest in the communities they serve, including moderate- and low-income neighborhoods within their service areas.<sup>14</sup>

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<sup>12</sup> an example of such an ordinance can be found in "A Guide to the Model Licensing Ordinance for Healthy Food Retailers", ChangeLab Solutions, accessed at [http://changelabsolutions.org/sites/default/files/Licensing\\_for\\_Lettuce\\_FINAL\\_20130212\\_0.pdf](http://changelabsolutions.org/sites/default/files/Licensing_for_Lettuce_FINAL_20130212_0.pdf)

<sup>13</sup> accessed at: [http://www.minneapolismn.gov/www/groups/public/@regservices/documents/webcontent/convert\\_272863.pdf](http://www.minneapolismn.gov/www/groups/public/@regservices/documents/webcontent/convert_272863.pdf)

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<sup>14</sup> Getting to Grocery – Tools for Attracting Healthy Food (Change Lab Solutions, 2012), and Grocery Store Attraction Strategies; A Resource Guide for Community Activists and Local Governments (Policy Link, Bay Area LISC, 2007)

## ACCESS TO PARKS AND RECREATION

This section of the Community Health Checklist provides some important background information and context about parks and recreation opportunities in West Oakland and about the positive community health benefits of parks, open space and recreation facilities. Specifically, this section of the Checklist addresses the following questions:

1. Does this Specific Plan include policies, strategies or other efforts to reduce the extent of known toxic sites within West Oakland?
2. Does this Specific Plan include policies or strategies intended to minimize the risk of exposure to on-going uses of hazardous materials?
3. Does this Specific Plan include policies or strategies that seek to resolve the health risks to the surrounding community posed by previous contamination at the AMCO Chemicals/DC Metals site?

### *Existing Parks and Recreation Facilities*

City of Oakland parks in West Oakland include Brush Street, Bertha Port, Crescent, Cypress Freeway Memorial, DeFremery, Durant, Fitzgerald, Grove Shafter, Lowell, Marston Campbell, McClymonds, Poplar, Raimondi, South Prescott, Saint Andrews Plaza, Union Plaza, Wade Johnson, Willow Street, Wood Street Pocket Park, and 25th Street. Other nearby parks that also serve West Oakland residents includes Middle Harbor Park and PortView Park in the Port of Oakland.

Several community recreation centers offer sports, arts and crafts, culture arts and dance, computer labs, drama, mentoring, general learning, and afterschool activities. Recreation centers in West Oakland include DeFremery Recreation Center, West Oakland Senior Center, and Willie Keyes Community Center.

### *Park Standards*

The City of Oakland General Plan establishes a parkland objective of 4 acres per 1,000 residents for parks that meet the active recreational needs of the community. Within West Oakland there are approximately 57 acres of parkland (including schoolyards and athletic fields), which equates to 2.43 acres of parkland per 1,000 residents, or 60% of the General Plan parkland objective but nearly two times the ratio of parkland per population city-wide.

### *Community Health Benefits of Parks and Recreation*

Parks support public health, the economy, the environment, education, and community cohesion. Parks can provide measurable health benefits, from providing direct contact with nature and a cleaner environment to opportunities for physical activity and social interaction:

- parks provide people with contact with nature, known to confer certain health benefits and enhance well-being,
- physical activity opportunities in parks help to increase fitness and reduce obesity, and
- parks resources can mitigate climate, air, and water pollution impacts on public health. <sup>15</sup>

### **Parkland**

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**Q Parks-1: Does this Specific Plan include policies, strategies or plans to increase West Oakland residents' access to parks, open space and recreational areas?**

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- Beneficial
- Silent
- Detrimental

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<sup>15</sup> American Planning Association, City Parks Forum Briefing Papers, "How Cities Use Parks to Improve Public Health", accessed at: (<https://www.planning.org/cityparks/briefingpapers/physicalactivity.htm>)

- ☑ Other – focus on improvements to existing urban parks and open space

### *Specific Plan Policies and Strategies*

#### *Parkland*

Chapter 9 of this Plan promotes improvements to existing parks and urban open spaces within the public realm. Important strategies of the Specific Plan call for:

- The pursuit of additional funding to further implement subsequent phases of the Raimondi Park concept plan, including a second multi-purpose field, additional infrastructure upgrades, park amenities, tot lots, picnic tables, benches, barbecues, bleachers, and additional lighting and landscape improvements (City Parks-1);
- The pursuit of additional funding sources to implement subsequent phases remaining in the De Fremery Park improvements project, including improvements to the picnic areas, lead abatement and new painting of the De Fremery House, and the installation of an edible garden (City Parks-2); and
- The pursuit of additional sources of public funding to support efforts to clean-up and beautify St. Andrews Park (City Parks-3).

#### *Urban Open Space*

The Specific Plan also calls for West Oakland's public streetscapes to be improved and enriched as public open space elements. Urban open space strategies of this Plan call for:

- Encouraging development of pocket parks and plazas where the street pattern has created small, angular or otherwise unbuildable parcels and large leftover paved areas (Pedestrian-3);
- Improving the smaller triangular parcels along San Pablo Avenue (especially St. Andrews Plaza) as attractive neighborhood gathering places with new trees (see West Oakland Reforestation Plan) and well lit at evenings and at night to reduce incidences of crime (Urban Open Space-6);
- Encouraging the use of portions of the former AMCO Chemical/DC Metals site near the West Oakland BART station for interim (and

potentially permanent) use as an open space buffer adjacent to the South Prescott neighborhood. This open space buffer could accommodate long-term hazardous materials clean-up actions and a bamboo forest at the site could facilitate groundwater cleanup, provide a cap for known lead present within the soil, help reduce air pollution from nearby I-880 freeway traffic, and provide an aesthetic screen around the site (Urban Open Space-3);

- Implementing the recommendations of the West Oakland Reforestation Plan, which are directed at developing a thriving sustainable urban forest encompassing West Oakland's streets, parks, other publicly owned facilities and private properties (Reforestation-1 through -3); and
- Working with the creators of the *West Oakland Walk* concept to assess needed physical improvements and how to best communicate and market the idea for creating a "social circuit" for walking, biking, organic gardening, exercising and socializing, all activities that build sustainable communities (West Oakland Walk-1 through -3).

### *Other Recommendations for Further Consideration*

#### *Coordinated Planning with the Gateway Park*

Preliminary plans for the proposed Gateway Park adjacent to the new Bay Bridge and former Army Base include recreational areas and trail links within and immediately adjacent to West Oakland, with active recreation areas under the MacArthur Maze/West Oakland area and a new elevated bike path that would connect West Oakland to the waterfront. The Concept Report acknowledges that the level and scale of amenities is dependent upon the type of development that occurs in the surrounding area.

Further coordination with the planning efforts for Gateway Park, particularly regarding how the recreation areas at the MacArthur Maze and the pedestrian/bike trail would link to West Oakland, could make a substantial contribution toward better meeting the existing parkland and recreational need in West Oakland.

### *Recreational Programing, Especially for Youth*

This Specific Plan’s approach to recreation and open space concerns is focused on the physical and built environment. However, it is also important to consider how the programming of recreational facilities can better contribute to the vitality of the community and its residents.

The services provided at parks and public open space areas are more than gym and swim programs. These places are also where positive social relationships are built, conflict resolution skills can be learned, and where youth can learn to achieve academic success, mental health, and civic engagement. The values of recreational programming for youth, for families, and for the wider community include:

- reducing juvenile delinquency
- increasing positive and reducing negative behaviors
- exposing youth to less violence
- improving children’s educational performance
- helping decrease health care costs related to childhood obesity
- increasing the economic contributions of young people to society, and
- helping youth develop self-confidence, optimism, and initiative.<sup>16</sup>

The Oakland Parks and Recreation Department currently offers quality of life programming in areas of enrichment, cultural arts, prevention and intervention, sports and physical activities, health and wellness, youth violence abatement, and leisure activities for adults, youth, and children. Programs and camps are part of the efforts to promote health, stem obesity, and encourage civic participation, personal development, and empowerment.

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<sup>16</sup> National Recreation and Park Association, “The Rational for Recreation Services for Youth: An Evidence Based Approach, 2010. Accessed at: [http://www.nrpa.org/uploadedFiles/nrpa.org/Publications\\_and\\_Research/Research/Papers/Witt-Caldwell-Full-Research-Paper.pdf](http://www.nrpa.org/uploadedFiles/nrpa.org/Publications_and_Research/Research/Papers/Witt-Caldwell-Full-Research-Paper.pdf)

Continuing efforts can be made to better program West Oakland’s existing recreation facilities to serve its residents.

### Private Open Space

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#### **Q Parks-2: Does this Specific Plan require new development to contribute towards new, accessible open space?**

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- Beneficial
- Silent
- Detrimental
- Other

New, larger-scale private development projects pursuant to this Specific Plan will be incentivized to incorporate new urban open space into the fabric of West Oakland. These new open space elements will be predominantly outdoors and inviting to the public; providing public seating, sun and shade, trees and plantings with attractions and features that offer different ways for visitors to enjoy the space. These spaces are intended to be used intensively on a daily basis, serving as destinations for a broad spectrum of users. They are also intended to have positive economic impacts on their surroundings and promote physical, social, and economic health of the larger community. Specific Plan strategies call for:

- New, large-scale development projects to include publically accessible courtyards as part of their overall development plan.
  - Courtyards to be designed to maximize exposure to the street front and include people- attracting elements, such as water features and public art.
  - Pedestrian connections through the courtyards to provide interconnections between on-site buildings (Urban Open Space-1);
- New large scale commercial development should include public gathering places and landscaped areas as part of their overall development.

- Retail entrances should be highly indicated by open space entries, potentially including seating areas, trees and pedestrian plazas.
- Internal and abutting streets should include streetscape open space potentially including wide, landscaped planting strips, bulb-outs for tree wells, and parking areas that have landscaped visual buffers along their external edge and planting islands within (Urban Open Space-2).

## EXPOSURE TO COMMUNITY NOISE

This section of the Community Health Checklist addresses the following three questions pertaining to the Specific Plan's response to community noise concerns:

1. Does this Specific Plan include policies, strategies or other efforts to reduce the extent to which West Oakland residents and employees are exposed to excessive community noise?
2. Does this Specific Plan include measures or requirement to ensure that new land use development does not result in increased noise levels adversely affecting existing residents? and
3. Does this Specific Plan include policies, strategies or other efforts to ensure that new development adequately protects future residents from the harmful effects of excessive noise?

### *Ambient Noise Conditions*

Community noise in West Oakland is adversely affected by a number of transportation sources, such as automobiles, trucks and trains. These noise sources have been measured under a number of studies conducted in West Oakland over the past several years.<sup>17</sup> The results can generally be summarized as follows:

- The primary noise source is traffic on the I-880, I-980 and I-580 freeways. CNEL noise levels are estimated at 68 to 71 dBA at 400 feet from freeway centerlines. Freeway noise levels are lower in areas protected by sound walls (less than 60 dBA at 400 feet from the I-880 freeway centerline).

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<sup>17</sup> Noise studies include the Port of Oakland Health Impact Assessment (2010), MacArthur BART Transit Village EIR, City of Oakland Housing Element EIR (2009), Noise Element of the City of Oakland General Plan (2004), and the West Oakland Redevelopment Plan EIR (2003)

- Local arterial streets are also major noise sources. Generally, the louder arterial streets include Mandela Parkway, 14th Street, West Grand Avenue, 7th Street, Adeline Street, Peralta Street, Hollis Street, San Pablo Avenue, Market Street, 27th Street and Martin Luther King Jr. Way, where daytime noise levels are mostly between 66 to 68 dBA (Leq) and CNEL levels were mostly between 68 and 72 dBA at 50 feet from roadway centerlines.
- The elevated BART line is a major noise source affecting the southern part of West Oakland. Noise levels reach in excess of 67 dBA (Leq) during the day in the southeastern portion of the West Oakland BART Station south parking lot. Noise levels at the northern edge of the BART station on 7th Street reach in excess of 68 dBA (Leq) during the day.
- The Union Pacific Railroad and BNSF Railroad and their associated railyards and Port of Oakland intermodal facilities that border West Oakland on the south and west are additional significant noise sources affecting those immediate areas.

In areas away from arterials, freeways, and BART (where there are no adjacent major noise sources), noise levels are generally less than 65 dBA CNEL. In these areas, typical noise sources include car horns, car alarms, loud vehicles or motorcycles, emergency sirens, loud music, mechanical equipment, trucks, and people talking or yelling. Many of these sources are common and although annoying, do not contribute substantially to the overall ambient noise level in any particular area.

### Noise Standards

City of Oakland noise exposure standards indicate that there is exposure to unacceptable community noise if noise levels exceed the land use compatibility guidelines of the Oakland General Plan. For residential and other sensitive land uses, this land use compatibility guideline is 65db CNEL (after incorporation of all applicable Standard Conditions of Approval). Another City threshold is exposing of persons to interior Ldn or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities per California Noise Insulation Standards.

When measured noise levels are compared to these City noise and land use compatibility guidelines, the existing environments near the elevated segments of I-580 and I-880 (unprotected by sound walls) and near the elevated BART tracks and West Oakland BART Station include unacceptable levels of community noise for residential and other noise-sensitive uses.

Noise levels along many major arterial streets generally meet the threshold for conditionally acceptable noise levels for residential uses.

### Associated Community Health Risks of Noise

Community noise is associated with a variety of potential health impacts.

The 2010 Health Impact Assessment for the Port of Oakland estimated that the majority of West Oakland residents are exposed to ambient noise levels of 75 dB Ldn. Based on these exposures and established noise-health relationships, the report estimated that:

- currently, greater than one in three residents are likely to be highly annoyed by noise, which has considerable bearing on stress and its associated health impacts,
- approximately one third of West Oakland residents may be at risk of sleep disturbance, and
- West Oakland residents experience 29% impairment in recall and reading, and 4% impairment in recognition and attention over a residential area that has a typical 60 dB noise environment.

### Community Noise Reduction

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**Q Noise-1: Does this Specific Plan include policies, strategies or other efforts to reduce the extent to which West Oakland residents and employees are exposed to excessive community noise?**

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- Beneficial
- Silent
- Detrimental

❑ Other

### *BART Noise*

As indicated earlier in the Plan, one of the primary noise sources currently affecting West Oakland, particularly in the Prescott and South Prescott neighborhoods, is BART train noise. Noise from the BART trains, especially where trains slow down to enter and speed up to leave the West Oakland station, is unacceptably loud for existing residents. A typical BART train produces an instantaneous 85 dBA noise level at a distance of 100 feet from the tracks.

### *Specific Plan Policies and Strategies*

#### *BART Noise*

The Specific Plan's approach for addressing noise reduction, particularly at the West Oakland BART station, is found in Chapter 7: Building the Plan. Specific strategies include:

- The West Oakland BART Transit Oriented Development (TOD) project's new buildings are expected to provide a noticeable and significant noise buffer between portions of both the freeway and the BART tracks, and existing residential neighborhoods. The noise attenuation benefits from these building should be fully considered in final designs for these structures (7th Street TOD Env-2).

Noise reduction of as much as 15 dBA could potentially occur with the proposed TOD project if buildings are effectively designed to act as noise barriers and break the line of sight between the noise sources (I-880 and the BART tracks) and existing neighborhoods.

- The Specific Plan recommends that BART consider a number of potential noise reduction strategies that would have significant benefit to the surrounding existing community as well as for the new residential and commercial buildings anticipated by this Specific Plan, including:
  - regularly-scheduled rail grinding in the West Oakland area, and a monitoring and reporting mechanism similar to actions taken by BART in other parts of its service area (7th Street TOD Env-3).

According to BART's analysis, rail grinding (or ballasted tracks) has been shown to result in a 2dB reduction along straight track, and up to an 8dB reduction (from 80 to 72 dB) at elevated curves.

- BART, in coordination with the City and other development parties at the TOD, should fully investigate, and implement if feasible, a noise baffling structure and/or a completely enclosed noise baffling "tube" surrounding the BART overhead structure along 7th Street. This concept, and a preliminary design which can serve as a basis for further study moving forward, is recommended in the Seventh Street Concept and Urban Design Plan (7th Street TOD Env-3).

The potential noise reductions that might be achieved by such a noise baffle and/or a completely enclosed noise baffling "tube" on the BART overhead structure is unknown at this time, and is dependent upon the design and construction techniques that might be used. However, substantial noise reductions could reasonably be expected.

#### *Truck Noise*

There have been a number of prior efforts to minimize traffic noise impacts in West Oakland, in particular noise from trucks associated with the Port of Oakland. Currently, signs direct trucks to prescribed truck routes. However, trucks still deviate from these prescribed routes and documented traffic counts indicate numerous trucks in mixed industrial and residential parts of West Oakland. Sound walls have also been constructed along portions of I-880 adjacent to the Prescott and South Prescott neighborhoods.

Strategies for minimizing truck noise impacts in the Specific Plan include:

- maintaining those truck routes necessary to serve Port of Oakland activities, but prohibiting additional encroachment of truck routes into West Oakland neighborhoods (Truck Traffic-1);
- relocating truck parking and services from West Oakland neighborhoods to a consolidated site or sites in the Port/former Oakland Army Base area (Truck Traffic-2);

- implementing a traffic calming program in residential neighborhoods that could include vehicle lane reductions, speed humps, neighborhood traffic circles, pedestrian crossing improvements, etc., to discourage truck traffic from entering the neighborhoods (Truck Traffic-3); and
- enhancing truck route enforcement and education to keep trucks off of neighborhood streets (Truck Traffic-4).

### New Noise Sources

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**Q Noise-2: Does this Specific Plan include measures or requirement to ensure that new land use development does not result in increased noise levels adversely affecting existing residents?**

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- Beneficial
- Silent
- Detrimental
- Other

### Specific Plan Policies and Strategies

#### Industrial Noise

An important objective of this Specific Plan is to address the relationship between industrial uses and adjacent neighborhoods. The intent of the Plan is to establish a well-defined industrial/residential edge between West Oakland's residential neighborhoods and its growing industrial base. Historically, the lack of a defined residential/industrial edge in West Oakland has allowed heavy truck traffic and container storage, with its associated noise impacts, into residential areas.

Strategies included in the Plan to address the interface between industrial and residential land uses include:

- Creating a clearly defined boundary between West Oakland's Opportunity Areas (areas in need of transformative growth and change), and West Oakland's Residential Areas. The identified border between the industrial and intensive commercial business areas and the

Residential Areas provides a clear and intentional boundary (Residential Edge-1);

- Encouraging the relocation of waste recycling operations, heavy truck-dependent uses and other noise-generating uses to alternative locations outside of and distant from West Oakland's residential neighborhoods (Ind./Res. Interface-1);
- Ensuring that new industrial development provides appropriate buffers between adjacent sensitive uses; and
- Retaining the current S-19 Health and Safety Protection Combining Zone and modifying its boundaries (Ind./Res. Interface-2).

### City-wide Standard Conditions of Approval

#### SCA 32: Operational Noise – General

Noise levels from activities, property, or any mechanical equipment shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

Under the Planning Code provisions, the maximum allowable receiving noise varies depending upon the sensitivity associated with the receiving land use. In other words, the City Of Oakland's Standard Conditions of Approval (SCAs) and Section 17.120 set forth different (more stringent) maximum allowable noise levels for residential and civic uses (including parks/open space areas) than for commercial or industrial uses deemed to have lower noise sensitivity. If noise levels exceed the proscribed standards, SCA 32 stipulates that the activity causing the noise shall be abated until appropriate noise reduction measures have been installed, and compliance verified by the Planning and Zoning Division and Building Services.

## Introduction of New Noise Sensitive Receptors

**Q Noise-3: Does this Specific Plan include policies, strategies or other efforts to ensure that new development adequately protects future residents from the harmful effects of excessive noise?**

- Beneficial
- Silent
- Detrimental
- Other – Mitigation Measures Included

### *Noise Exposure at the West Oakland BART TOD and Infill Sites*

#### *Specific Plan Policies and Strategies*

This Specific Plan’s approach for addressing noise issues at the West Oakland BART Station TOD and other urban infill sites near freeways is found in Chapter 7: Building the Plan. Specific strategies include:

- New residences within the West Oakland BART Station TOD project will be subject to Title 24 of the California Code of Regulations, which requires an interior noise standard of 45 dBA DNL in any habitable room, and requires an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard. To meet the interior standard of DNL 45 dBA, a noise level reduction of up to nearly 35 dBA will likely be necessary from the exterior façades of the buildings facing towards the I-880 freeway and BART tracks and station (7th Street TOD Env-1);
- Require new residential and live/work building design to address air quality and noise impacts with appropriate noise insulation and air filtration systems (7th Street Lower Pine-1).

#### *City of Oakland Standard Conditions of Approval*

The following Standard Conditions of Approval (SCAs) will apply to all development projects in West Oakland:

#### *SCA 31: Interior Noise*

Prior to issuance of a building permit and Certificate of Occupancy, and if necessary to comply with the interior noise requirements of the City of Oakland’s General Plan Noise Element and achieve an acceptable interior noise level, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls), and/or other appropriate features/measures, shall be incorporated into project building design, based upon recommendations of a qualified acoustical engineer and submitted to the Building Services Division for review and approval prior to issuance of building permit. Final recommendations for sound-rated assemblies, and/or other appropriate features/measures, will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phases. Written confirmation by the acoustical consultant, HVAC or HERS specialist, shall be submitted for City review and approval, prior to Certificate of Occupancy (or equivalent) that:

- Quality control was exercised during construction to ensure all air-gaps and penetrations of the building shell are controlled and sealed; and
- Demonstrates compliance with interior noise standards based upon performance testing of a sample unit.
- Inclusion of a Statement of Disclosure Notice in the CC&R’s on the lease or title to all new tenants or owners of the units acknowledging the noise generating activity and the single event noise occurrences. Potential features/measures to reduce interior noise could include, but are not limited to, the following:
- Installation of an alternative form of ventilation in all units identified in the acoustical analysis as not being able to meet the interior noise requirements due to adjacency to a noise generating activity, filtration of ambient make-up air in each unit and analysis of ventilation noise if ventilation is included in the recommendations by the acoustical analysis.

## Appendix B: Community Health

These standard conditions of approval require the inclusion of design measures to reduce interior noise to acceptable levels within the buildings.