



City of Santa Barbara California

PLANNING COMMISSION STAFF REPORT

REPORT DATE: February 6, 2014
AGENDA DATE: February 13, 2014
PROJECT: Air Quality Design Standards for Development near Highway 101
TO: Planning Commission
FROM: Planning Division, (805) 564-5470, extension 4467
 Renee Brooke, AICP, Senior Planner *RLB*
 Barbara Shelton, Project Planner/Environmental Analyst *BAA*

I. PROJECT DESCRIPTION

Extensive long-term exposure to heightened traffic air pollution levels next to freeways, including from diesel particulates, has been shown to be correlated with increased health risks, such as for cancer, childhood asthma, and emphysema. State and regional air pollution control agencies recommend that cities limit development of sensitive land uses (residences, schools, etc.) next to freeways.

This continued public hearing is for Planning Commission consideration of a proposed ordinance to implement City General Plan Policy ER7 by establishing air quality design standards for specified sensitive types of new development within 250 feet of Highway 101, for the purpose of reducing air quality health risks.

The hearing is continued from January 16, 2014, with several Commissioner requests to revise the draft ordinance, as discussed in the Issues section below. A revised draft ordinance is included as Exhibit A of this report, with proposed revisions identified by underline/strike-out.

[Please refer to the prior staff report for the January 16th Commission meeting for further discussion of background, review process, and policy consistency for this item.]

II. RECOMMENDATION

Staff recommends that the Planning Commission make a recommendation that City Council take the following actions:

- A. Adopt the revised draft Ordinance in Exhibit A.
- B. As part of the City General Plan Adaptive Management Program, provide funding to conduct an air quality study of the Highway 101 corridor within 2-3 years, and, based on the study results or other available air quality information, consider whether to repeal or amend General Plan Policy ER7 and the implementing Ordinance.

III. ISSUES:

The following discusses issues raised by Commissioners at the January 16, 2014 hearing, and describes changes to the draft Ordinance.

A. **Vacant Lots** (*Draft Ordinance page 2; Sec. 22.65.030 Applicability and Exceptions; A. Applicability; 2. Types of Development*).

A Commissioner noted that the ordinance provision exempting one residential unit on a vacant lot seems unfair, because other new residential development would be subject to the ordinance.

The January draft of the ordinance provided an exemption to the application of ordinance air quality measures for one residential unit on a vacant lot. This provision was derived from the original General Plan policy language on which the implementing ordinance is based (shown below), which excludes one unit on a vacant lot from the policy prohibition and permitting criterion for new sensitive land uses within 250 feet of Highway 101.

ER7. Highway 101 Set Back: New development of residential or other sensitive receptors (excluding minor additions or remodels of existing homes or one unit on vacant property) on lots of record within 250 feet of U.S. Hwy 101 will be prohibited in the interim period until California Air Resources Board (CARB) phased diesel emissions regulations are implemented and/or until the City determines that diesel emission risks can be satisfactorily reduced or that a project's particulate exposure level is sufficiently reduced. The City will monitor the progress of CARB efforts and progress on other potential efforts or measures to address diesel emissions risks.

The purpose of the Policy ER7 exception provision was to ensure that a vacant lot would retain the basic property right to develop an economic use. It is noted that most of the parcels within the 250-foot corridor have some existing development. Only seven small parcels are vacant; three of the seven are behind Caltrans sound walls.

Staff reviewed this issue further, and advises that the ordinance may be changed to apply to one new unit on a vacant lot, and still be consistent with the General Plan Policy. Policy ER7 includes the basic provision underlying the ordinance that authorizes the City to permit potentially prohibited sensitive land uses if a City determination is made that a project's air pollution exposure is satisfactorily reduced. Even on parcels with constraints to accommodating some design measures, the requirement that all new sensitive development within 250 feet include an interior central ventilation/filtration system would ensure that all permitted projects will have reduced air pollution exposure and health risks. In addition, Policy ER7 is specified as an interim policy until anticipated air quality improvements have occurred. As such, there is not the concern for a property taking resulting from this ordinance.

The revised draft ordinance in Exhibit A has been changed to provide for its application to one new residential unit on a vacant lot.

B. Residential Additions (*Draft Ord. page 2, Sec. 22.65.030 Applicability and Exemptions; A. Applicability; 2. Types of Development*)

A Commissioner suggested deletion of the ordinance application to projects involving a residential addition of more than 50% of the net floor area of an existing structure.

Staff continues to recommend that the ordinance include this provision. Policy ER7 specifies that minor additions are exempted, and the City Council Resolution for implementation specifies that minor additions are additions not exceeding 50% of the existing floor area (as of December 2011). The ordinance should apply to larger additions consistent with this policy direction. The provision of an addition of more than 50% of the existing size represents an extension of the life of the structure, and the substantially increased capacity provides the potential for more persons receiving extensive exposure to elevated health risks. Per long-time City practice, such substantial additions generally require upgrades to current standards.

The revised draft ordinance does not include this suggested change.

C. Accessory Uses (*Draft Ord. page 2, Sec. 22.65.030 Applicability and Exceptions; A. Applicability; 2. Types of Development; and page 3, Section 22.65.040 Design Standards*)

A Commissioner suggested that the ordinance language be revised to clarify that distance and design provisions are only applied to main structures to be occupied by sensitive individuals, and not to accessory structures.

The intent of Policy ER7 and the implementing ordinance is to address structures involving extensive occupancy and exposure by sensitive individuals (e.g. main living and sleeping quarters in residences; classrooms in schools), and not accessory structures that typically do not involve extensive exposure. Staff agrees that the ordinance language should be changed to clarify that the distance and design measures apply to main structures for extensive occupancy and exposure by sensitive uses, and do not apply to accessory structures.

The revised draft ordinance in Exhibit A reflects language changes to address this.

D. Parcels in Whole or Part (*Draft Ord. Page 2, Section 22.65.030 Applicability and Exceptions; A. Applicability; 1. Location*)

Two Commissioners objected to applying the ordinance to all properties “in whole or part” within 250 feet of Highway 101 without reference to the location of proposed development. They suggested that the ordinance should be written to clearly exempt projects up front where a property is in whole or part within 250 feet of Highway 101 but the proposed new sensitive development envelope is entirely outside of the 250-foot corridor. This would allow the applicant to avoid the City ordinance determination process.

Staff continues to recommend that the ordinance be applied to all properties wholly or partially within 250 feet of Highway 101 without the suggested exemption, for the following reasons:

- The up-front exemption is not needed. Projects proposing all applicable development and outdoor areas more than 250 feet from Highway 101 would clearly be seen to meet the ordinance design provisions. Distance from the freeway is the most effective mitigating measure. As such, no additional analysis, time, or cost would be needed for the City ordinance design determination compared to the ordinance exemption determination.
- From a practical standpoint, applying the ordinance to properties rather than proposed development ensures proper and consistent implementation by staff prior to and during permit application and approval processes, including at the Building Permit stage. Parcels are tagged in the land use database. In this example of a parcel partly within the 250 foot distance but proposing all development at greater than 250-foot distance, some information about the proposed development would be required from the applicant to verify accurate distance measurements and applicable types of land uses.

The revised draft ordinance in Exhibit A clarifies that Design Standards apply to main buildings for sensitive land uses within 250 of the Highway, but does not include the suggested exemption. Staff can provide language if a Commission majority supports the exemption.

E. Sunset Clause

Several Commissioners and a public commenter supported inclusion of a “sunset clause” in the ordinance to identify the specific criteria and time frame for repeal of the ordinance, given that the underlying General Plan policy ER7 is identified as an interim policy until anticipated air quality improvements occur due to State regulations or other means.

Staff continues to recommend that the ordinance not include a sunset clause, for the reasons outlined below. Staff recommends that the Commission instead address this issue through a separate recommendation to Council for funding an air quality study within 2-3 years and then reassessing Policy ER7 and this implementing ordinance, as part of the General Plan Adaptive Management Program.

- *It is not necessary to include a sunset clause in the ordinance.* City Council has the ongoing option to consider amendments and repeal of existing ordinances at any time. In this case, the original Policy ER7 and Resolution 12-013, both adopted by Council, already identify the policy as interim until such time as the City determines that risks are satisfactorily reduced, and direct that the City will monitor State regulations and air quality improvements. Both the General Plan Mitigation Monitoring and Reporting Program and the General Plan Adaptive Management Program identify this item for periodic analysis and reassessment.
- *It is not advisable to provide specific criteria for repealing the ordinance within the ordinance.* The City 2009 air quality modeling study, which informed General Plan

Policy ER7 and this implementing ordinance, utilized the generally used health risk standard of 10 excess cancer cases per one million persons. The study modeled average traffic, weather, and pollution levels, and identified dissipation of pollution concentration to the level associated with the health risk standard at about 250 feet from Highway 101. It is anticipated that a similar study would most likely be used to show that the ordinance could either be repealed or the 250-foot distance reduced due to improvements in air quality. However, it is also possible that the California Air Resources Board may in coming years be able to provide air quality data showing improved air quality that would provide a sufficient basis for City action to repeal or amend the ordinance without doing the City study, but which data may not be specifically tied to the excess cancer risk health standard. It is advisable to retain some flexibility in how the City might meet the policy basis for repeal.

- *It is not advisable to include a specific time frame for repealing the ordinance within the ordinance.* Policy ER7 specifies the policy as interim until the City determines a reduced risk level. The evidence of changed air quality conditions supporting the policy and ordinance repeal is necessary. To repeal the policy and ordinance on a specified timeline regardless of air quality conditions would not be consistent with ER7 and could undermine the Council's environmental findings supporting the General Plan approval.

The revised draft ordinance in Exhibit A does not include this suggested change. Staff can provide language options if a Commission majority supports inclusion of a sunset clause.

F. Caltrans Sound Wall Exemption (*Draft Ord. page 3, Section 22.65.030 Applicability and Exemptions; B. Exemptions; 1. Projects on sites where a State Highway Sound Wall is located between the highway and project site.*)

A Commissioner requested additional information that explains the basis for the draft ordinance provision exempting project sites where a Caltrans highway sound wall is located between the highway and project site.

Caltrans highway sound walls vary in dimension but are typically 10-14 feet in height and are constructed of solid material such as wood or masonry. The staff recommendation to exempt sites with Caltrans highway sound walls was based on studies showing that the walls block roadway pollutants and provide for higher dispersal of pollutants. Sound walls provide substantial mitigation of roadway pollution on the other side of the wall; about a 50% reduction in the concentration of particulates and other pollutants. (California Air Resources Board, *Status of Research on Potential Mitigation Concepts to Reduce Exposure to Nearby Traffic Pollution*, 08-2012)

It is recognized in the studies and by staff that the level of mitigation varies across different topographic and meteorological circumstances and with changing factors such as wind direction and speed. And, while benefitting individuals living near the roadway, the redistribution of pollution dispersal patterns due to sound walls may also elevate background levels at times within the roadway corridor or further inland. However, the expected mitigation level provided by sound walls is generally similar or greater than what

would be expected from the ordinance on-site design measures, which is the basis for the upfront exemption. In areas without Caltrans sound walls, the Ordinance design criteria provide for privately built walls, which may be of various dimensions, as one of the types of design measures that can be proposed toward meeting the project design standards.

The exemption basis is consistent with the approach of General Plan Policy ER7 for using overall factors, since weather and pollution levels are changeable over time. The policy, the ordinance sound wall exemption, and the ordinance design measures are all based on overall typical or average conditions and factors. Rather than requiring each project to conduct what can be expensive and time-consuming individual health risk modeling assessments (which would also represent average conditions for a site), the ordinance focuses effort and resources on appropriate land use and design measures that represent common sense, good planning practices to reduce health risks for development next to a freeway.

G. Clarifications

The revised draft ordinance reflects the following additional clarifications based on Commissioner comments:

- Purpose. Added text to clarify the intent to reduce health risks by limiting development of new sensitive uses or by modifying the design of structures for sensitive uses.
- Outdoor Space. The definition was revised to clarify application of ordinance provisions only to required outdoor living space or open yard area.
- Individual Risk Assessments. The general exemption was clarified to indicate that such an exemption would be determined based on an individual health risk assessment for the site submitted by the applicant.
- Fences. The design criteria reference to fences was revised to specify solid fences. This would preclude open type of fences such as chain link from qualifying as measures addressing the design criteria.

G. Example Diagrams

Two Commissioners commented that site design templates and handouts are needed to assist applicants in applying the ordinance provisions (i.e., in determining whether their projects qualify for an exemption, or comply with project design provisions).

Staff does not recommend including design templates within the ordinance itself. There is too much variation among individual site conditions to provide a specific template for site layouts. Not all sites will be able to incorporate all design measures. However, information and handouts will be provided at the Planning Counter and on the City web site to graphically summarize the design criteria to assist applicants in understanding the ordinance provisions.

IV. POLICY CONSISTENCY ANALYSIS

As discussed in the prior staff report for the January 16, 2014 Commission meeting, the draft ordinance, as revised, would be consistent with the City Charter Section 1507 policy that land development not exceed natural resources, including air quality; and with General Plan Policy ER7 for limiting sensitive development within 250 feet of Highway 101.

V. ENVIRONMENTAL REVIEW

As discussed in the prior staff report for the January 16, 2014 Commission meeting, adoption of the revised draft ordinance to implement Policy ER7 is within the scope of the 2011 General Plan Update and its Program EIR analysis, and no further environmental review process is required under the California Environmental Quality Act.

Exhibits:

- A. Revised Draft Ordinance: Air Quality Design Standards for Development near Highway 101
- B. Map of Highway 101 Corridor and Parcels

ORDINANCE NO. ____

AN ORDINANCE OF THE COUNCIL OF THE CITY OF SANTA BARBARA AMENDING TITLE 22 OF THE SANTA BARBARA MUNICIPAL CODE BY ADDING CHAPTER 22.65 ESTABLISHING DESIGN STANDARDS FOR NEW DEVELOPMENT NEAR HIGHWAY 101 TO IMPLEMENT POLICY ER7 OF THE 2011 GENERAL PLAN.

THE CITY COUNCIL OF THE CITY OF SANTA BARBARA DOES ORDAIN AS FOLLOWS:

SECTION ONE: The City Council adopts the ordinance codified in Chapter 22.65 of the Santa Barbara Municipal Code based on the following findings:

- A. The California Air Resources Board and the Santa Barbara County Air Pollution Control District have recommended reducing potential health hazards associated with vehicle exhaust, including diesel particulates, by limiting development of new residences and other sensitive land uses in close proximity to highways.
- B. A Program Environmental Impact Report (EIR) certified for the City of Santa Barbara 2011 General Plan update evaluated air quality effects associated with new development in close proximity to Highway 101 during the General Plan time horizon. The EIR identified an interim policy for limiting new development of sensitive land uses within 250 feet of Highway 101. The EIR analysis concluded that the interim policy would mitigate the potential air quality impact associated with future development within the City near Highway 101 to a less than significant level until such time as statewide diesel particulate levels and associated health hazards are reduced by planned State regulations or other means.
- C. Interim policy ER7 adopted as part of the City of Santa Barbara 2011 General Plan directs that the development of new sensitive land uses within 250 feet of Highway 101 be limited unless the City determines that diesel emission risks or exposures are satisfactorily addressed. Implementation Measure ER7.1 directs that the City establish development standards for new development to implement the policy, and track State regulations and progress on reducing highway diesel particulates pollution to determine when the interim policy is to be retired.

SECTION TWO: Title 22 of the Santa Barbara Municipal Code is amended by adding Chapter 22.65 titled "Design Standards for Development Near Highway 101" to read as follows:

22.65.010 Purpose and Intent.

It is the purpose of this section to limit and regulate development within close proximity to Highway 101 in a manner that promotes the health, safety, and welfare of the residents of the City of Santa Barbara.

Pursuant to 2011 General Plan Policy ER7, the design standards in this Chapter are intended to limit the number of people, including Sensitive Individuals, who receive Extensive Exposure to potential air pollution hazards from highway vehicle exhaust including diesel particulates by limiting the development of new sensitive land uses within close proximity of Highway 101 or by modifying the design of new

sensitive land uses to reduce the amount of air pollution exposure received, until such time as statewide diesel particulate levels are reduced by planned State regulations or other means.

22.65.020 Definitions.

For the purpose of this Chapter, the following words and phrases shall have the following meanings:

- A. Accessory Building.** As defined in Section 28.04.010 of this Code.
- B. Extensive Occupancy or Exposure.** Substantial time periods involving daily occupancy or frequent lengthy visits of many hours occurring repeatedly over many years, such as typically experienced with residential land uses and schools.
- C. Main Building.** As defined in Section 28.04.145 of this Code.
- D. Required Outdoor Living Space.** Outdoor living space or open yard area required in accordance with City residential zoning standards as specified in Title 28 of this Code.
- E. Sensitive Individuals.** ~~Segments of the population~~ Persons most susceptible to adverse affects ~~offrom~~ poor air quality (including from diesel particulates) including children, the elderly, and people who are ill or have serious chronic respiratory, heart, or other medical conditions that are exacerbated by air pollution.
- F. Sensitive Land Uses.** Land uses that typically involve Extensive Occupancy or Exposure by Sensitive Individuals, including residences; nursing homes, retirement homes, and other community care facilities; schools; and large family day care facilities. Land uses not considered sensitive land uses include retail, commercial services, and offices.
- G. State Highway Roadside Sound Wall.** A roadside sound wall constructed by the California Department of Transportation.

22.65.030 Applicability and Exemptions.

- A. Applicability.**
 - 1. Location.** Any property that is located in whole or part within 250 feet of Highway 101 as measured from the outer edge of the nearest highway travel lane (excluding highway on- and off-ramps) is subject to the requirements of this Chapter, unless identified as exempt in Subsection B of this Section 22.65.030.
 - 2. Types of Development.** The following types of development are subject to the requirements of this Chapter, unless identified as exempt in Subsection B of this Section 22.65.030:

SHOWING CHANGES FROM 1/16/14 DRAFT

- a. The development of ~~two~~one or more new residential units on a ~~vacant~~ lot.
- ~~b. The addition of one or more new residential units to a lot on which development existed as of December 1, 2011.~~
- ~~e.~~b. An addition to an existing residential unit that increases the net floor area of the residential unit by more than 50% of the net floor area that existed within the residential unit as of December 1, 2011. If multiple additions are made to a residential unit during the time this Chapter is in effect, the amount of the additional floor area shall be measured in the aggregate.
- ~~d.~~c. The development of a new main building ~~for the following that will be occupied by a Sensitive Land Uses: schools; large family day care facilities; and nursing homes, retirement homes, and other community care facilities.~~
- ~~e.~~d. The demolition of an existing building and its replacement with a main building ~~intended for residential use or other that will be occupied by a Sensitive Land Uses.~~
- ~~f.~~e. A change of use of an existing main building from a use not defined as a Sensitive Land Use to a Sensitive Land Use.
- f. A change of use of an existing Main Building from a Sensitive Land Use that existed on the effective date of the ordinance adopting this Chapter to a different Sensitive Land Use.

B. Exemptions. The following projects are exempt from this Chapter:

1. Projects on sites where a State Highway Roadside Sound Wall is located between the highway and project site.
2. Projects with applications submitted to the City before December 1, 2011 for development permits including a Master Application, building permit plan check, or for other development approval, where the application has not expired.
3. Projects that received a final approval from the City prior to December 1, 2011 where the approval remains valid.
4. Projects where the ~~developer~~property owner can demonstrate to the satisfaction of the Community Development Director or the Director's designee that site-specific climatic or topographic conditions avoid or address the air quality risks from Highway 101 on the site such that the site specific conditions present a health risk of less than 10 excess cancer cases per one million persons.

Nothing in this Subsection B prevents an applicant from incorporating the design standards specified in Section 22.65.040 to exempt projects on a voluntary basis.

22.65.040 Design Standards for Air Quality.

The following design standards apply to development and occupancy of main buildings to which this Chapter applies. The location, design, and filtration standards specified in this Section are not required

for accessory buildings or areas on the lot where Sensitive Individuals would not be subject to Extensive Occupancy or Exposure (e.g., parking).:

- A. Proximity to Highway 101 and Project Design Features.** ~~New development for~~ Main buildings that will be occupied by Sensitive Land Uses shall be prohibited from locating within 250 feet of Highway 101 unless the City Community Development Director or designee determines that project design features satisfactorily address air quality risks. When determining whether the project design features satisfactorily address air quality risks, the Director shall consider the following factors:
1. **Distance from Highway 101.** ~~Structures~~ Main buildings and outdoor living areas ~~for that will be extensively occupied by Sensitive Land Uses~~ should be located as far from Highway 101 as feasible. For ~~mixed-use~~ projects that have a mixture of Sensitive Land Uses and non-sensitive land uses, Main Buildings and areas expected to have Extensive Occupancy or Exposure by Sensitive Individuals should be located furthest from the highway, while facilities for non-sensitive populations and/or involving short-term use (such as parking facilities) should be placed closer to the highway.
 2. **Building Orientation and Outdoor Living Areas.** Main Buildings involving for occupancy by Sensitive Land Uses should be oriented with doors and outdoor living areas on the side of the building away from the highway in order to provide physical screening by the building.
 3. **Vegetative Screening and Physical Barriers.** ~~Development involving~~ Project sites to be occupied by Sensitive Land Uses should incorporate dense, tiered vegetative plantings between the highway and the ~~project~~ Main buildings and outdoor living areas that are to be occupied by Sensitive Land Uses, which helps to remove air pollutants and reduce diesel particulate concentrations. Vegetation should largely entail trees with complex foliage (leafy vegetation or with needles) that allow substantial in-canopy airflow; preferably in multiple rows, using tree plantings of tall and uniform height that retain foliage year-round and have a long life span. Inclusion of physical barriers such as walls and solid fences between the highway and the project also help to reduce air pollutant exposure levels.
 4. **Air Infiltration.** In addition to a filtration system as required in Section 22.65.040 B, ~~projects~~ Main Buildings occupied by Sensitive Land Uses should be designed to locate air intake vents on the side of building away from the highway and use double-paned windows throughout.
 5. **Other Measures.** ~~The developer of~~ An applicant proposing a Sensitive Land Use that will be located within 250 feet of Highway 101 may propose other measures that have a demonstrated ability to reduce highway air pollution exposure.
- B. Interior Air Filtration System.** ~~New development~~ Main Buildings intended for occupation by a Sensitive Land Use that are located within 250 feet of Highway 101 ~~which is and are not exempt pursuant to Section 22.65.030.B~~ shall incorporate a central ventilation system with air filtration rated at Minimum Efficiency Reporting Value of “MERV13” or better for enhanced particulate removal efficiency. The owner of any development subject to this requirement shall attach a copy of the operator’s manual for the central ventilation and filtration system as an exhibit to every lease of the building or any portion of the building.

22.65.050 Maintenance of Design Features.

Design features incorporated into an approved project design pursuant to Section 22.65.040 shall be maintained as long as this Chapter remains in effect.



Highway 101 250 Foot Area and Soundwall Locations

JAN 2014

Pacific Ocean

Exhibit B



Note: Existing soundwall locations are provided by Caltrans at http://svctenvims.dot.ca.gov/soundwall_gis/
250 foot setback line was digitized by the City Planning Division using 2012 aerials to find the edge of nearest travel lane. The nearest travel lane does not include on-ramps or off-ramps.

Legend

- Existing Soundwall Locations
- 250 foot distance from edge of nearest travel lane
- Parcels that Intersect 250 foot distance

