

CEQA

AIR QUALITY HANDBOOK

*Guidelines for the Implementation of the
California Environmental Quality Act of 1970, as amended*



As Amended by

**Imperial County Air Pollution Control District
150 South Ninth Street
El Centro, California**

**Final
December 12, 2017**



TRANSMITTAL RECORD

- Imperial County Planning/Building Department**
- City of Brawley – City Planner**
- City of Calexico – Acting Planning Director**
- City of Calipatria – City Manager**
- City of El Centro – Acting Planning Director**
- City of Holtville – Public Works Manager**
- City of Imperial – City Manager**
- City of Westmorland – Planning**
- Building Industry Association (BIA) – Imperial Area Coordinator**
- Advisory Board Members**

- City of Brawley**
- City of Calexico**
- City of Calipatria**
- City of El Centro**
- City of Holtville**
- City of Imperial**
- City of Westmorland**
- County Counsel**

1. Purpose

The Guidelines for the implementation of the California Environmental Quality Act (CEQA) section 15022 states, “[e]ach public agency shall adopt objectives, criteria, and specific procedures consistent with CEQA and these Guidelines for administering its responsibilities under CEQA...”¹ Thus, this guidance document shall serve to fulfill the Imperial County Air Pollution Control District’s (ICAPCD) obligation under CEQA². In addition, the objectives, criteria and specific procedures, henceforth known as protocol, are intended to serve as guidance and are not intended to replace the authority or requirements of CEQA or its Guidelines. In the event that any of the following protocol conflicts with the provisions of CEQA or its Guidelines, the provisions of CEQA or its Guidelines shall control.

As stated above the intent of this document is to develop and adopt protocol for the ICAPCD. This protocol has been created to serve as a guidance tool in assisting Lead Agencies, consultants, ICAPCD staff, and project proponents with uniform procedures, which are designed to help assess any potential air quality impacts from residential, commercial, and industrial developments during the environmental review process. The protocol is designed to give local, public and government agencies specific guidelines that identify when an air quality analysis is necessary, the type of analysis that should be performed, the level of significance of the impacts predicted by the analysis, and the mitigation measures needed to eliminate or reduce the overall air quality impacts. Because CEQA establishes a “duty” upon public agencies to minimize or avoid environmental damage where feasible the ultimate outcome of any analysis should be the development and implementation of mitigation measures.³ In order to properly determine and implement mitigation measures the preparation of an air quality analysis resulting from an environmental document must be consistent with the rules and regulations governing the ICAPCD and those found within the guidelines of CEQA. This handbook strives to provide guidance for the accurate and consistent evaluation of the potential air quality impacts created by plans and development proposals. Therefore, it is understood that when a proper air quality analysis is evaluated it will necessarily help identify mitigation measures, which will reduce or eliminate adverse and significant impacts. The reduction of such adverse impacts will improve ambient concentrations, which ultimately will improve air quality in Imperial County.

¹ The California Environmental Quality Act (Division 13, Public Resources Code, (PRC), 21000 et. seq.) as adopted by the State Legislature and as may be amended by Legislative Act and now contained in Title 14, Chapter 3 of the California Administrative Code, now cited as the CALIFORNIA CODE OF REGULATIONS (CCR) (commencing with Section 15000).

² Throughout this document the term ICAPCD refers to the Imperial County Air Pollution Control District.

³ CEQA Guidelines §15021

2. Introduction

Clean air is vital to the health and welfare of every citizen of this country. The residents of Imperial County have an inherent right to clean air. To answer the call of improving and maintaining clean air, the legislature has given local ICAPCD regional authority over the control of air pollution from all sources other than emissions from motor vehicles. The ICAPCD has regulatory control over all stationary sources of air contaminants. These stationary sources are divided into point sources, such as factories, geothermal plants and rock quarries, and indirect sources, such as paved and unpaved roads, open areas and construction projects. These types of sources tend to have emissions that fit a generalized category and are considerably too small to warrant permitting. Generally, point sources of air contaminants are required to obtain specific operational permits from the ICAPCD while indirect sources are exempt. Indirect sources are facilities as well as land uses which do not emit a significant amount of pollution on their own but rather attract or generate motor vehicle trips which result in emissions of ozone precursors (VOC's, ROG, NOx), carbon monoxide (CO) and fine particulate matter (PM₁₀ & PM_{2.5}).⁴

With the enactment of CEQA in 1970 the California Legislature required public agencies to consider and to disclose the environmental effects of their decisions to the public and governmental decision-makers. As an integral part of the disclosure requirements, CEQA mandates the implementation of feasible mitigation measures or alternatives so as to mitigate significant adverse impacts to the environment. Generally, CEQA address's a broad range of environmental issues, including water quality, noise, land use, natural resources, transportation, energy, human health and air quality. The specific legislative tool for the implementation of CEQA is the CEQA Guidelines adopted by the Office of Planning and Research in the Governor's Office. These Guidelines apply statewide and they govern the assessment, disclosure and review of all environmental impacts that may result from proposed projects.

This handbook has been designed to provide the Lead Agency, the Environmental Evaluation Committee (EEC) members, ICAPCD staff, other public agencies and project proponents with specific guidelines that identify when an air quality analysis is necessary, the type of analysis that should be performed, the significance of the impacts predicted by the analysis, and the mitigation measures needed to reduce the overall air quality impacts. The ICAPCD's handbook is solely an air quality guidance document. To address the overall general CEQA process, the Lead Agency, EEC members, ICAPCD staff, other public agencies and project proponents should follow the appropriately adopted CEQA document for each municipality. For those projects and public departments which fall under the jurisdiction of Imperial County the Planning and Development Services

⁴ Health & Safety Code §40716 gives ICAPCDs authority over indirect or area sources of air contaminants

Department's guidance manual entitled "Rules and Regulations to Implement California Environmental Quality Act (CEQA) as Amended" should be followed.

3. Role of the ICAPCD within the CEQA Process

Under CEQA, the ICAPCD may act as a Lead Agency, a Responsible Agency or a Reviewing Agency.

Lead Agency: A Lead Agency normally is the agency with general discretionary governmental powers, such as a city or county⁵. That is, if a government agency – city or county – has jurisdiction over discretionary land use permits then that agency will be the preferred Lead Agency⁶. For example, the Imperial County Department of Planning & Development Services has jurisdiction over zoning and as such is typically the lead agency for all residential, commercial and industrial development projects proposed within Imperial County⁷. The ICAPCD will undertake the Lead Agency role when a project requires an ICAPCD permit and no other agency has prepared or will prepare a CEQA document for that project.⁸

A Lead Agency is responsible for compliance with CEQA by ensuring that the potential environmental impacts associated with a proposed project are adequately assessed. The assessment is comprised of several determinations, which includes, but is not limited to, exempting a project from CEQA and for those projects deemed nonexempt, preparing a Negative Declaration (ND), a Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR). Because CEQA grants the Lead Agency full discretionary authority to determine the type of environmental document to be prepared, CEQA included a requirement that Lead Agencies consult with and solicit comments from responsible and reviewing agencies during the preparation of environmental documents.⁹

⁵ CEQA Guidelines section 15051 (b) (1)

⁶ Discretionary land use permits include but are not limited to conditional use permits, tentative maps and Specific Plans.

⁷ According to the "Rules and Regulations to Implement CEQA Rules" adopted by the Planning & Development Services Department the Planning/Building Department is designated as the principal "Lead Agency" Department for the County with respect to the CEQA compliance, of projects.

⁸The regulations found in the "Rules and Regulations to Implement CEQA Rules" adopted by the Planning & Development Services Department shall be applicable to all County Department(s) that have responsibilities under CEQA as either a "Lead Agency" or a "Responsible Agency".

⁹ CEQA Guidelines §15050 (c). In addition, Environmental documents include but are not limited to an Initial Study, a ND, and Mitigated ND or any of the many types of EIR's.

Responsible Agency: A Responsible Agency is a public agency, other than the Lead Agency, which has responsibility for carrying out or approving a project.¹⁰ The power to approve a project has been defined as a discretionary approval power.¹¹ Therefore, the ICAPCD is a Responsible Agency for projects or portions of a project that require an ICAPCD permit or that require any other approval by the ICAPCD. For example, a project under the jurisdiction of the Imperial County will submit an Initial Study to the EEC for review. Here, the ICAPCD is considered a Responsible Agency because it is a member of the EEC. However, the EEC as a body will determine, by vote, whether an EIR, Mitigated ND, or ND is required for the project and will cause the appropriate document to be prepared. Similarly, the ICAPCD has discretionary permitting approval power. Under this capacity, the ICAPCD may coordinate the environmental review process with the ICAPCD's permitting process. While the Lead Agency considers all the potential impacts of a project, the Responsible Agency only considers those aspects that are within the agency's expertise or that require any other approval by the ICAPCD. Under this capacity, the ICAPCD will review and comment to the Lead Agency where the deficiencies lie in the air quality analysis and provide suggestions as to the feasible mitigation measures.

Reviewing Agency: Under CEQA, when an agency is neither a Lead Agency nor a Responsible Agency but has jurisdiction by law with respect to the project or is a Trustee agency over a particular natural resource, that agency is said to have reviewing power over the proposed project.¹² As a Reviewing Agency, the ICAPCD serves as an advisory agency to the Lead Agency. The ICAPCD comments on the adequacy of the air quality analysis, helps to identify a project's impact on air quality and recommends any potential mitigation measures for Lead Agency consideration. In addition, the ICAPCD may comment on other sections of the environmental document, such as traffic, which are related to the impacts on air quality. In any event, a final review by the ICAPCD will include an identification of any deficiencies in the air quality analysis and the recommendation of feasible mitigation measures.

In all cases, the primary concern of the ICAPCD is air quality improvement and maintenance. The ICAPCD provides guidance primarily to mitigate adverse impacts to air quality from development projects within the Imperial County. For most urban development proposals, this typically involves projects where the vehicle trip generation is enough to potentially cause high emission levels, which may hinder the ICAPCD's efforts in attaining and maintaining the Federal and State ambient air quality standards.

¹⁰ Public Resources Code §21069

¹¹ CEQA Guidelines §15381

¹² CEQA Guidelines §15086

4. Thresholds of Significance

Under CEQA, each public agency is encouraged to develop and publish thresholds of significance. These thresholds of significance should be an identifiable quantitative, qualitative or performance level of a particular environmental effect; the noncompliance with would mean the effect would normally be significant while compliance with would mean the effect would normally be less than significant.¹³

Generally, a project proponent must submit a preliminary application to an appropriate Lead Agency for a preliminary review. The discretionary authority granted to Lead Agencies during the preliminary review process is found in CEQA. According to the CEQA guidelines, if during the preliminary review process the Lead Agency can clearly determine that an EIR is required the Lead Agency may, under its discretionary powers, skip further preliminary review and begin work directly on the EIR process¹⁴. In any case, CEQA grants to the Lead Agency the complete discretionary power to determine the type of environmental document, which will be prepared for a proposed project.

Under most circumstances, upon completion of the preliminary review, an Initial Study is conducted to identify any significant environmental impacts created by the proposed project.¹⁵ The Initial Study should analyze all phases of a proposed project that includes construction and operation as well as cumulative impacts. When the air quality evaluation of an Initial Study identifies no potential significant air quality impacts or a less than significant impact then the Lead Agency may decide to adopt a ND¹⁶. However, when the air quality evaluation of an Initial Study identifies potentially significant air quality impacts then further environmental review is required. Lead Agencies and project proponents are encouraged to utilize computer tools, such as, CalEEMod to analyze direct and indirect sources of emissions. Such a review may result in the development of a Mitigated ND or an EIR. An EIR will require the project proponent to evaluate the identified adverse air quality impacts through the process of a Comprehensive Air Quality Analysis Report.

CEQA requires full disclosure of all the potential air pollutants and/or toxic air emissions from a project. As stated above, the air quality analysis conducted during the Initial Study phase, should help to identify these potential emissions. Typically, the Initial Study is in

¹³ CEQA Guidelines §15064.7

¹⁴Found in Article 5 section 15060 (d) of the CEQA guidelines.

¹⁵ CEQA Guidelines §15063 (c) (5) provides that an initial study provide "...documentation of the factual basis for the finding.." and §15063 (d) (3) provides "that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries."

¹⁶ Before the release of the ND the Lead Agency must determine that there is no substantial evidence, in light of the whole record before the agency, that the project without mitigation may have a potentially significant impact on air quality.

the form of an “Environmental Checklist.”¹⁷ CEQA included criteria in the “Environmental Checklist Form,” where by a project will be deemed to have a “potentially significant impact” on air quality if it:

- a) Conflict[s] with or obstruct[s] implementation of the applicable air quality plan.
- b) Violate any air quality standard or contribute to an existing or projected air quality violation.
- c) 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.)
- d) Expose the public (especially schools, day care centers, hospitals, retirement homes, convalescence facilities and residences) to substantial pollutant concentrations.
- e) Create objectionable odors affecting a substantial number of people.

Similarly, the ICAPCD has established significance thresholds to assist Lead Agencies in determining whether a proposed project may have a significant air quality impact. Therefore, projects whose emissions are expected to meet or exceed the thresholds of significance for the operational phases of a project will be deemed to have a potentially significant adverse impact on air quality. Another tool available for Lead Agencies and project proponents is the use of project screening, discussed below.

It is not the intent of this guidance handbook, including the thresholds or procedures found therein, to apply to projects, which are specifically exempt within the CEQA Guideline, Sections 15260-15285 (Statutory Exemptions) and 15300-15332 (Categorical Exemptions).

4.1 Thresholds of Significance for Project Operations

In order to assist Lead Agencies in making a determination on the type of environmental document to prepare, this section, provides quantitative criteria in the form of thresholds to help in the assessment of the environmental impacts. When the preliminary analysis of a project indicates that the proposed project may potentially be near the thresholds identified below, the Lead Agency may consider the project as having a potentially significant impact. Please refer to section 4.2 Screening Criteria for Project Impacts for further information. However, further analysis would then be required to help identify the level of emissions and the subsequent level of impact. In addition, the emission analysis should explore any mitigating characteristics of the project or site which should help the

¹⁷ CEQA Guidelines Appendix G

Lead Agency identify any feasible mitigation measures. That is, an Initial Study should analyze all phases of a development project including, operational (long-term) and cumulative impacts so as to determine the level of significance.¹⁸ As mentioned above, when the air quality impacts of a project are found to be insignificant then a Lead Agency may determine that a ND is appropriate. However, when the air quality impacts of a project are considered significant because one or more of the thresholds are met or exceeded then a determination by the Lead Agency of either a Mitigated ND or an EIR may be made.¹⁹

Because the operational phase of a proposed project has the potential of creating lasting or long term impacts on Air Quality, it is important that a proposed development evaluate the potential impacts carefully. Therefore, the results of an initial study should compare all operational emissions of a project, including motor vehicle, area source and stationary or point sources to the thresholds in Table 1 below. Table 1 provides general guidelines for determining the significance of impacts and the recommended type of environmental analysis required based on the total emissions that are expected from the operational phase of a project. For industrial development projects, the thresholds in Table 1 should be used only to determine significance of the impact from mobile source emissions attracted to the stationary source. Therefore, Table 1 would not be used to determine significance for the air emissions associated with the stationary source, including off-road mobile emissions produced within the stationary source. Those stationary source emissions are already subject to mitigation according to Rule 207, New and Modified Stationary Source Review and Rule 201 and must therefore be excluded. However, the Lead Agency has the authority to request a comprehensive air quality analysis or an EIR to address the impact of the stationary source regardless of the threshold in table 1, according to CEQA guidelines.

¹⁸ CEQA Guidelines §15063 and §15064

¹⁹ An MND is appropriate when impacts can be made insignificant due to the imposition of mitigation measures.

Table 1, Thresholds of Significance for Project Operations

Pollutant	Tier I	Tier II
NOx and ROG	Less than 137 lbs/day	137 lbs/day and greater
PM₁₀ and SOx	Less than 150 lbs/day	150 lbs and greater
CO and PM_{2.5}	Less than 550 lbs/day	550 lbs/day and greater
Level of Significance	Less Than Significant	Significant Impact
Level of Analysis	Initial Study	Comprehensive Air Quality Analysis Report
Environmental Document	Negative Declaration	Mitigated ND or EIR

Tier I. Less than 137 lbs/day of NOx or ROG; less than 150 lbs/day of PM₁₀ or SOx; or less than 550 lbs/day of CO or PM_{2.5}

Any proposed residential, commercial, or industrial development with a potential to emit less than 137 lbs/day of NOx or ROG; less than 150 lbs/day of PM₁₀ or SOx; or less than 550 lbs/day of CO or PM_{2.5} may potentially have an adverse impact on local air quality. From the ICAPCD’s perspective residential, commercial and industrial developments with a potential to emit below this level will **not** be required to develop a Comprehensive Air Quality Analysis Report or an EIR. However, an Initial Study would be required to help the Lead Agency determine whether the project would have a less than significant impact. It must be mentioned that the determination of a “less than significant” impact is distinguished from a “no impact” determination in that the air quality analysis conducted during the Initial Study would reveal that the operational phase of a proposed project would in fact have a potential air quality impact which would not meet the established thresholds for the operational phase. A “no impact” determination would arise when the air quality analysis conducted during the Initial Study would reveal no potential air quality impacts. Further, in keeping with the requirements of CEQA and as a point of clarification, a “No Impact” determination must be “adequately supported by the information sources a Lead Agency cites.”²⁰

In any case, the Lead Agency is required by CEQA to disclose the identified environmental effects and the ways in which the environmental effects will be mitigated to achieve a level of less than significant. **To achieve a level of insignificance the Lead Agency should require the implementation of all feasible standard mitigation measures listed in Section 7.2.**²¹ It is important to note that the measures identified in Section 7.2

²⁰ CEQA Guidelines Appendix G “Environmental Checklist Form.”

²¹ CEQA Guidelines §15364 states: “Feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

do not represent a comprehensive list of all mitigation measures. Alternative mitigation measures may be proposed by the project proponent, the Lead Agency or the ICAPCD. The ICAPCD requires that alternative mitigation measures be fully documented with a copy of the documentation attached to the Initial Study. In addition, for some residential and commercial development projects, the developer may be required to implement off-site mitigation measures in order to further reduce the air quality impacts. All residential and commercial projects are required to abide by off-site mitigation requirements under section 7.4

Tier II. 137 lbs/day or greater of NO_x or ROG; 150 lbs/day or greater of PM₁₀ or SO_x; or 550 lbs/day or greater of CO or PM_{2.5}

Any proposed residential, commercial, or industrial development with a potential to meet or exceed the 137 lbs/day of NO_x or ROG; 150 lbs/day of PM₁₀ or SO_x; or 550 lbs/day of CO or PM_{2.5} is considered to have a significant impact on regional and local air quality. ***Therefore, Tier II projects are required to implement all standard mitigation measures as well as all feasible discretionary mitigation measures. These measures must be listed and incorporated into the environmental document, which is prepared by the Lead Agency.*** Typically, Tier II projects are required, by the Lead Agency, to prepare an EIR however, should a Lead Agency exempt a project from the development of an EIR **the ICAPCD requires, at a minimum, a Comprehensive Air Quality Analysis Report.** A properly developed Comprehensive Air Quality analysis Report will identify the significant air quality impacts and the required mitigation measures associated with the project. Please refer to Section 6 of this handbook for a discussion on the requirements of a Comprehensive Air Quality Analysis Report. A menu of standard and discretionary mitigation measures are listed in Sections 7.2 and 7.3. These mitigation measures serve to provide the project proponent with feasible measures to help reduce the air quality impacts identified in the Comprehensive Air Quality Analysis Report. In addition, residential, commercial and industrial development projects may be required to implement off-site mitigation measures in order to further reduce the air quality impacts. All residential, commercial and industrial projects are required to abide by off-site mitigation requirements under Section 7.4

4.2 Construction Emissions for Tier I Projects

It is not uncommon for construction related emissions, which are generally temporary in nature, to have a temporary adverse impact on air quality. Construction, by its very nature may produce a variety of emissions however particulate matter (PM₁₀) is the pollutant of greatest concern. Past experience has shown that the emissions from construction can cause substantial increases in localized concentrations of PM₁₀. The most common

activities associated with construction involve site preparation, earthmoving activities and general construction. These activities include, but are not limited to, demolition, grading, excavation, cut and fill operations, trenching, soil compaction, land clearing, grubbing and the addition of improvements such as roadway surfaces, structures and facilities. These common construction activities generate emissions from:

1. Fuel combustion from mobile heavy-duty diesel and gasoline powered equipment.
2. Portable auxiliary equipment
3. Worker commuter trips
4. Fugitive dust from soil disturbance.

While construction PM₁₀ emissions can vary greatly depending on the phase of the construction, level of activity and other factors, there are feasible mitigation or control measures, which can be reasonably implemented to significantly reduce PM₁₀ emissions. Because particulate emissions from construction activities have the potential of leading to adverse health effects as well as nuisance concerns, such as reduced visibility, all projects are required to mitigate construction impacts by regulation. Section 7.1 represents a summary of standard mitigation measures for the control PM₁₀ as adopted by the ICAPCD in a set of rules, collectively known as Regulation VIII. Another source of construction related emissions comes from the use of diesel powered construction equipment which has been known to produce ozone precursor emissions and combustion related particulate emissions. To help projects address these emissions Section 7.1 also includes standard mitigation measures for construction equipment.

The approach of the CEQA analyses for construction particulate matter impacts should be qualitative as opposed to quantitative (Tier II projects please refer to Section 6). While a Lead Agency may elect to quantify construction emissions, the ICAPCD recommends the implementation of effective and comprehensive mitigation measures as found in Section 7.1. ***In any case, regardless of the size of the project, the standard mitigation measures for construction equipment and fugitive PM₁₀ must be implemented at all construction sites. The implementation of discretionary mitigation measures, as listed in Section 7.1, apply to those construction sites which are 5 acres or more for non-residential developments or 10 acres or more in size for residential developments.*** The mitigation measures found in Section 7.1 are intended to be a menu of feasible mitigation measures they are not intended to be an all inclusive comprehensive list of all mitigation measures. Alternatives may be proposed by the Lead Agency, a Developer or the ICAPCD however, the alternatives must produce the same level of mitigation. In addition, the ICAPCD requires documentation of all alternative mitigation measures and a copy of the documentation should be attached to the Initial Study.

4.3 Screening Criteria for Project Impacts

During the preliminary analysis of a project, the Lead Agency may utilize the project screening criteria as a simple indication of whether a proposed project may meet or exceed the operational thresholds found in Section 4.1. That is, Table 2 may serve as an indicator to the Lead Agency of any further analysis, which may be required, such as an initial study and/or a Comprehensive Air Quality Analysis Report. However, the Lead Agency should note that Table 2 is not intended to be comprehensive but rather a guiding tool.²² Should Table 2 indicate that the proposed project may potentially exceed the operational thresholds then the Lead Agency has discretionary authority to require either a Comprehensive Air Quality Analysis Report or an EIR. The criteria used to evaluate air emissions associated with residential and commercial projects is based primarily on the combustion emissions generated by motor vehicles and area source emissions (paved and unpaved roads, construction projects, open areas, etc.) The CalEEMod model was used to evaluate the emissions associated with these projects²³. The following list is not comprehensive and should be used as general guidance only. As mentioned above, the Lead Agency is encouraged to develop a more refined analysis of the air quality impacts that are specific to a particular project, especially for those proposed projects, which exceed the screening thresholds. The latest CalEEMod model is recommended for use in the evaluation of air quality impacts.

Consultation between the Lead Agency and the ICAPCD is strongly recommended for those development projects, which are not represented in Table 2. Some examples of the type of projects which are not represented are General plans, Specific Plans and/or Enterprise Zones. For mixed use projects, it is strongly recommended by the ICAPCD that these types of projects perform a CalEEMod model on the whole of the project comparing the results to the thresholds found in Table 1. In any event, the intent of the consultation is to provide the Lead Agency with helpful information on the applicability of a Comprehensive Air Quality Analysis Report or an EIR on proposed projects.

²² There are other air quality issues, such as high CO concentrations, odors, toxics and cumulative impacts, which must be considered when evaluating a project's potential for causing adverse air quality impacts.

²³ CalEEMod is a planning tool for estimating vehicle travel, fuel use and resulting emissions related to land use projects. The model is used to calculate emissions of ROG, CO, NOX and PM10 from vehicle use associated with specific construction developments.

Table 2, Screening Criteria for Project Air Quality Impacts

Land Use	Units of Measure	Trip Generation Rate⁽¹⁾	Project Size which Would Generate Air Emissions Greater than the Threshold Limit⁽²⁾
Single Family	Dwelling Unit	9.57	825 Units
Apartments Mid Rise	Dwelling Unit	5.76	1,700 Units
Condominiums General	Dwelling Unit	6.90	1,650 Units
Condominiums High Rise	Dwelling Unit	5.26	1,650 Units
Mobile Home Park	Dwelling Unit	4.99	2,300 Units
Convenience Market (24 hour)	1,000 sq ft	737.99	20,500 sq ft
Convenience Market w/gas pumps	1,000 sq ft	845.60	14,500 sq ft
Supermarket	1,000 sq ft	102.24	78,000 sq ft
Warehouse	1,000 sq ft	2.59	660,000 sq ft (90% HHD, 5% LDA, 5% LDT1)

Source: CalEEMod, version 2016.3.2-programmed by Trinity using Microsoft SQL Compact Edition in conjunction with a Visual Basic Graphical User interface (GUI)

(1) Trip generation rates in this table are from the Institute of Transportation Engineers (ITE) Trip Generation Rate Tables

(2) Emissions are defined as NO_x, ROG, CO or PM₁₀

4.4 Consistency with the Most Recent Clean Air Plan for Imperial County

Within the CEQA guidelines, Section 15125 (d) requires that an EIR discuss consistency between the proposed project and the applicable regional plans. Section 6 of this handbook, similarly, requires that a Comprehensive Air Quality Analysis Report discuss the consistency between the proposed project and the most recent regional plans. A consistency analysis with the Clean Air Plans is required for large residential developments and large commercial developments which are required to develop an EIR and/or a Comprehensive Air Quality Analysis Report. The EIR and/or a Comprehensive Air Quality Analysis Report of a proposed project should demonstrate compliance with the most recent ozone Air Quality Attainment Plan (AQAP) and PM₁₀ State Implementation Plan (SIP). The EIR and/or a Comprehensive Air Quality Analysis Report of a proposed project should also demonstrate compliance not only with the Imperial County Rules and Regulations but also those of the State and Federal Regulations.

4.5 Comparison of Predicted Ambient Pollutant Concentrations to State and Federal Air Quality Standards.

To help protect the public health and welfare, the State and Federal governments established Ambient Air Quality Standards for certain pollutants, known as criteria pollutants. When a large residential and/or commercial project is deemed to have the potential to cause an exceedance of the Ambient Air Quality Standards an ICAPCD air

quality dispersion model may be required. A project is considered to have a significant impact if the emissions associated with the project are predicted to cause or contribute to a violation of any Ambient Air Quality Standard. The petitioner should identify in the EIR or the Comprehensive Air Quality Analysis Report any on-site and off-site control measures which reduce the concentration of air emissions below the Ambient Air Quality Standards.

4.6 Special Conditions

Project impacts may also be considered significant if one or more of the following special conditions apply:

- a. Development projects which locate in close proximity to already existing industrial type operations which have the potential to emit toxic or hazardous air pollutants, even at a very low level of emissions, may be considered significant because of the increased cancer risk to the in coming population. This is also true of development projects which have the potential to emit toxic or hazardous air pollutants and are located in close proximity to sensitive receptors. Such projects may be required to prepare a health risk assessment to determine the potential level of risk associated with the operation. The ICAPCD should be consulted on any project with the potential to emit toxic or hazardous air pollutants. In addition, pursuant to the requirements of California Health and Safety Code 42301.6 (AB 3205) and Public Resources Code Section 21151.8, subdivision (a)(2), any proposed industrial or commercial project site located within 1000 feet of a school must be referred to the ICAPCD for review.
- b. If a determination is made that a development project has the potential to cause a nuisance problem which impacts a considerable number of people, the project may be considered as having a significant effect. There are projects that may emit pollutants in concentrations that would not otherwise be significant except as a nuisance, as an example projects which emit hydrogen sulfide.

If a project is proposed within the screening level distance in Table 3, the ICAPCD should be contacted for information regarding potential odor problems. For projects that involve new receptors located near an existing odor source(s), a public information reviewing request should be submitted to the ICAPCD for a review of any existing odor complaints and for the nearest odor emitting facility(ies).

Table 3, Project Screening Distances for Potential Odor Sources

Type of Operation	Project Screening Distance
Wastewater Treatment Plant	1 mile
Sanitary Landfill	1 mile
Composting Station	1 mile
Feedlot	1 mile
Asphalt Plant	1 mile
Painting/Coating Operations (auto body shops)	1 mile
Rendering Plant	1 mile

5. Methods for Calculating Project Emissions

Air pollutant emissions from an urban development can derive from a variety of sources, including, but not limited to, motor vehicles, natural gas use, electric energy use, combustion-powered utility equipment, paints and solvents, equipment or operations used by various commercial and industrial facilities, construction and demolition equipment and operations, as well as various other sources. The amount and type of emissions produced, and their potential to cause significant impacts, depends on the type and level of development proposed. The following sections describe the recommended methods generally used to calculate emissions from residential and commercial projects.

5.1 Motor Vehicle Emissions

Motor vehicles are the primary source of long-term emissions caused by residential and commercial land uses. These land uses often do not directly emit significant amounts of air pollutants, but cause or attract motor vehicle trips that do produce emissions. Such land uses are referred to as indirect sources.

Motor vehicle emissions associated with indirect sources should be calculated for projects, which exceed the screening criteria listed in Table 2, Screening Criteria for Project Air Quality Impacts. Calculations should be based on the most recent vehicle emission factors (EMFAC series) provided by the California Air Resources Board (CARB), and trip generation factors published by the Institute of Transportation Engineers (ITE). These factors have been incorporated into a simple computer model called CalEEMod. CalEEMod incorporates the EMFAC emission factors and ITE trip rates.

CalEEMod is a planning tool for estimating vehicle travel, fuel use and resulting emissions related to land use projects. The model calculates emissions of ROG, CO, NOX and PM10 from vehicle use associated with new or modified development such as shopping centers, housing, commercial services and industrial land uses. CalEEMod allows users to compare motor vehicle emissions as a function of the number of vehicle trips associated with a given land use and the vehicle miles traveled for each particular type of trip taken. The calculated emissions can then be used as a basis for project screening.

User-specific inputs to the model include project type, year, season, trip speed and other parameters. The default values should be used when no other project specific information is available. If different values are used, justification and documentation for the inputs should be provided on the appropriate document.

The ICAPCD recommends using the most recent version of CalEEMod and the corresponding version of EMFAC. A link to the most recent version of CalEEMod can be accessed from the California Air Pollution Control Officers Association (CAPCOA) website at www.capcoa.org or at www.caleemod.com. As an alternative, the petitioner may choose to manually evaluate the air emissions associated with a particular project.

A thorough emissions analysis should be performed on all relevant emission sources, using emission factors from EPA document AP-42 "Compliance of Air Pollutant Emission Factors", the latest version of EMFAC, or other approved source(s). The emission analysis should include calculations for estimated emissions of all criteria pollutants and toxic substances released from the project. Documentation of emission factors and all assumptions should be provided.

6. Air Quality Analysis

This section is intended to help project proponents understand the application of an Air Quality Analysis. Typically, during the initial study portion of a proposed project a preliminary Air Quality Analysis, such as CalEEMod, is conducted to help reveal potential air quality impacts. When indications of the analysis demonstrates that a project may potentially have significant impacts then further review is required to identify those impacts and to determine the appropriate mitigation measures. As mentioned before a Lead Agency has the discretionary authority to determine the type of environmental documentation which is required. There is a distinction; the Lead Agency may only require a Comprehensive Air Quality Analysis Report as opposed to an EIR. However, even when a Lead Agency does not require an EIR and the proposed project either meets or exceeds those significance criteria mentioned above a Comprehensive Air Quality Analysis Report

is still required. For all other projects, a preliminary Air Quality Analysis such as an initial study with CalEEMod is sufficient enough to identify potential impacts and their respective mitigation measures.

6.1 Comprehensive Air Quality Analysis Report

A Comprehensive Air Quality Analysis Report should address the air quality impacts from both the construction and operational phases of a proposed project. The analysis should include, at a minimum, all of the following:

- a. A description of the existing air quality and related emissions within the impacted area, including the attainment status of the ICAPCD relative to State and Federal air quality standards and any existing regulatory restrictions to development. Included should be data from the closest air quality monitoring station(s) to the project site. The most recent Clean Air Plans should be consulted for applicable information.
- b. A description of criteria and toxic air pollutants emitted from the project and their primary health impacts. The description shall include short and long term health effects from exposure of elevated levels of these pollutants. As well as, a description of the impact upon encroaching development from the emissions of toxic and criteria pollutants from existing facilities. In addition, this section shall describe how increase's in these pollutants impact the health of any susceptible group.
- c. A thorough emission analysis should be performed on all relevant emission sources using the latest version of CalEEMod or other ICAPCD approved source(s). The emission analysis should include calculations for estimated emissions of all criteria pollutants and toxic substances released from the anticipated land mix on a daily and yearly basis. Documentation of emission factors and all assumptions (i.e. anticipated land uses, average daily trip rates from generation studies, etc) should be provided as an appendix to the Comprehensive Air Quality Analysis Report.
- d. The Comprehensive Air Quality Analysis Report should include a range of alternatives to the proposed project that could effectively minimize air quality impacts, if feasible. A thorough emissions analysis should be conducted for each of the proposed alternatives identified. The project proponent and/or interested parties should contact the ICAPCD if additional information and guidance is required. All calculations and assumptions used should be fully documented as an appendix to the Comprehensive Air Quality Analysis Report.

- e. For those projects with a potential to generate heavy volumes of traffic and which can lead to high levels of CO, hot spot modeling should be used to determine compliance with the state CO standard at the intersections and/or roadway links that are considered most impacted by the proposed project. The “hot spots” should be determined according to the traffic impact analysis. One of the most common models is CALINE4, developed by and available from the California Department of Transportation; however, any other ICAPCD approved hot spot model can be used. If determinative results from the air modeling indicate a significant impact, mitigation measures must be identified and incorporated into the appropriate environmental document. The effectiveness of any proposed mitigation measure(s) should be quantified by estimating the effects of the measure(s) on the volume of traffic and/or speeds, and CO concentrations.
- f. The Comprehensive Air Quality Analysis Report should include a section describing the cumulative impacts from all identified existing and proposed future projects. Under CEQA “cumulative impacts” refers to two or more individual effects which when considered together are considerable or which compound or increase other environmental impacts. CEQA also explains that any cumulative impact analysis should consider the incremental impact of a project added to other closely related past, present and reasonably foreseeable probable future projects.²⁴ Lead Agencies should utilize the threshold limits in Section 4. In addition, any cumulative CO analysis should be accounted for in a CO hotspot analysis described above.
- g. The Comprehensive Air Quality Analysis Report should include an evaluation of the projects consistency with the Clean Air Plan and applicable ICAPCD Rules and Regulations.
- h. Mitigation measures should be recommended, as appropriate, following the guidelines of this handbook.
- i. Construction Emission Analysis

As mentioned previously, construction-related emissions are generally short-term in duration, but may still cause temporary adverse air quality impacts. In some cases, the emissions from construction represent the largest air quality impact associated with a given project. The most common activities associated with construction involve site preparation, earthmoving activities and general construction. These activities include but are not limited to, demolition, grading, excavation, cut and fill operations, trenching, soil compaction, land clearing, grubbing and the addition of improvements

²⁴ CEQA Guidelines section 15355

such as roadway surfaces, structures and facilities. These common construction activities generate emissions from

1. Fuel combustion from mobile heavy-duty diesel and gasoline powered equipment.
2. Portable auxiliary equipment
3. Worker commuter trips
4. Fugitive dust from soil disturbance.

The types of pollution that construction activities can generate include PM₁₀, ROG, NO_x, CO and possibly air toxics. However, with respect to general construction activities, PM₁₀ is the pollutant of greatest concern. Construction related PM₁₀ emissions can cause a substantial increase in localized concentrations, which under certain circumstances can contribute to violations of the state and federal ambient air quality standards. As such, the Imperial County adopted Regulation VIII, which contains a variety of feasible fugitive dust control measures to help bring the ICAPCD into compliance with the National Ambient Air Quality Standards (NAAQS). Therefore, implementation of the Regulation and its measures apply to any proposed project regardless of its determined level of significance or size.

The emissions from construction activities, such as fugitive PM₁₀ and exhaust emissions from construction equipment, must be quantified and identified in an EIR or a Comprehensive Air Quality Analysis Report. Table 4 below is intended to serve as a guide for project developers and interested parties in determining the recommended type of mitigation measures.

Table 4, Thresholds of Significance for Construction Activities

Pollutant	Thresholds
PM ₁₀	150 lbs/day
ROG	75 lbs/day
NO _x	100 lbs/day
CO	550 lbs/day

PROJECTS BELOW THE THRESHOLD OF SIGNIFICANCE FOR CONSTRUCTION

For those residential and commercial projects which fall below the level of significance for construction adherence to the most current rules adopted for the control of fugitive dust is mandatory. In addition, the ICAPCD requires the use of the standard mitigation measures for construction equipment and fugitive dust found under Section 7.1 of this

handbook. Please note that the mitigation measures listed are not intended to be all inclusive. Alternative mitigation measures may be proposed either by the project proponent, the Lead Agency or the ICAPCD. In any event, the ICAPCD requires that any alternative mitigation measure be fully documented with a copy of the documentation attached to the Initial study.

PROJECTS GREATER THAN THE THRESHOLD OF SIGNIFICANCE FOR CONSTRUCTION

Residential and commercial projects which are greater than the level of significance for construction may have a significant impact on local and, under certain circumstances, regional air quality. These projects must conduct a construction analysis that appropriately reflects the identified potential construction air quality impacts. In addition, the quantification of construction emissions should be utilized to help define the analysis of a health risk assessment. A health risk assessment requires a diesel exhaust screening level which should be performed in consultation with ICAPCD engineering staff. Projects that are prone to a significant use of heavy-duty diesel equipment and that are within areas prone to human exposure will be required to perform a diesel exhaust screening level. Factors considered by the ICAPCD staff when determining if a screening risk analysis is necessary include the expected emissions from diesel equipment, the location of the project and the distance to sensitive receptors.

In order to help reduce or eliminate construction impacts these projects are required to implement standard, discretionary and enhanced mitigation measures found in Section 7.1 for construction equipment and fugitive PM10. In addition, a health risk assessment as described above is also required.

In order to help Lead Agencies identify feasible mitigation measures for those projects which have been deemed to have a significant environmental impact, a mitigation measures section has been added to this handbook. Section 7, Mitigation Measures, includes a menu of mitigation measures for the construction and operational phases of a project. Subsection 7.1 lists the feasible mitigation measures that are recommended for the construction phase of the project while Subsection 7.2 lists the feasible mitigation measures for the operational phase of a project. Because Section 7 in its entirety does not represent a comprehensive list of all mitigation measures the project proponent or the Lead Agency may propose alternative mitigation measures that are capable of providing the same level of mitigation. The ICAPCD requires documentation of all alternative mitigation measures and a copy of the documentation should be attached to the Initial Study.

In no way does this CEQA handbook absolve or otherwise preclude a project from compliance with any and all appropriate Imperial County Air Pollution Control District Rules and Regulations. All projects are required to comply with applicable ICAPCD rules and regulations. For the construction phase of a project this means that compliance with the requirements of Regulation VIII is absolute.

7. Mitigation Measures

Under CEQA, a Lead Agency must mitigate or avoid significant environmental impacts associated with a proposed project. Projects which have been deemed to have a significant environmental impact must identify feasible mitigation measures or alternatives to reduce the impacts below a level of significance. Thus, an EIR must not only identify significant environmental impacts but the EIR must attempt to mitigate or avoid those significant impacts by implementing feasible mitigation measures. Similarly, a MND should identify mitigation measures and include those measures as part of the project to reduce impacts on air quality to a less than significant. To achieve a level of insignificance, a project must reduce its air quality impacts below the threshold levels indicated in Section 4. In order to help Lead Agencies make proper discretionary judgments regarding the feasibility of the mitigation measures pertaining to air quality the following information is provided.

This section contains a menu of mitigation measures, which may be used by project proponents and local agencies, to mitigate air quality impacts resulting from any proposed project. **By definition an air quality mitigation measure must go beyond already existing requirements and regulations.** Federal, State and local level regulatory programs currently exist to reduce air pollutant emissions from a variety of sources. Even with these regulatory programs additional mitigation measures are needed to supplement and compliment already existing regulations to help eliminate air quality impacts.

7.1 Construction Equipment and Fugitive PM₁₀ Mitigation Measures

Construction emissions, while traditionally temporary in nature, have been known to cause adverse air quality impacts. In fact, in some cases, construction emissions tend to represent the largest portion of the air quality impacts associated with a given project. Emissions resulting from the common activities associated with general construction and construction equipment both contribute to elevated concentrations of PM₁₀, CO and ozone precursor emissions.

Below are a number of fugitive dust mitigation measures, which have been shown to significantly reduce emissions. The following examples are not considered all inclusive. Use of alternative mitigation measures may also be considered if the appropriate documentation is provided.

In no way does compliance with Regulation VIII, Fugitive Dust Control measures alleviate or otherwise preclude a project from compliance with any and all other applicable laws, ordinances, resolutions, rules, statutes or other local, state or federal regulations or requirements.

REGULATION VIII - FUGITIVE DUST CONTROL MEASURES (Most recently adopted)

– All construction sites, regardless of size, must comply with the requirements contained within Regulation VIII. Although compliance with Regulation VIII does not constitute mitigation under the reductions attributed to environmental impacts its main purpose is to reduce the amount of PM₁₀ entrained into the atmosphere as a result of anthropogenic (man-made) fugitive dust sources. Therefore, under all preliminary modeling a presumption is made that all projects are in compliance with Regulation VIII.

Standard Mitigation Measures for Fugitive PM₁₀ Control

- a. All disturbed areas, including Bulk Material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover.
- b. All on site and off site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
- c. All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
- d. The transport of Bulk Materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of Bulk Material. In addition, the cargo compartment of all Haul Trucks is to be cleaned and/or washed at delivery site after removal of Bulk Material.

- e. All Track-Out or Carry-Out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an Urban area.
- f. Movement of Bulk Material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.
- g. The construction of any new Unpaved Road is prohibited within any area with a population of 500 or more unless the road meets the definition of a Temporary Unpaved Road. Any temporary unpaved road shall be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.

In order to provide a greater degree of PM₁₀ reductions, above that required by Regulation VIII, the ICAPCD recommends the following:

Discretionary Mitigation Measures for Fugitive PM₁₀ Control

- a. Water exposed soil with adequate frequency for continued moist soil.
- b. Replace ground cover in disturbed areas as quickly as possible
- c. Automatic sprinkler system installed on all soil piles
- d. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
- e. Develop a trip reduction plan to achieve a 1.5 AVR for construction employees
- f. Implement a shuttle service to and from retail services and food establishments during lunch hours

Although the preceding discussion of construction impacts and mitigation measures are primarily focused on PM₁₀ emissions from fugitive dust sources, Lead Agencies should also seek to reduce emissions from construction equipment exhaust. Because of the availability of new control devices, required in the manufacturing of PM oxidation catalysts and NO_x absorbers, substantial reductions in PM and NO_x emissions from diesel engines is achievable. These new retrofit kits and in some cases new original equipment require the use of ultra low sulfur diesel in order to be effective.

Standard Mitigation Measures for Construction Combustion Equipment

- a. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment.
- b. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- c. Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use
- d. Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set)

To help provide a greater degree of reduction of PM emissions from construction combustion equipment the ICAPCD recommends the following enhanced measures.

Enhanced Mitigation Measures for Construction Equipment

- a. Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways
- b. Implement activity management (e.g. rescheduling activities to reduce short-term impacts)

7.2 Standard Mitigation Measures for Project Operations

These standard air quality mitigation measures have been separated according to land use and mitigation type.

According to Table 1, Tier I, projects generating less than 137 lbs/day of NO_x or ROG; less than 150 lbs/day of PM₁₀ or SOX; or less than 550 lbs/day of CO or PM_{2.5}, the Initial Study should require implementation of all the Standard Mitigation Measures in order to help mitigate or reduce the air quality impacts to a level of insignificance. However, simple implementation of the mitigation measures does not guarantee that the project will be insignificant. The insignificance must be determined by the results of the Initial Study.

According to Table 1, Tier II, projects generating 137 lbs/day or greater of NOx or ROG; 150 lbs/day or greater of PM₁₀ or SOX; or 550 lbs/day or greater of CO or PM_{2.5}, the EIR or Comprehensive Air Quality Analysis Report should select and implement all feasible and practicable measures from the discretionary list, in addition to the Standard Mitigation Measures.

RESIDENTIAL PROJECTS

Standard mitigation measures for residential projects include the following site design and energy efficiency standards:

Standard Site Design Measures

- a. Link cul-de-sacs and dead-end streets to encourage pedestrian and bicycle travel;
- b. Allocate easements or land dedications for bikeways and pedestrian walkways;
- c. Provide continuous sidewalks separated from the roadway by landscaping and on-street parking. Adequate lighting for sidewalks must be provided, along with crosswalks at intersections;
- d. Bicycle storage at apartment complexes or condos without garages.

Standard Energy Efficiency Measures

- a. Measures which meet mandatory, prescriptive and/or performance measures as required by Title 24.

COMMERCIAL PROJECTS

Standard mitigation measures for commercial projects include the following site design and energy efficiency standards:

Standard Site Design Measures

- a. Provide on-site bicycle lockers and/or racks;
- b. Provide on-site eating, refrigeration and food vending facilities to reduce lunchtime trips;

- c. Provide shower and locker facilities to encourage employees to bike and/or walk to work;
- d. Provide for paving a minimum of 100 feet from the property line for commercial driveways that access County paved roads as per County Standard Commercial Driveway Detail 410B (formerly SW-131A).

Standard Energy Efficiency Measures

- a. Measures which meet mandatory, prescriptive and/or performance measures as required by Title 24.

7.3 Discretionary Mitigation Measures

The discretionary mitigation measures listed in this section have been separated according to land use and mitigation type. It is important to note that the measures identified here do not represent a comprehensive list of all mitigation measures possible. Project proponents are encouraged to propose other alternatives that are capable of providing the same level of mitigation.

RESIDENTIAL PROJECTS

Discretionary Site Design Measures

- a. If the project is located on an established transit route, improve public transit accessibility by providing transit turnouts with direct pedestrian access to project.
- b. For bus service within a ¼ mile of the project provide bus stop improvements such as shelters, route information, benches and lighting.
- c. Increase street tree planting.
- d. Outdoor electrical outlets to encourage the use of electric appliances and tools.
- e. Provide bikeway lanes and/or link new comparable bikeway lanes to already existing lanes.
- f. Increase the number of bicycle routes/lanes.
- g. Provide pedestrian signalization and signage to improve pedestrian safety.

- h. Synchronize traffic lights on streets impacted by development

Discretionary Energy Efficiency Measures

- a. Use roof material with a solar reflectance value meeting the EPA/DEO Energy Star® rating to reduce summer cooling needs.
- b. Use high efficiency gas or solar water heaters.
- c. Use built-in energy efficient appliances.
- d. Use double-paned windows.
- e. Use low energy street lighting (i.e. sodium).
- f. Use energy efficient interior lighting.
- g. Use low energy traffic signals (i.e. light emitting diode).
- h. Install door sweeps and weather stripping if more efficient doors and windows are not available.

COMMERCIAL PROJECTS

Discretionary Site Design Measures

- a. Increase street tree planting
- b. Shade tree planting in parking lots to reduce evaporative emissions from parked vehicles.
- c. Increase number of bicycle routes/lanes.
- d. If the project is located on an established transit route, improve public transit accessibility by providing transit turnouts with direct pedestrian access to protect or improve transit stop amenities.
- e. For bus service within a ¼ mile of the project provide bus stop improvements such as shelters, route information, benches and lighting

- f. Implement on-site circulation design elements in parking lots to reduce vehicle queuing and improve the pedestrian environment.
- g. Provide pedestrian signalization and signage to improve pedestrian safety.
- h. Synchronize traffic lights on streets impacted by development

Discretionary Energy Efficiency Measures

- a. Use roof material with a solar reflectance value meeting the EPA/DOE Energy Star® rating to reduce summer cooling needs.
- b. Use built-in energy efficient appliances, where applicable.
- c. Use double-paned windows.
- d. Use low energy parking lot and street lights (i.e. sodium).
- e. Use energy efficient interior lighting.
- f. Use low energy traffic signals (i.e. light emitting diode).
- g. Install door sweeps and weather stripping if more efficient doors and windows are not available.
- h. Install high efficiency gas/electric space heating.

INDUSTRIAL PROJECTS

- a. Implement carpool/vanpool programs and incentives (i.e. carpool ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, etc.)
- b. Provide for shuttle/mini bus service such as to establish a shuttle service from residential care areas to the worksite.
- c. Provide preferential carpool and vanpool parking

- d. Construct transit facilities such as bus turnouts/bus bulbs, benches, shelters, etc if the project is located on an established transit route.
- e. Design and locate buildings to facilitate transit access (i.e., locate building entrances near transit stops, eliminate building setbacks, etc.)
- f. Provide incentives to employees to take public transportation, walk, bike, etc.
- g. Provide pedestrian signalization and signage to improve pedestrian safety.
- h. Implement on-site circulation design elements in parking lots to reduce vehicle queuing and improve the pedestrian environment.
- i. Provide on-site bicycle and motorcycle parking. Such as providing weather-protected bicycle parking for employees.
- j. Provide safe, direct access for bicyclists to adjacent bicycle routes.
- k. Provide shower and locker facilities to encourage employees to bike and/or walk to work – typically, one shower and three lockers for every 25 employees.
- l. Provide on-site eating, refrigeration and food vending facilities to reduce lunchtime trips.
- m. Increase street tree planting
- n. Measures which meet mandatory, prescriptive and/or performance measures as required by Title 24.
- o. Use low emission fleet vehicles such as TLEV, ULEV, LEV, ZEV
- p. Install an electrical vehicle charging station with both conductive and inductive charging capabilities.
- q. Use built-in energy efficient appliances, where applicable.
- r. Use double-paned windows
- s. Use low energy parking lot and street lights

- t. Use energy efficient interior lighting

7.4 Off-site Mitigation

Off-site mitigation for Commercial and Residential Developments:

Off-site mitigation measures are designed to offset emissions from residential and commercial projects that cannot be fully mitigated with on-site measures. Typically, off-site reductions can occur as a result from either stationary or mobile sources. For example, NOx emissions from increased vehicle trips from a residential development could be reduced by funding the expansion of existing transit services. Rule 310, Operational Development Fee has been adopted by the ICAPCD as a sound method for mitigating the emissions produced from the operations of new development projects throughout the County of Imperial. All project proponents have the option of either providing off-site mitigation or paying an Operational Development Fee. The evaluation process in providing this fee is found within the applicability and administrative requirements of Rule 310

Off-site mitigation for Industrial Projects:

Because industrial development projects are by their very nature much more complex, the evaluation of the air impacts resulting from an industrial development is addressed at two levels: that of the environmental review process and that of the ICAPCD permitting review process. The ICAPCD permitting review process addresses mitigation of air emissions from the Stationary source. Therefore, the ICAPCD has adopted the guidance policy #5 to help Lead Agencies and interested parties in the evaluation of off-site mitigation from mobile sources attracted to the stationary sources.