

2 ENVIRONMENTAL REVIEW AND THRESHOLDS OF SIGNIFICANCE

2.1 ENVIRONMENTAL REVIEW PROCESS

The [California Environmental Quality Act \(CEQA\)](#) requires that public agencies (e.g., local, county, regional, and state government) consider and disclose the environmental effects of their decisions to the public and governmental decision-makers. Further, CEQA mandates that agencies implement feasible mitigation measures or alternatives that would mitigate significant adverse effects on the environment.

The main implementation tool is the [CEQA Guidelines](#); which applies statewide and governs the assessment, disclosure and review of all environmental impacts that may result from a project.

CEQA is intended to address a broad range of environmental issues, including water quality, noise, land use, natural resources, transportation, energy, human health, and air quality. This Guide addresses air quality analyses performed to meet the requirements of CEQA.

2.1.1 AIR DISTRICT ROLE IN THE CEQA REVIEW PROCESS

As a public agency, the District takes an active part in the CEQA [intergovernmental review process](#). In carrying out its CEQA duties, the District may act as a Lead Agency, a Responsible Agency, or a Reviewing Agency.

LEAD AGENCY

A Lead Agency is the public agency with the principal responsibility for carrying out or approving a project subject to CEQA. In general, the local government agency with jurisdiction over land use (e.g., a city or county) is the preferred Lead Agency for land development projects. The District will undertake the Lead Agency role if a project requires a District operating permit and no other agency has prepared (or is preparing) a CEQA document for the project. In addition, the District routinely serves as Lead Agency for its own projects (e.g., adoption of rules and attainment plans).

RESPONSIBLE AGENCY

A Responsible Agency is a public agency, other than the Lead Agency, that has responsibility for carrying out or approving a project. The District is a Responsible Agency for projects or portions of a project that require a District operating permit, or any other approval by the District. The Responsible Agency may only consider those aspects of the project that are within the agency's area of expertise or which are required to be carried out or approved by the agency.

As a Responsible Agency, the District may help the Lead Agency identify applicable District rules, provide guidance and assistance on applicable air quality analysis methodologies, and help address other air quality related issues. The District will also submit comments to the Lead Agency through the intergovernmental review process on the adequacy of the Lead Agency's air quality analysis. As part of this review, the District may recommend mitigation measures to reduce or eliminate impacts.

When conducting its review, the District will review the air quality section of the environmental document and other sections that address areas that may contribute to air quality impacts (e.g., traffic and circulation). At the conclusion of the District's review, the District will submit comments to the Lead Agency that identify deficiencies in the air quality analysis, suggest approaches to correct the deficiencies, and recommend additional feasible mitigation measures, where appropriate.

REVIEWING AGENCY

An agency that is neither a Lead Agency nor a Responsible Agency may be an agency with "jurisdiction by law" over a particular natural resource. This type of agency may be called a Reviewing Agency. The District has a program to review air quality analyses in environmental documents submitted to it under [CEQA Guidelines section 15086](#) (Search Title 14). As such, the District routinely reviews and provides comments on projects through the intergovernmental review process but for which the agency has no discretionary permit authority and, therefore, is neither a Lead nor Responsible Agency.

2.1.2 RELATIONSHIP TO NEPA

Some projects subject to CEQA may also require compliance under federal environmental law, namely the [National Environmental Policy Act \(NEPA\)](#). In such cases, a joint NEPA-CEQA analysis is appropriate. Under certain circumstances, the CEQA Guidelines allow public agencies to use a NEPA document rather than prepare an EIR or Negative Declaration. This Guide provides guidance for assessing air quality impacts and preparing environmental documents under CEQA, but can also be used to prepare a NEPA or joint CEQA-NEPA analysis, unless noted otherwise.

2.1.3 LEAD AGENCY CONSULTATION

District staff is available for consultation at any time during the project review process, but there are certain times when consultation is required. For example, when the District has discretionary approval authority over a project for which another public agency is serving as Lead Agency, the District must be consulted as a Responsible Agency. When the District does not have approval authority over a project, it should be consulted as a Reviewing Agency. CEQA provides opportunities for consultation at various times during the environmental review process. CEQA encourages Lead Agencies to consult with any individual or agency

that will be concerned with the environmental effects of the project prior to the completion of the Draft EIR or Negative Declaration. This is often done in conjunction with the Notice of Preparation or scoping meeting.

However, the Lead Agency can proactively address air quality concerns before a project is ever submitted for environmental review by providing information to project proponents during initial consultation with the planning department. In fact, [CEQA Guidelines section 15004](#) (search Title 14) directs lead agencies and project sponsors to incorporate environmental considerations into project conceptualization, design, and planning at the earliest feasible time. In many cases, District staff will meet with the Lead Agency and project proponent to ensure air quality impacts are being addressed.

Addressing land use and site design issues while a proposed project is still in the conceptual stage increases opportunities to incorporate mitigation measures and desirable modifications to minimize air quality impacts. By the time a project enters the CEQA process, it is usually more costly and time-consuming to redesign the project to incorporate mitigation measures. Early consultation may be achieved by including a formal step in a jurisdiction's development review procedures or simply by discussing air quality concerns with the planning department when a project proponent makes an initial contact regarding a proposed development. Public agencies can use the initial consultation phase to address air quality issues most effectively by becoming familiar with this Guide and District staff.

2.2 RELATIONSHIP BETWEEN CEQA AND DISTRICT ATTAINMENT RESPONSIBILITIES

The District is tasked with implementing programs and regulations required by the Federal Clean Air Act and the California Clean Air Act. In that capacity, the District has prepared plans to attain federal and state ambient air quality standards. As part of the effort to accomplish its mandates, the District conducts a CEQA project review program and maintains a staff of planners and technical personnel versed in air pollution analysis and control.

Nearly all development projects in the Sacramento region have the potential to generate air pollutants that may make it more difficult to attain federal and state air quality standards. Therefore, for most projects, it is necessary to evaluate air quality impacts to comply with CEQA. This Guide is intended to help public agencies evaluate these air quality impacts. A properly prepared CEQA document will inform decision-makers and the public about the air quality impacts of a project and facilitate an informed public dialogue regarding their implications.

2.3 LAND USE AND AIR QUALITY LINKAGE

The air quality considerations that warrant particular attention during early consultation between Lead Agencies and project proponents include: consistency with applicable District rules and permit requirements; land use conflicts and

exposure of sensitive receptors to odors, toxics and criteria pollutants; and land use and design measures to encourage alternatives to the automobile and to promote energy conservation. Lead Agencies and project proponents are encouraged to consult with the District on these issues as early as possible.

2.3.1 AIR DISTRICT REQUIREMENTS

Air District [rules](#) and [permit requirements](#) apply to most industrial processes (e.g., manufacturing facilities, food processing), many commercial activities (e.g., print shops, drycleaners, gasoline stations), and other miscellaneous activities (e.g., demolition of buildings containing asbestos and aeration of contaminated soils). During early consultation, Lead Agency staff should address air pollution rules and permit requirements that may apply to the proposed project with the proponent. Lead Agency staff is encouraged to coordinate directly with District staff during the environmental review process on issues such as regulatory requirements, impact analyses and mitigation measures.

2.3.2 LAND USE CONFLICTS AND EXPOSURE OF SENSITIVE RECEPTORS

The location of a development project is a major factor in determining whether it will result in localized air quality impacts. The potential for adverse air quality impacts increases as the distance between the source of emissions and members of the public decreases. Impacts on sensitive receptors are of particular concern. Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors.

For each of the situations discussed, the impacts generally are not limited to sensitive receptors. Air pollutants can adversely affect all members of the population, and thus any consideration of potential air quality impacts should include all members of the population. However, this discussion focuses on sensitive receptors, because they are the people most vulnerable to the effects of air pollution.

Air quality problems arise when sources of air pollutants and sensitive receptors are located near one another. There are several types of land use conflicts that should be avoided:

- A sensitive receptor is in close proximity to a congested intersection or roadway with high levels of emissions from motor vehicles. High concentrations of carbon monoxide, fine particulate matter or toxic air contaminants are the most common concerns.
- A sensitive receptor is close to a source of toxic air contaminants or a potential source of accidental releases of hazardous materials.
- A sensitive receptor is close to a source of odorous emissions. Although odors generally do not pose a health risk, they can be quite unpleasant and often lead to citizen complaints to the District and to local governments.

- A sensitive receptor is close to a source of high levels of nuisance dust emissions.

Localized impacts to sensitive receptors generally occur in one of two ways:

- A (new) source of air pollutants is proposed to be located close to existing sensitive receptors. For example, an industrial facility is proposed for a site near a school.
- A (new) sensitive receptor is proposed near an existing source of air pollutants. For example, a residential development is proposed near a wastewater treatment plant.

Early consultation between project proponents and Lead Agency staff can avoid or minimize localized impacts to sensitive receptors. When evaluating whether a development proposal has the potential to result in localized impacts, Lead Agency staff need to consider the nature of the air pollutant emissions, the proximity between the emitting facility and sensitive receptors, the direction of prevailing winds, and local topography. Often, the provision of an adequate distance, or buffer zone, between the source of emissions and the receptor(s) is necessary to mitigate the problem. This underscores the importance of addressing these potential land use conflicts during the preparation of the general plan and as early as possible in the development review process.

It should be noted that there may be instances when some of the land use considerations discussed above, such as infill development and mixed use projects, could result in localized impacts to sensitive receptors. For example, an infill or mixed use project might result in residences being in close proximity to a source of odors or toxic air contaminants, or a child care facility might be proposed at a worksite in an area where large quantities of hazardous materials are stored and used. Such situations should be avoided. Lead Agencies should bear in mind that while infill and mixed use development are desirable (to reduce auto trips), such projects should be approved only when they do not subject receptors to health or nuisance impacts.

2.3.3 LAND USE AND DESIGN CONSIDERATIONS

Land use decisions are critical to air quality planning because land use patterns greatly influence transportation needs, and motor vehicles are the largest source of air pollution in Sacramento County. The design of development projects significantly influences how people travel. With land use design in mind, District staff utilize a set of Board adopted [Project Review Principles](#) when reviewing and commenting on proposed projects. The Project Review Principals focus on land use, design and energy conservation concepts that are beneficial for air quality. Lead Agencies and project proponents are encouraged to consider incorporating the concepts included in the Project Review Principals or more specifically incorporate mitigation measures from its [Guidance for Land Use Emission Reductions](#) early in the design of a project. Measures incorporated into the design

of a project are commonly documented in an Air Quality Mitigation Plan, sometimes referred to as an AQ-15 Plan (see Chapter 4 for more information). By incorporating such measures in local development plans and discussing the measures during initial contacts with project proponents, Lead Agencies greatly increase the likelihood of bringing forth development projects with less air quality impacts and possibly a simplified environmental review process.

2.4 DETERMINING SIGNIFICANCE

Projects that are subject to CEQA generally undergo a preliminary evaluation in an Initial Study. The Initial Study is used to determine if a project may have a significant effect on the environment. The Initial Study should evaluate the potential impact of a proposed project on air quality. The air quality impact of a project is determined by examining the types and levels of emissions generated by the project, the existing air quality conditions, and neighboring land uses. The Initial Study should analyze all phases of project planning, construction and operation, as well as cumulative impacts. When considering a project's impact on air quality, a lead agency should provide substantial evidence that supports its conclusions in an explicit, quantitative analysis whenever possible. Lead Agencies are encouraged to use the methodologies and screening tools provided in this Guide. Lead Agencies can use District staff as an additional resource in preparing the air quality analysis for an Initial Study.

CEQA Guidelines [Appendix G](#) presents a model initial study checklist. This checklist includes suggested criteria, in question format, for determining whether a project will have a potentially significant impact on air quality. According to the criteria, a project will have a potentially significant impact on air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

In addition, the District has established significance thresholds to assist Lead Agencies in determining whether a project may have a significant air quality impact. Projects whose emissions are expected to meet or exceed the recommended significance criteria will have a potentially significant adverse impact on air quality.

If the Lead Agency determines the proposed project would exceed any of the thresholds, then an environmental document should be prepared. The more comprehensive analysis of an EIR will provide a more detailed discussion of the

project impacts and will help identify the most appropriate and effective mitigation measures to minimize the impacts. Where no significant air quality impacts of a project or plan can be identified in the Initial Study, the District recommends that the Lead Agency either prepare a Negative Declaration or include in an EIR a statement explaining the reasons for determining air quality impacts as insignificant.

2.5 RECOMMENDED SIGNIFICANCE THRESHOLDS

This section along with the [thresholds of significance table](#) includes recommended criteria for determining whether an EIR or a Mitigated Negative Declaration (MND) should be prepared for a development project to address potential adverse air quality impacts. Tests of significance are not limited to the table or the criteria listed. Other factors, especially those related to the location of the project and potential impacts on nearby populations (e.g., schools, day care centers, residences, and hospitals) also should be examined. These factors include proximity of the project to population areas, proximity of the proposed project to other pollutant sources (e.g., industrial facilities emitting odorous or hazardous substances), and potential land use conflicts.

The following chapters of this Guide describe methodologies for assessing emissions from projects, which assist a Lead Agency in determining whether the District's thresholds have been exceeded, and whether the project will have an impact on air quality.

[Chapter 3, Construction Generated Emissions of Criteria Air Pollutants](#)

[Chapter 4, Operational Emissions of Criteria Air Pollutants and Precursor Emissions](#)

[Chapter 5, Toxic Air Contaminant Emissions](#)

[Chapter 6, Greenhouse Gas Emissions](#)

[Chapter 7, Odors](#)

[Chapter 8, Cumulative Air Quality Impacts](#)

[Chapter 9, Program Level Analysis of General and Area Plans](#)

2.5.1 OZONE PRECURSORS SIGNIFICANCE THRESHOLDS

The District has established [mass emissions thresholds for ozone precursors](#) because the Sacramento Region does not meet [state and federal ozone ambient air quality standards](#). Emissions of ozone precursors from an individual project could contribute to an existing exceedance of the ozone standards. A "substantial" contribution means one that exceeds the mass emissions threshold levels.

The construction and operational mass emissions thresholds approximately correlate to the NO_x reductions from heavy-duty vehicles and land use project

emission reduction requirements committed to in the 2004 Ozone Attainment Plan for the Sacramento Federal Ozone Nonattainment Area. The thresholds were adopted by the District's Board of Directors in 2002 and are based on the District's document *Foundation for a Threshold: Justification for Air Quality Thresholds of Significance in the Sacramento Federal Nonattainment Area*.

2.5.2 OTHER CRITERIA POLLUTANT –SIGNIFICANCE THRESHOLDS

A project that may cause an exceedance of a state air quality standard, or may make a substantial contribution to an existing exceedance of a state air quality standard will have a significant adverse air quality impact. "Substantial" is defined as making measurably worse, which is five percent or more of an existing exceedance of a state ambient air quality standard.

2.5.3 TOXIC AIR CONTAMINANTS SIGNIFICANCE THRESHOLDS

If a development project will emit toxic air contaminants (TACs), the Lead Agency must assess the potential of the TACs to adversely impact nearby populations. Assessment guidance is described in [Chapter 5, Toxic Air Emissions](#). The recommended significance thresholds for TACs emitted from stationary sources are based on the District's [AB2588 Air Toxics Hot Spots Program](#). The District has not established thresholds of significance for mobile or indirect emission sources.

2.5.4 GREENHOUSE GAS SIGNIFICANCE THRESHOLD

Greenhouse gas (GHG) emissions have the potential to adversely affect the environment because they contribute, on a cumulative basis, to global climate change. Although the District has not established thresholds of significance for GHG emissions, the District does provide methodologies for analysis and mitigation in [Chapter 6, Greenhouse Gas Emissions](#). The District recommends that Lead Agencies consider thresholds of significance for GHG emissions that are related to AB 32's GHG reduction goals.

2.5.5 OFFENSIVE ODORS SIGNIFICANCE THRESHOLD

Any project with the potential to create objectionable odors affecting a substantial number of people would be considered to have a significant impact as suggested in CEQA Guidelines [Appendix G](#). In addition, the District's [Rule 402](#) prohibits any person or source from emitting air contaminants that cause detriment, nuisance, or annoyance to a considerable number of persons or the public. The adverse effects of odors on residential areas and other sensitive receptors, such as hospitals, day-care centers, and schools warrant the closest scrutiny; but consideration should also be given to other land use types where people congregate, such as recreational facilities, worksites, and commercial areas. Lead Agencies are encouraged to make a significance determination regarding odors for a project on a case-by-case basis taking into account the parameters described in [Chapter 7, Odors](#).

2.5.6 CUMULATIVE IMPACTS

Cumulative impacts refer to the incremental effect of several projects that may have an individually minor, but collectively significant, impact on air quality. All

new development in Sacramento County that results in an increase in air pollutant emissions above those assumed in regional air quality plans contributes to cumulative air quality impacts. [Chapter 8, Cumulative Air Quality Impacts](#), provides guidance for identifying when an individual project's increase in air pollutant emissions is cumulatively considerable.

2.6 PROJECT SCREENING

In some cases the Lead Agency may know that a project requires an EIR as the appropriate environmental document. In such cases, the Lead Agency may forgo preparing an Initial Study and immediately begin preparing an EIR. In many cases, however, the Lead Agency will need to prepare an Initial Study to determine whether any of the thresholds of significance discussed above would be exceeded.

Project screening may provide an indication of whether a project will exceed the construction or operational mass emission thresholds. The Lead Agency may consult the [Construction NOx Screening Table](#) and the [Operational Screening Table](#) to assist them in this effort. The screening tables provide sizes for land use types which, based on default assumptions, are likely to result in emissions exceeding the District's threshold of significance for ozone precursor pollutants. Lead Agency planners, project proponents and consultants are encouraged to refer to [Chapters 3](#) and [4](#) of this Guide to confirm the applicability of the screening tables when determining project significance under CEQA or NEPA.

The Lead Agency should note that the screening tables do not address all thresholds of significance. Other air quality issues, such as CO concentrations, odors, toxics, greenhouse gases and cumulative impacts, must be considered when evaluating a project's potential for causing adverse air quality impacts. Depending on the nature of the project and local conditions, a project below the values in the screening tables could still cause an adverse air quality impact. Project proponents, consultants, and Lead Agency planners are strongly encouraged to verify the accuracy of a project's air quality analysis and findings by consulting with the District prior to its official acceptance by the Lead Agency.