

DRAFT GUIDELINES

COMMUNITY RISK REDUCTION PLANS FOR TOXIC AIR CONTAMINANTS (TACs) AND FINE PARTICULATE MATTER (PM2.5)

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Acronyms and Abbreviations

APU	Auxiliary Power Unit
ARB	California Air Resources Board
AVR	alternative vehicle ridership
BAAQMD, District	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BAU	business-as-usual
CAPCOA	California Air Pollution Control Officers Association
CARE	Community Air Risk Evaluation
CEQA	California Environmental Quality Act
CNG	compressed natural gas
CRRP	Community Risk Reduction Plan
DPM	diesel particulate matter
EPA	Environmental Protection Agency
GGRS	Greenhouse Gas Reduction Strategy
HEPA	High Efficiency Particulate Air
MOU	memorandum of understanding
PM2.5	particulate matter less than 2.5 microns in diameter
TACs	toxic air contaminants
TBACT	Best Available Control Technology for Toxics
TRUs	transportation refrigeration units

Draft Guidelines Community Risk Reduction Plans for Toxic Air Contaminants (TACs) and Fine Particulate Matter (PM2.5)

This is a public review draft intended to outline the general parameters of a Community Risk Reduction Plan (CRRP) and how such a plan could result in a more holistic evaluation of community health risks relative to toxic air contaminants and fine particulate matter that can promote better community health outcomes than a project-by-project approach. As a draft, this document does not represent any final decisions of the Bay Area Air Quality Management District (District, BAAQMD) and is intended to stimulate public input and discussion for the District's consideration in further developing guidance for the preparation of CRRPs.

Introduction: How to Use This Document

Who should use this document?

Communities within the BAAQMD seeking a proactive approach of reducing exposure to toxic air contaminants¹ (TACs) and particulate matter less than 2.5 microns in diameter (PM2.5) should use this document as an introduction to preparing a CRRP. Community Air Risk Evaluation (CARE) program communities may be particularly interested in CRRP development, although any community in the BAAQMD may develop and utilize a CRRP.

What is the purpose of this document?

It is the intent of the BAAQMD that CRRPs be developed with substantial support and guidance from the BAAQMD. This document:

- Sets forth potential minimum requirements and general framework for a CRRP.
- Defines appropriate data sources and risk models on which to base a CRRP.
- Provides guidance to preparers of CRRPs on how to address boundaries, target setting, public involvement, and updates to a CRRP.
- Explains the relationship of a CRRP to the California Environmental Quality Act (CEQA) process, specifically how the CEQA process for certain projects can potentially be streamlined by demonstrating consistency with a CRRP.

What is a CRRP?

A CRRP for TACs and PM2.5 is a multi-year plan developed by a set of CRRP preparing entities (city or county), a single CRRP preparing entity, or a single community within a CRRP preparing entity—

¹ TAC includes diesel particulate matter for this analysis.

the goal of which is twofold. First, the purpose of a CRRP is to ensure that air quality and public health improve through the reduction of TACs and PM_{2.5} exposure. Second, a CRRP provides a mechanism for assuring consistent approaches to evaluating new development proposals and the potential for streamlining environmental compliance under CEQA. Because advanced project planning that is coordinated and consistent is often more effective and efficient than consideration of health risks during the development review and project-level CEQA analysis, the development of a CRRP will likely be a more effective and efficient way to improve air quality than traditional approaches. The BAAQMD anticipates that in most cases the preparing entity(ies) will be local city and county governments.

A CRRP will be designed to improve public health related to exposure to TACs and PM_{2.5} over time, and must include reduction targets identified by the preparing entity and approved in consultation with the BAAQMD for the entire community covered by the plan. A CRRP would establish a target date by which the community seeks to meet the goal (e.g. 2020). A CRRP is similar in concept to a Greenhouse Gas Reduction Strategy (GGRS) which also sets a reduction target, a target year, and a trajectory for the community to reach the target.

The BAAQMD is currently considering the minimum requirements of an approved CRRP reduction target but intends to give latitude to CRRP preparing entities in selecting additional reduction targets so that they are closely aligned with the specific public health concerns of the Plan Area. For example, the preparing entity might identify the proposed 100-in-a-million BAAQMD CEQA cumulative threshold as the target for the Plan Area. Alternatively, a specified percentage reduction in asthma-related hospital visits within the Plan Area might be selected as the CRRP target. For the purposes of this document, *reduction target* refers to any metric identified by the community that will result in the improvement of public health in the Plan Area by reducing public exposure to TACs and PM_{2.5}.

A CRRP would assess existing and projected health risks associated with TACs and PM_{2.5} for the community as a whole. As such, projects that are fully consistent with the CRRP in terms of incorporation of all CRRP required measures and inclusion in the CRRP risk evaluation and projection, can be candidates for streamlining during development review and CEQA as they relate to TACs and PM_{2.5} risks. While this framework allows for the airborne health risk exposure in some sub-areas to improve more quickly or more dramatically than others, a qualified CRRP would not allow for any receptor or sub-area to experience an increase in health risks above current levels.

TACs and PM_{2.5} concentrations in many Bay Area communities exceed air quality standards set by the Environmental Protection Agency (EPA), the California Air Resources Board (ARB) and the BAAQMD. A CRRP helps chart a course toward achieving air quality standards in Bay Area communities over time by accounting for the complexity of the sources and receptors in specific communities while encouraging the adoption of tailored and locally feasible measures to reduced TAC and PM_{2.5} exposure.

What are the minimum requirements of a CRRP?

The BAAQMD is soliciting input on what should be the minimum requirements of a CRRP. Preliminary considerations are that a qualified CRRP must, at a minimum:

- Be developed through a robust public participation process to facilitate community input from the entire affected community into goals and strategies.

- Define a plan area and an area of influence (see discussion later in this document).
- Include base-year and future-year emissions inventories of TACs and PM2.5.
- Include BAAQMD–approved risk modeling of current and future risks.
- Establish risk and exposure reduction goals for the community:
- Establish a commitment to not allow an increase of health risks above current levels.
- Specific reduction targets identified by the local jurisdiction.
- Identify feasible, quantifiable, and verifiable measures to reduce emissions and exposures.
- Include procedures for monitoring and updating the inventory, modeling, and reduction measures in coordination with BAAQMD staff.

Why should my community develop a CRRP?

The primary purpose of a CRRP is to provide a holistic risk reduction plan that promotes effective and efficient risk reductions overall. A CRRP allows the advantages and disadvantages of proposed new development to be judged in the context of the collective plan area’s progress toward the goals set forth in a CRRP. By working off a target year, a CRRP also takes into account the expected benefits of regulatory action on the Plan Area. Finally, a CRRP can be one part of a community’s comprehensive approach to reducing airborne health risks such as mold and asthma-aggravating exposures, and improving indoor air quality.

The current project-by-project approach does not provide the community with a long-term path to reduce health risks and to control the creation of new health risks. By planning in advance, health risk information can be available to the public, City planning staff, and City decision-makers to inform land use choices well in advance of project proposals being advanced through the entitlement process. The community can identify feasible measures that can be applied consistently across all new projects as necessary to control and/or reduce risks. The community can also identify the areas where action may be inadequate to reach target risk levels, and consider up front whether current land use planning is appropriately balancing public health protection with economic development.

While the primary benefit is to promote the reduction of community health risks, a secondary benefit for the development of a CRRP is to streamline the CEQA process for projects consistent with the CRRP. Consistency with the CRRP should be defined as implementing all required CRRP measures and consistent with the emissions inventory/forecast and risk evaluation and forecast. Thus, a consistent project is one that is fully anticipated by the CRRP evaluation and found to be consistent with meeting the CRRP risk reduction targets.

While projects will still be required to go through CEQA review, the assessment of project impacts can be facilitated by having a fully developed community approach to new sources and receptors and to project-level mitigation . By incentivizing development with lower relative health risks and discouraging development with relative higher health risks, a CRRP will send the right signals to both private and public project proponents early in the project cycle and express the importance of risk reduction as a priority.

Communities that would benefit from a CRRP

Listed here are communities that would likely benefit from a CRRP. This list is not meant to be comprehensive. An assortment of other communities could also benefit from a CRRP.

- A community with existing health risks that desires to better understand the variation of existing health risks within the community in order to prioritize action to improve air quality.
- A community without substantial existing cumulative health risks that is considering future land use plans to expand roadways and other TAC/PM2.5 sources (such as warehousing) and desires to inform land use planning to avoid cumulatively significant risks through site selection and on-site controls.
- A community with existing health risks that is planning for future infill development that would bring more receptors within the cumulative exposure area, and that desires to examine the potential impact of state regulations and local action to control health risks in the short and long run.
- A community with existing health risks that is planning for new roadway, commercial, or industrial sources of TAC/PM2.5 emissions within 1,000 feet of existing or future receptors, and that desires to comprehensively evaluate existing and future community health risks.

Communities (or parts of communities) that might not benefit from a CRRP

Although the establishment of a CRRP is possible for any area, certain areas (such as those listed here) are not expected to benefit from a CRRP planning effort.

- Remote areas with no substantial existing health risks and with no future planning to introduce new receptors within proximity to cumulative risks or to introduce new TAC/PM2.5 sources within proximity to sensitive receptors.
- Residential areas located substantially far (> 1,000 feet in most cases and more in the case of major sources such as ports) from any substantial TAC/PM2.5 sources, including major roadways.

Would a CRRP ensure that health risks would be reduced over time?

Yes. A fundamental purpose of the CRRP is, in combination with the state Diesel Risk Reduction Strategy, to reduce current health risk levels and to avoid exposure of new receptors to significant health risks. Targets developed as part of a CRRP will be based on the best available data and standard dispersion models. A CRRP seeks to inform local planning by making a comprehensive evaluation of TAC/PM2.5 within a targeted community, identifying the risks to that community, identifying the benefits of state vehicle and fuel regulations over time, and identifying feasible local measures that can contribute to lowering the risk in the community beyond that which would be achieved solely through state action.

Does the BAAQMD support the development of a CRRP?

Yes. Because air quality conditions in affected communities result in part from land use and transportation decisions made over many years, the BAAQMD believes comprehensive, community-wide strategies will achieve the greatest reductions in emissions of and exposure to TACs and PM2.5. The BAAQMD is committed to completing TAC/PM2.5 emissions inventory work and the generalized risk assessment for the Bay Area as a whole. This work will assist local communities to understand their existing health risks better and to support those communities that desire to complete a CRRP.

The BAAQMD supports local land use planning that promotes infill, mixed-use, walking, cycling, and transit-oriented development. However, the BAAQMD does not support compact or infill development if it results in unacceptable air quality risks to existing or future residents. The BAAQMD supports planning efforts such as the CRRP approach because these efforts allow a community to examine the current and future public health consequences of land use decisions throughout the planning process, not just at the time of permit approval.

The BAAQMD's mission is to promote public health and welfare by seeking to reduce exposure to criteria and toxic air contaminants. A CRRP is one tool a community could use to seek better public health outcomes. The BAAQMD believes that advance consideration of current and future health risks and identification of feasible means of controlling and/or reducing those risks will result in better outcomes than those that result from the existing process. The BAAQMD is committed to supporting communities that decide to create a CRRP by providing the technical data necessary to complete the emissions inventory and risk assessment required for the effort. The BAAQMD is also available to provide technical advice to communities preparing a CRRP. The BAAQMD also believes that planning processes that motivate positive outcomes through CEQA streamlining, where appropriate, send the right signals to project proponents to ensure that these projects are consistent with a community's air quality improvement priorities. A CRRP would not provide streamlining for projects that are inconsistent with community efforts to improve air quality.

How is a CRRP related to the CARE program?

A CRRP is designed to be especially effective in areas that already are severely affected by TACs and PM2.5, such as CARE communities. The BAAQMD initiated the CARE program in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs/ PM2.5 from point sources, area sources and mobile sources. Through the CARE program, The BAAQMD has identified TAC/PM2.5 sources and areas severely affected by TACs, primarily diesel particulate matter (DPM). Additionally, the CARE program develops and implements a variety of mitigation measures with a special focus on these most severely affected communities. The BAAQMD encourages CARE communities to develop CRRPs, but does not require a CRRP. Likewise, non-CARE communities are not precluded from developing a CRRP and are encouraged to prepare CRRPs where substantial areas exceed the BAAQMD's cumulative risk thresholds.

Defining the Plan Area and the Area of Influence

Two geographic areas are defined in a CRRP:

1. The *Plan Area* (also known as the receptor analysis area). This geographical region includes the area for which the CRRP addresses health risks for existing and proposed receptors. The Plan Area is likely to be bound by the jurisdictional control of the agency or agencies that create the CRRP.
2. The *Area of Influence* (also known as the source analysis area). This geographical regional includes the entire Plan Area and extends beyond the Plan Area to include emission sources outside the Plan Area that may affect receptors within the Plan Area. It is possible that the agency or agencies that create a CRRP may not have jurisdictional control of all emission sources in the Area of Influence.

What is the Plan Area?

The Plan Area is defined as the physical area within which the CRRP preparing entity (or entities) is interested in evaluating long-term health risks and allowing for a programmatic evaluation. The Plan Area is defined by the location of receptors that the CRRP seeks to protect and the area where the CRRP preparing entity has jurisdictional control. The Plan Area or “receptor analysis zone” can be defined in terms of logical dividing lines such as jurisdictional boundaries, parcel boundaries, geographic features (shorelines, major roadways, etc.), or areas of common exposure concerns (areas within the zone of influence of a large port). Numerous sources that contribute to the air quality of the receptors will be associated with the Plan Area. These sources may be located inside or outside of the Plan Area.

What is the Area of Influence?

The Area of Influence is defined as the area containing TAC/ PM_{2.5} sources that affect a specified Plan Area where receptors are located. These sources may be located inside or outside the Plan Area and the CRRP preparing entity may have jurisdictional control only over a portion of the sources relevant to the Plan Area. It is expected that the Area of Influence will be defined as within 1,000 feet (or other as appropriate) of the perimeter of the Plan Area. The Area of Influence may also include additional areas where necessary to include the entire area of a source that is partially within 1,000 feet or where necessary to avoid splitting geographic areas (such as parcels). The distance of 1,000 feet is provided as a guideline only. Discretion is given to a CRRP preparing entity and the BAAQMD in determining the most appropriate boundary. See Figure 1 for an example of the interrelation between the Plan Area, Area of Influence, and sources to consider for a CRRP analysis.

Line sources (e.g. roadways and railroad tracks) will likely not be wholly contained within either the Project Area or the Area of Influence. When dispersion models are used to calculate risk within the Plan Area (dispersion models are discussed in greater detail in a subsequent section) it is recommended that line sources are modeled within the Area of Influence and a significant distance upstream and downstream of the Area of Influence to ensure that the health risk from the line source is not under-represented. Site geometry will influence the projected distance of the line source beyond the Area of Influence. It is recommended that, initially, line source projected distances should extend at least 1,000 feet outside the Area of Influence.

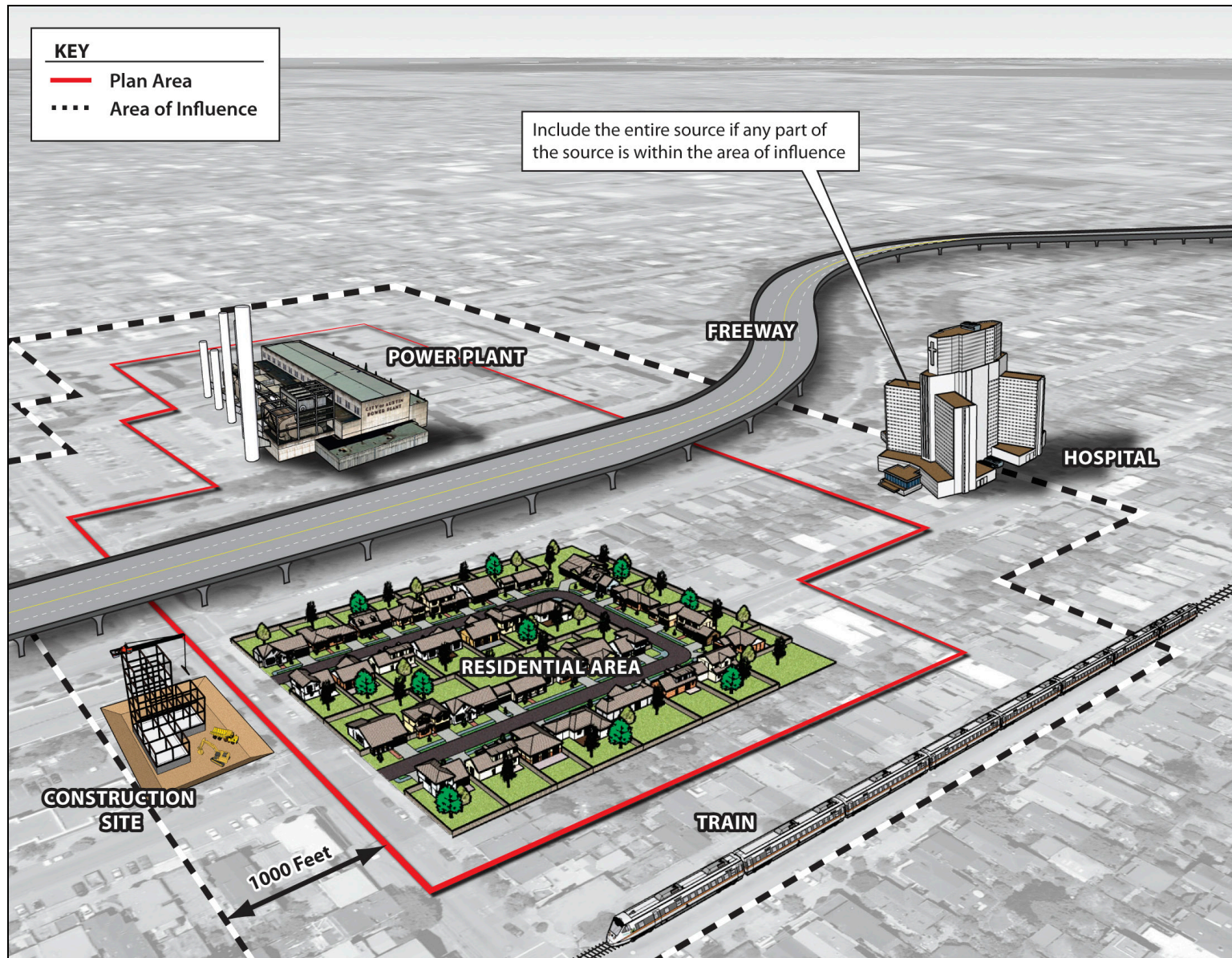


Figure 1. Example CRRP Plan Area, Area of Influence, emissions sources, and receptors.

Should the Plan Area be large or small?

The definition of the boundaries of the Plan Area is at the discretion of the entity preparing a CRRP. Each community will have unique characteristics and specific TAC and PM_{2.5} concerns. To maximize effectiveness of a CRRP, the BAAQMD will work with CRRP preparers to identify key issues and aptly define appropriate Plan Area boundaries.

Certain disadvantages may be associated with a Plan Area that is either too large or too small. The magnitude of health benefits to be gained from a small Plan Area may be limited, while a large Plan Area may become logistically difficult to manage. Latitude is given to a CRRP preparing entity to define the Plan Area by several means in addition to geography and jurisdiction. For example, a community may opt to focus a CRRP on a single community of concern. Alternatively, a community could define a CRRP geographically around a single dominating source (e.g. a port or rail yard). However, as described below, once a Plan Area is defined, all sources within the Area of Influence must be included in order to comprehensively evaluate TAC and PM_{2.5} risk.

What options are available for coordination with other communities?

The BAAQMD encourages communities within a jurisdiction or across jurisdictional boundaries, if similar exposure concerns exist, to develop a joint plan or a plan that is complementary and highly cooperative. Neighboring communities that develop two unique CRRPs may choose to enter into a memorandum of understanding (MOU) for projects along the border of both areas. The BAAQMD will work with CRRP preparing entities to identify opportunities for cooperation and to structure cooperative CRRPs.

Profiling and Forecasting TACs and PM_{2.5} within the Plan Area

What are the emissions inventory and the forecast?

A CRRP emissions inventory is the identification of all major TAC and PM_{2.5} sources and their emission rates, within the Area of Influence affecting the Plan Area. The inventory answers the question: “What emissions sources affect the Plan Area and what are the magnitudes of the sources?” For example, the inventory might include emissions from state highways, local mobile sources and large area sources such as ports or rail yards, and significant stationary sources such as refineries, power plants, and gas stations. The BAAQMD is considering whether the inventory should include or exclude smaller sources (such as emissions from an individual boiler within a building) that don’t have a meaningful contribution to health risk levels. The inventory should be reported in units of mass/day. The inventory includes a profile of sources and the emission factors used to characterize source emissions.

The emission forecast is an estimate of what the inventory of all major emissions sources *will be in a future year* (for example, 2020) within the Area of Influence affecting the Plan Area. The emission forecast answers the question: “What emissions sources will affect the Plan Area in the future and

what are their magnitudes?” The emission forecast includes the same source categories as the inventory. The forecast must use the same Area of Influence boundary as the inventory.

An example inventory and forecast for PM_{2.5} is shown in graphically in Figure 2. Figure 2 shows typical sources that might be included in a Plan Area’s emissions inventory and forecast. Although a hypothetical emissions scenario, Figure 2 illustrates the very likely case that the emission factor for many sources, and thus total emissions, will decrease in coming years due to advances in technology and more stringent regulation. An actual CRRP would include all relevant TACs and PM_{2.5} and would use appropriate forecast year(s) for emission projections.

The BAAQMD has not finalized the list of TACs that should be included in a CRRP analysis. Table 1 presents a tentative list of TACs that may be considered in a CRRP analysis along with each TAC’s cancer and non-cancer risk factors based on Office of Environmental Health Hazard Assessment (OEHHA) guidance.

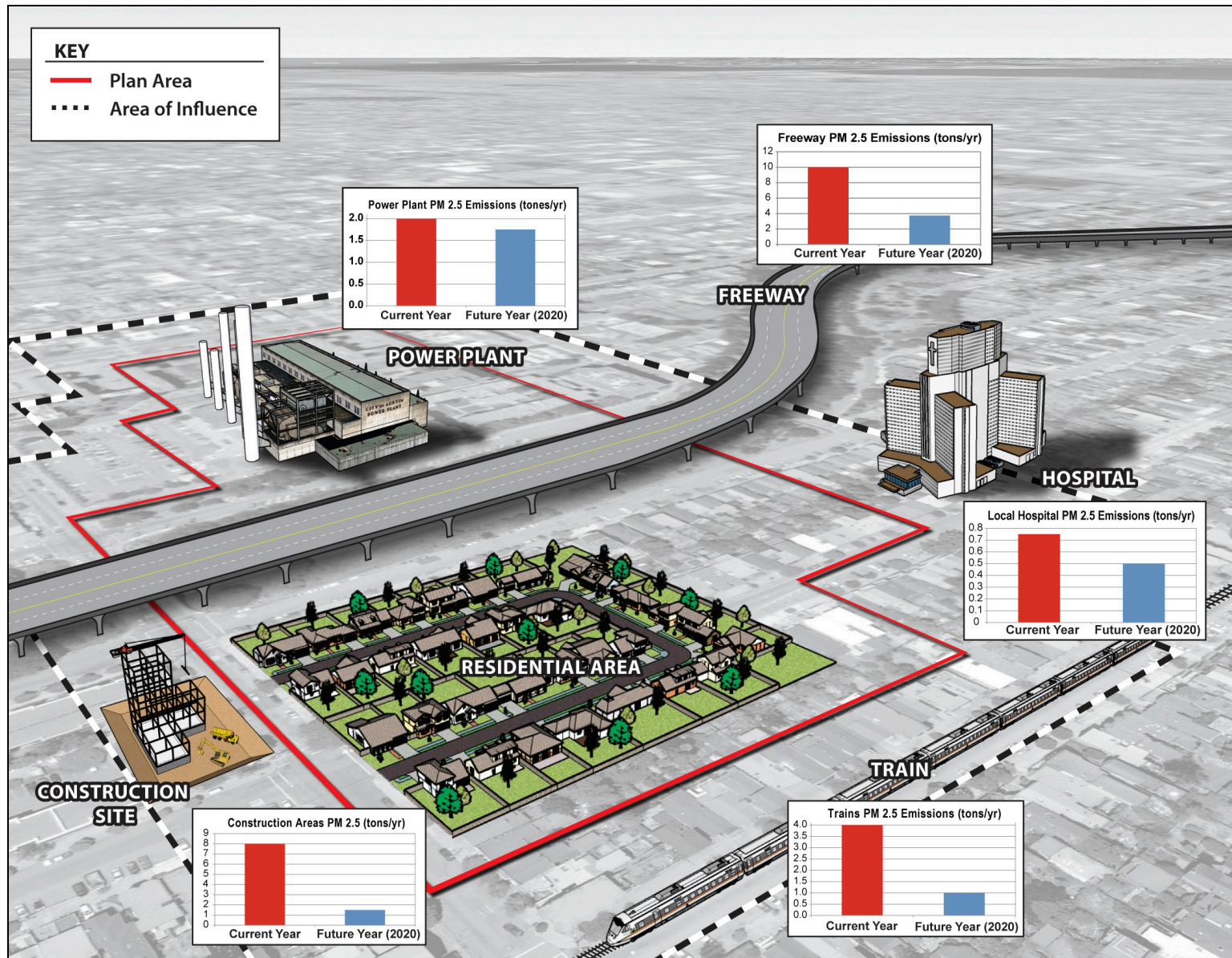


Figure 2. Example CRRP emission inventory and forecast.

Table 1. Cancer and non-cancer risk factors for selected TACs.

TAC Name	Non-Cancer			Cancer	
	Acute Inhalation (µg/m3)	8-Hour Inhalation (µg/m3)	Chronic Inhalation (µg/m3)	Inhalation Unit Risk (µg/m3)-1	Inhalation Cancer Potency Factor (mg/kg-d)-1
DPM	-	-	5.00E+00	3.00E-04	1.10E+00
PM2.5	-	-	-	-	-
acetaldehyde	4.70E+02	3.00E+02	1.40E+02	2.70E-06	1.00E-02
acrolein	2.50E+00	7.00E-01	3.50E-01	-	-
benzaldehyde	-	-	-	-	-
benzene	1.30E+03	-	6.00E+01	2.90E-05	1.00E-01
ethanol	-	-	-	-	-
ethylbenzene	-	-	2.00E+03	2.50E-06	8.70E-03
ethylene	-	-	-	-	-
ethylene dibromide (1,2-dibromoethane)	-	-	8.00E-01	7.10E-05	2.50E-01
ethylene dichloride (1,2-dichloroethane)	-	-	4.00E+02	2.10E-05	7.20E-02
ethylene glycol	-	-	4.00E+02	-	-
ethylene oxide (1,2-epoxyethane)	-	-	3.00E+01	8.80E-05	3.10E-01
ethylene thiourea	-	-	-	1.30E-05	4.50E-02
ethylene glycol butyl ether	1.40E+04	-	-	-	-
ethylene glycol ethyl ether	3.70E+02	-	7.00E+01	-	-
ethylene glycol ethyl ether acetate	1.40E+02	-	3.00E+02	-	-
ethylene glycol methyl ether	9.30E+01	-	6.00E+01	-	-
ethylene glycol methyl ether acetate	-	-	9.00E+01	-	-
formaldehyde	5.50E+01	9.00E+00	9.00E+00	6.00E-06	2.10E-02
isobutane	-	-	-	-	-
isopentane	-	-	-	-	-
methane	-	-	-	-	-
methyl ethyl ketone (mek) (2-butanone)	1.30E+04	-	-	-	-
methylcyclopentane	-	-	-	-	-
m-xylene	2.20E+04	-	7.00E+02	-	-
n-butane	-	-	-	-	-
n-hexane	-	-	7.00E+03	-	-
n-pentane	-	-	-	-	-
o-xylene	2.20E+04	-	7.00E+02	-	-
propionaldehyde	-	-	-	-	-
propylene	-	-	3.00E+03	-	-
propylene glycol monomethyl ether	-	-	7.00E+03	-	-
propylene oxide	3.10E+03	-	3.00E+01	3.70E-06	1.30E-02
toluene	3.70E+04	-	-	-	-

uk = unknown.

Source: Office of Environmental Health Hazard Assessment 2003, 2008, 2009.

What data sources should be used to create an emissions inventory and forecast?

The BAAQMD will be developing a detailed inventory and forecast of TAC and PM_{2.5} emissions within the Bay Area. A CRRP preparer will utilize the most current BAAQMD inventory data and forecast and will present the data in tabular form with the following headings: source, location in the Area of Influence, activity, mass emissions, current emissions factor, and future emissions factor. This format allows the community to focus efforts and more easily monitor the change in emissions factors over time. Additionally this format provides for consistency among CRRPs. The BAAQMD will work with the preparer to downscale the district-level data to a CRRP's Area of Influence. The CRRP preparer is not expected to perform a specific inventory and forecast for the relevant Area of Influence, but can do so if resources allow. In this instance, the preparer should also coordinate closely with the BAAQMD.

How will state and federal regulations affect emissions in the Plan Area?

For many communities, the primary source of PM_{2.5} and TACs is diesel truck traffic on highways and large arterial roadways. The ARB has adopted aggressive regulations related to DPM. The ARB's comprehensive strategy, known as the Diesel Risk Reduction Plan, includes regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and is anticipated to reduce diesel PM emissions and the associated health risk by about 75% in 2010 and 85% in 2020 (ARB 2000). The emission forecast will need to account for the impact of these regulations on the Plan Area and for reasonably foreseeable projects within the Plan Area or Area of Influence.

State action concerning vehicles and fuels will contribute substantially to the reduction of health risks from DPM and other TACs. Through a CRRP, local jurisdictions can identify the feasible local measures that can reduce risks during the interim years before the full value of the state actions is realized and can leverage the state reductions further in pursuit of local health risk reduction goals. Note that some areas may not be fully able to rely on state and federal regulations to achieve CRRP goals.

A CRRP can give critical guidance to local land use planners about what can realistically be achieved over time. Given that land use is a local (and not state) prerogative, only the local jurisdiction can affect land use policies that address airborne health risks. Local policies can potentially result in the avoidance of the introduction of new receptors or new sources within areas where the community has determined that risk levels are unacceptable or should be reduced to a greater extent than what is feasible solely through state action. Because a CRRP is directed by a future target year and thus requires projections of future conditions, it allows a community to identify the future year when emissions/risks have been reduced sufficiently to allow introduction of new sources or receptors.

Dispersion/Risk Modeling

What are the approved methodologies for estimating TAC risk and PM2.5 exposure?

The BAAQMD is providing guidance on acceptable methods and modeling techniques for emissions estimated and risk modeling in *Recommended Methods for Screening and Modeling Local Risks and Hazards* (BAAQMD, May 2010). An additional source of information is the California Air Pollution Control Officers Association (CAPCOA) guidance document titled *Health Risk Assessment for Proposed Land Use Projects* (CAPCOA 2009).

What is the risk baseline?

The risk baseline is defined as the current conditions of aggregated TAC risks (cancer and non-cancer incidence) and PM2.5 concentration ($\mu\text{g}/\text{m}^3$) at locations in the Plan Area in the year that a CRRP is developed (defined as the current year). The risk baseline answers the question: “What are the risks associated with our current level of exposure to PM2.5 and TACs in our community?”

To determine the risk baseline, a CRRP preparer will use the latest BAAQMD source inventory (*emissions inventory*, described above) data with dispersion models recommended by the BAAQMD to predict risk (incidence or Hazard Index) within relevant sections of the Plan Area. If resources are available, the local community may conduct more refined analyses that utilize more sophisticated models, and/or more precise input data in order to establish the risk baseline. TAC and PM2.5 risk should be calculated for all sensitive receptors located within the Plan Area.

Sensitive receptors are defined by BAAQMD CEQA guidelines as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas. Table 2 lists locations designated in CAPCOA’s *Health Risk Assessment for Land Use Projects* guidance where sensitive receptors are typically found. Table 2 serves as a minimum recommendation for receptors to be considered in a CRRP.

Table 2. Typical locations where sensitive receptors may be located that will need to be considered in a CRRP analysis.

Sensitive Receptors
<ul style="list-style-type: none"> • Schools • Schoolyards • Parks • Playgrounds • Daycare Centers • Nursing Homes • Hospitals • Residential Communities
<p>Source: CAPCOA 2009: <i>Health Risk Assessments for Land Use Projects</i>—CAPCOA Guidance Document. July 2009.</p>

What is the business-as-usual risk projection?

The business-as-usual (BAU) risk projection is defined as future conditions of risk (cancer or non-cancer incidence) and concentration ($\mu\text{g}/\text{m}^3$) at locations in the Plan Area in the target year (e.g. 2020), considering known patterns of development as outlined in the General Plan or other relevant local plans and all adopted federal and state regulations (e.g. California's Diesel Risk Reduction Plan) but assuming that the community takes no action beyond current efforts to lessen exposure to TACs and PM_{2.5}. The BAU risk projection answers the question: "For TACs and PM_{2.5}, what will be the risk associated with the level of exposure in 2020, assuming our current pattern of emissions?"

Figure 3 presents a pictorial depiction of baseline risk and future risk associated with new construction near a residential area where BAU risk projection is annotated as "Future No Project." In this example, all future risk levels are less than the current baseline risk exposure. As for the risk baseline, it is expected that BAAQMD staff will perform the technical work required to generate the BAU risk forecast for the Bay Area that would then be extracted for a particular CRPP.

It is important to note that the BAU risk projection is a planning tool for anticipating potential increases or decreases over time in the level of community health risk. However, as noted above, the fundamental goal of a CRRP is to reduce community health risks compared to existing conditions. The BAU risk projection identifies the additional level of reduction necessary in order to be able to reduce risks below the current levels taking into account future changes in development and in regulations.

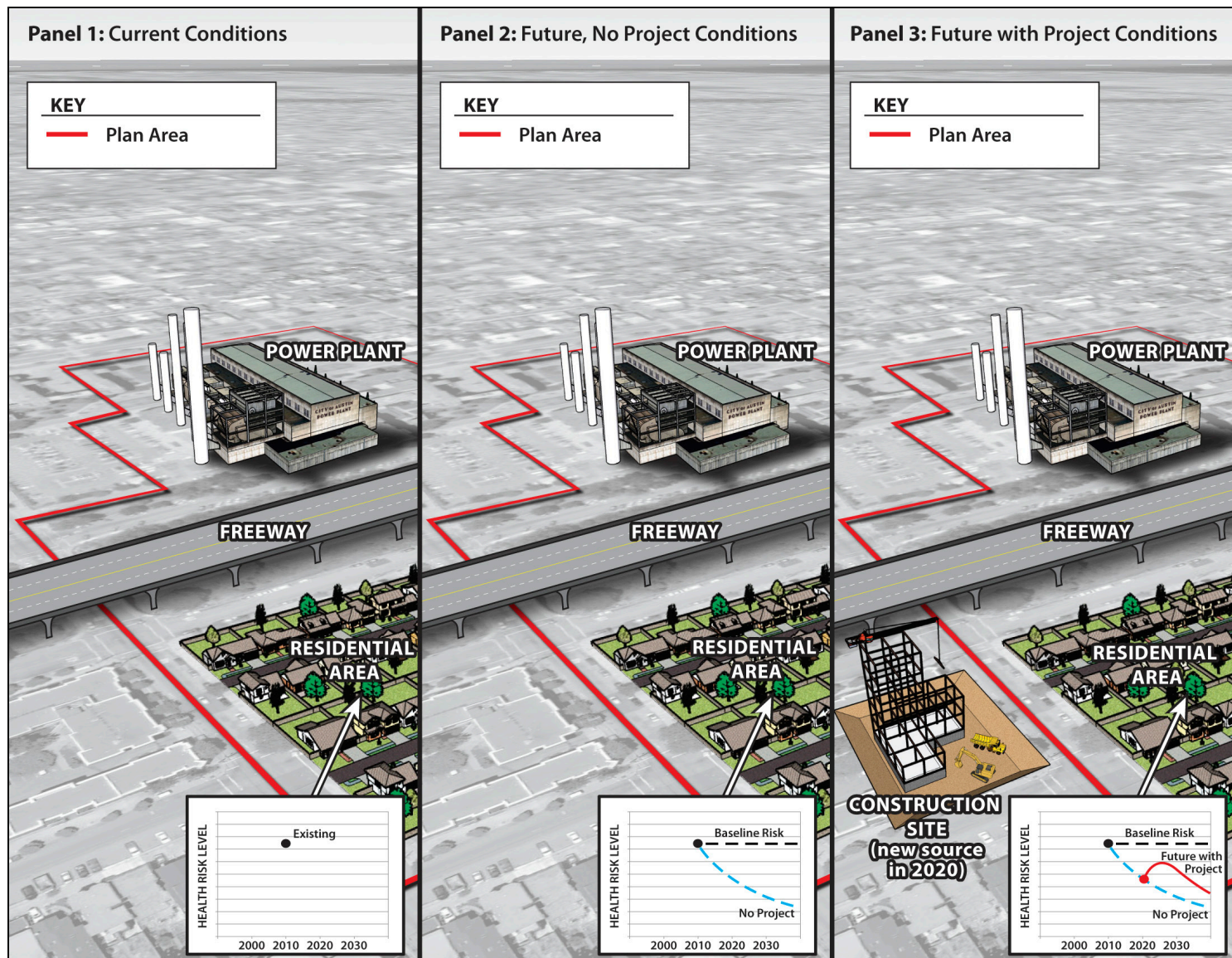


Figure 3. Example of a risk baseline, business-as-usual (BAU) risk forecast, and risk forecast for a sensitive receptor near a proposed construction project.

Conceptual case examples of using a CRRP to aid in planning decisions

A CRRP planning effort can be used in a variety of ways. Two case examples are described here to show two hypothetical uses of CRRP analysis. Case 1 describes the addition of a new receptor to an area that has existing elevated TAC/PM_{2.5} risks. Case 2 describes the addition of a new source to an area that may result in unacceptable health risk to an existing residence.

These two case studies are meant only to stimulate discussion and are not an exhaustive list of how a CRRP can be used for planning purposes. The BAAQMD is requesting feedback on how and when a CRRP analysis could aid the planning process.

Case 1: Adding new receptors to the Plan Area

Figures 4A and 4B depict the existing and future TAC/PM_{2.5} risk associated with a hypothetical Plan Area, respectively. In Figure 4A, given the *existing* risk from the roadway and emission sources in the Plan Area, new sensitive receptors can currently be placed only in the a small portion of the Plan Area to ensure that these receptors are not exposed to risk in excess of the CRRP risk standards. In Figure 4B, the TAC and PM_{2.5} health risk for *future conditions* (e.g. 2020) for a CRRP Plan Area are depicted. This projection includes the impacts from an anticipated source and the expected reduction of existing source emissions due to statewide efforts and CRRP recommended measures. Comparing Figure 4B to Figure 4A, it can be seen that the future receptors can safely be placed in a greater fraction of the Plan Area.

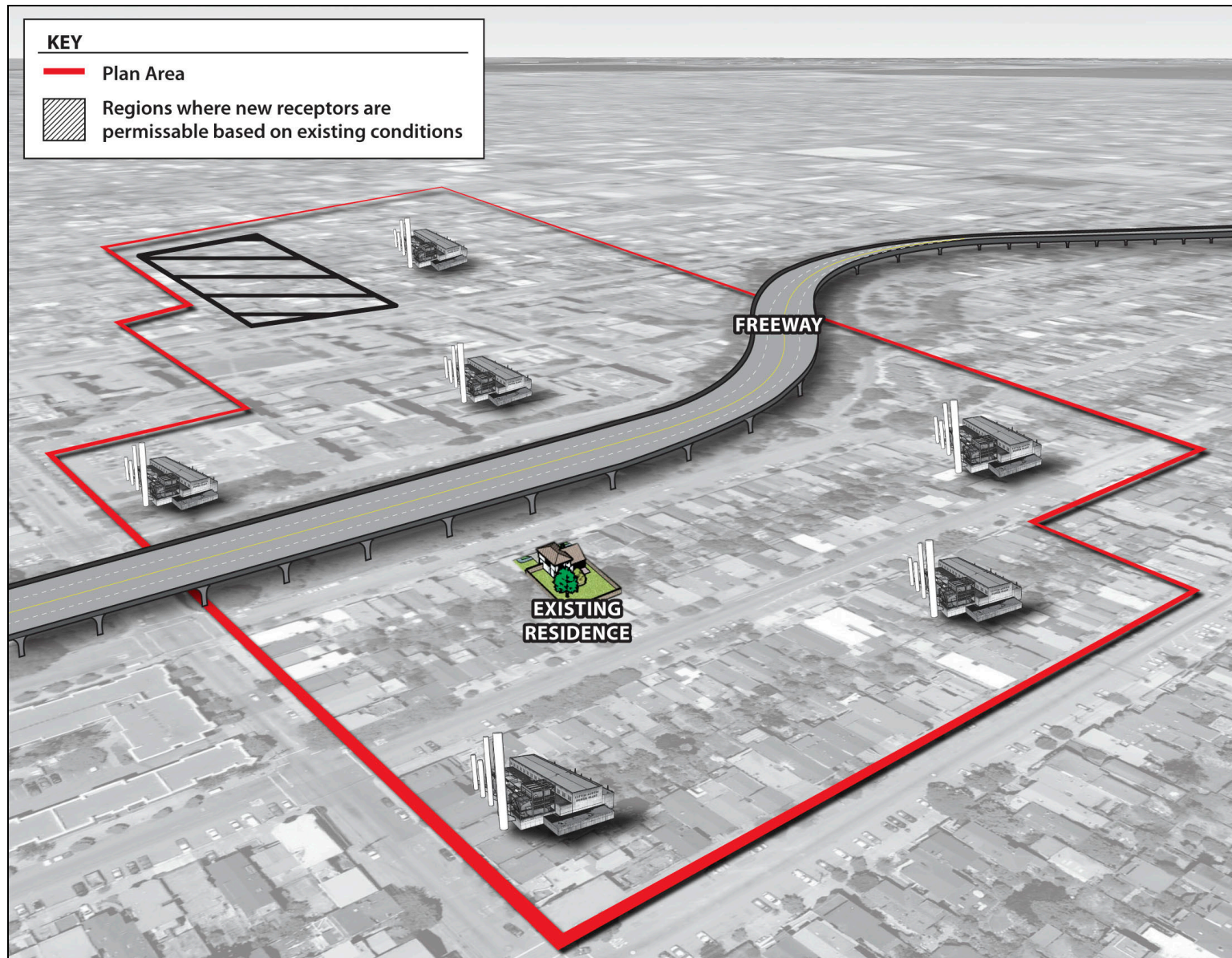


Figure 4a. Example TAC and PM2.5 health risk analysis for *existing conditions* (e.g. 2010) for a CRRP Plan Area.

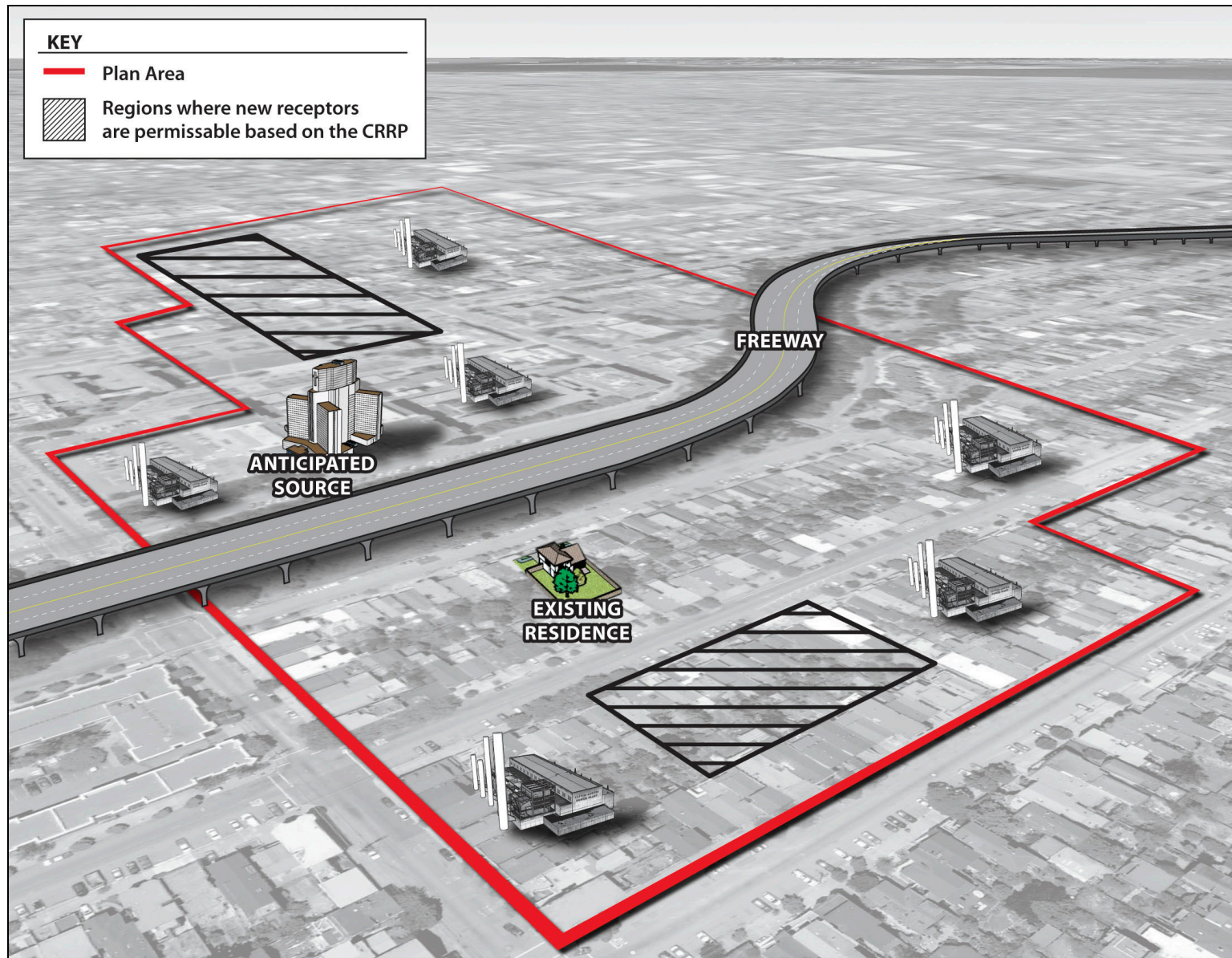


Figure 4b. Example TAC and PM_{2.5} health risk analysis for *future conditions* (e.g. 2020) for a CRRP Plan Area.

Case 2: Adding a new emission source to the Plan Area

Figures 5A and Figure 5B demonstrate how the risk at an existing residential sensitive receptor could be influenced by the potential addition of a new emission source. In these figures, the contributions of each emission source within the Plan Area to an existing residence are depicted. Next to each emission source (in parenthesis) is the incremental contribution of risk associated with the single existing residence. The current cumulative risk from existing sources in the Plan Area is the summation of the individual risks from the 10 emission sources.

As shown in Figure 5A, a proposed source is considered to be placed southwest of an existing residence. The incremental risk (X_{11}) associated with this proposed source, when considered in light of the risk associated with existing emissions, was found to be in excess of the acceptable risk specified in the CRRP. In this example, it is presumed that an assortment of mitigation measures were evaluated for the new source, however, even with mitigation, it is presumed that the existing residence would be exposed to an unacceptable risk level, when considering the existing source plus the new source.

As shown in Figure 5B, the proposed source is instead located north of the freeway. In this scenario, the new source is located further from the sensitive receptor and may also employ CRRP specified mitigation measures and the health risk at the existing residence is found to be acceptable and consistent with the CRRP. In this scenario, it is presumed that there are no other existing residences that would be adversely affected by the proposed source. In this example, it is shown that proposed sources should be placed in a way that ensures the improvement of air quality for sensitive receptors, and that mitigation measures to reduce TAC and PM_{2.5} emissions may be required prior to ensure that new development is consistent with CRRP goals.

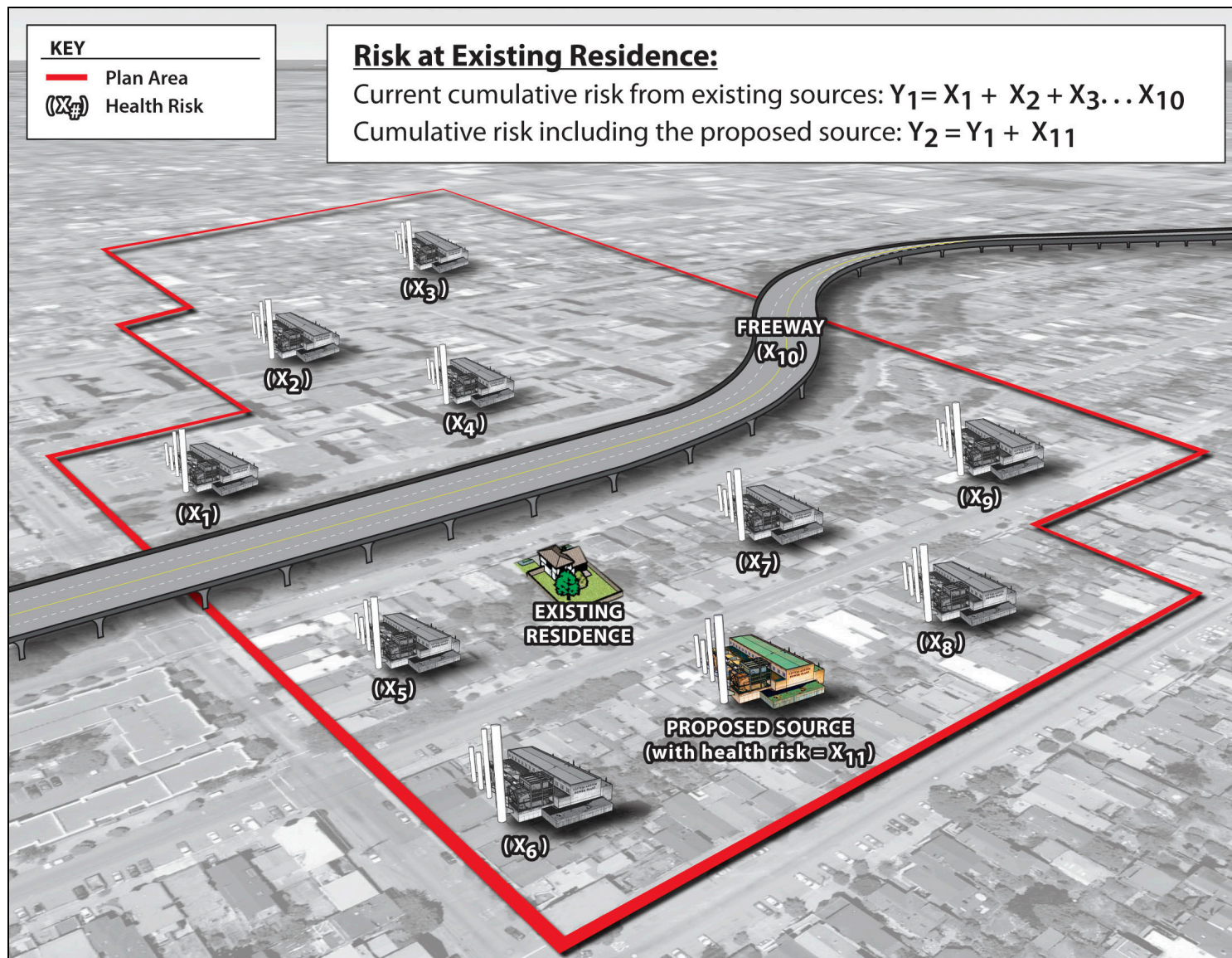


Figure 5a. Example TAC and PM_{2.5} risk at an existing residence considering the effect of a proposed new source that would result in an unacceptable health risk.

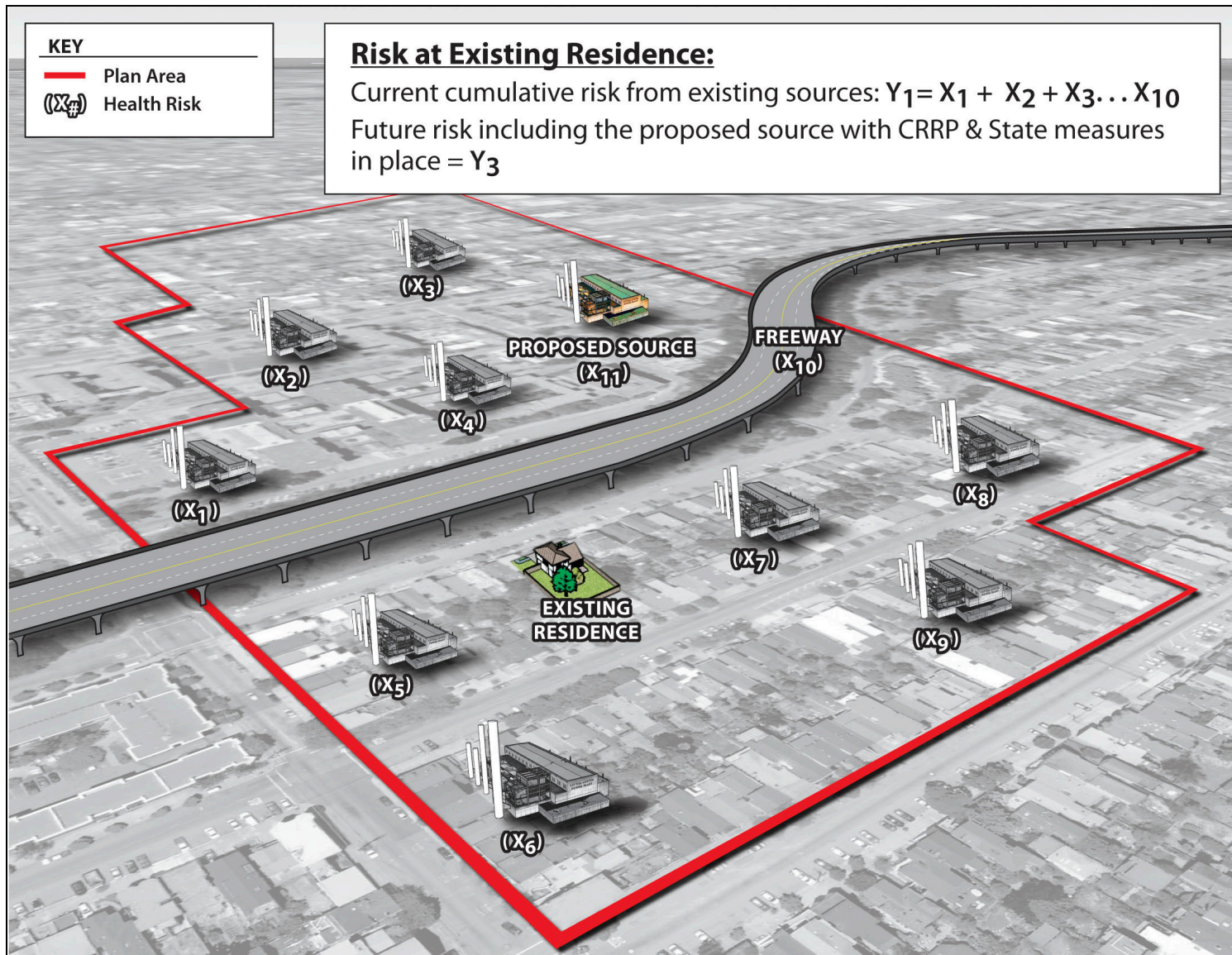


Figure 5b. Example TAC and PM2.5 risk at an existing residence considering the effect of a proposed new source that would not result in an unacceptable health risk.

Developing a Goal and/or Reduction Target

What is the reduction goal?

Setting goals for reducing emissions and exposures is a critical element of a CRRP. At this time, the BAAQMD is seeking input and is considering many options for what constitutes a minimum CRRP reduction target.

The BAAQMD is soliciting input on assessing potential minimum CRRP goals:

- Is success achieved if community health risks are reduced overall?
- Is success achieved if community health risks do not decline below current risk levels?
- Is success achieved if specified maximum exposure levels for any individual are not exceeded?
- Is success achieved when exposure levels are exceeded for only a fixed percentage of the population (but a smaller percentage than the current percentage)?
- Is success achieved if the community meets the proposed BAAQMD CEQA cumulative thresholds for all receptors?

Further, CRRP preparing entities will have discretion in setting the plan's target year and thus the timeframe by which progress should be made. The BAAQMD is also seeking input on target years and the progress toward reaching targets over time.

What are reduction targets?

A local municipality should have targets that reflect that community's individual purposes for preparing a CRRP in addition to a potential BAAQMD-mandated minimum reduction goal. For example, one community may set a reduction target of reducing risk levels within the Plan Area by 20% before 2015 while having a 2020 goal to meet the BAAQMD's minimum CRRP standard. Additional examples of suitable reduction targets are listed below.

The reduction targets can be based on several quantitative metrics. The following options could be used as reduction targets for a CRRP:

- Percent-based reduction compared to baseline.
- Maximum risk level or maximum concentration level determined by the plan.
- Target range of risk levels.
- Sliding scale of reduction depending on baseline risk levels.
- Reduction in the number of receptors in a severely affected area.
- Ambient measurements.

The BAAQMD will work with an entity preparing a CRRP to establish an acceptable CRRP reduction target. Reduction targets will be unique to each CRRP based on current conditions, pollutants of concern, development patterns, and other issues. A reduction target or CRRP goal should be tied to the community's purposes in completing the plan. Given that it may require a number of years for the exposure levels in many communities to reach an acceptable level, setting realistic, near-term targets ensures immediate progress in bettering public health in the Plan Area.

The relationship of a CRRP to the CEQA process for individual projects is discussed further in a subsequent section.

Reduction Measures and Strategies

What are reduction strategies and who is responsible for their development/selection?

CRRPs should include comprehensive strategies and measures to reduce emissions from existing and new sources and reduce exposure of existing and future receptors. It is anticipated that each CRRP preparing entity will develop a unique list of measures that best addresses the TAC and PM2.5 concerns in the area that are consistent or complimentary to other local efforts to curtail airborne health risk.

A sample list of measures that a community could select from is included in Table 3. Table 3 is not intended to be comprehensive, but should be considered representative of the types of measures the BAAQMD deems appropriate and as a starting point in CRRP reduction measure development. The BAAQMD is available to assist a CRRP preparing entity in selecting or developing reduction measures. Measures that reduce risk and/or emissions can target either sources (new or existing) or receptors (new and existing). Additionally, sources can be either stationary or mobile. Within these two main source categories, Table 3 identifies measures as either a strengthening of an existing regulation or practice or the introduction or requirement of a new practice.

Table 3. Potential PM2.5/TAC Measures Based on CAPCOA, California EPA, and ARB Guidance

Mobile Sources

Potential New Measures:

- Zoning to provide segregation of mobile sources from receptors such as requiring:
 - Minimum setbacks of new housing from highways.
 - Minimum setbacks of new housing from distribution centers.
 - Minimum setbacks of new housing from major service and maintenance rail yards.
- Establishment of zoning of buffer zones, such as vegetated areas or wall barriers, around mobile sources (such as highways and streets) and/or receptors.
- Establishment of *hazard areas* around mobile sources during peak travel times where pedestrians are strongly discouraged from entering.
- Limitations on cumulative mobile sources within any specific Area of Influence through advance planning for new major roadways.
- Operational hour limitations for truck deliveries.
- Alternative vehicle routing (i.e. re-route truck traffic by adding alternate access for truck traffic or by restricting truck traffic on certain sensitive routes).
- Truck parking restrictions (i.e. establish a buffer zone between truck parking and new housing or restrict truck parking in certain areas to specific hours of the day).
- Require trucks to utilize an Auxiliary Power Unit (APU)
- Alternative mobile source fuel requirements (i.e. require trucks, buses, and off-road construction equipment to run on biodiesel, very low-sulfur diesel fuel, aqueous diesel fuel, compressed natural gas (CNG), or other “clean” fuels).
- For construction sites or other regular truck travel, require a routing plan that maximizes distance

Table 3. Potential PM2.5/TAC Measures Based on CAPCOA, California EPA, and ARB Guidance

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- between source and receptors.
- Improve road infrastructure to facilitate improved traffic flow without inducing capacity through:
 - Signal synchronization.
 - Locations of on- and off-ramps for freeways.
 - Assessment of speed limits and roadway capacities.
 - Provide mechanisms for communication between carriers and operators at facilities such to manage demand and flow at facilities with heavy diesel traffic.
 - For marine sources:
 - Limit vessel speed.
 - Require or provide incentives to install add-on Diesel Particulate Matter control devices or cleaner engines or boilers.
 - Require use of electric power when berthed.
 - Require cleaner fuels.
 - For locomotives:
 - When ambient temperatures are above 50 degrees Fahrenheit, minimize locomotive engine idling by shutting down and re-starting engines.
 - Require Idle Reduction Technologies—The rail industry has developed and designed a new APU system that provides power during idling conditions and shuts down the main locomotive engine.
 - Require new engine technologies be applied to the engines - Modifying fuel injectors, which includes fuel injection pressure, fuel spray pattern, injection rate and timing, has been found to reduce emissions from locomotive diesel engines.
 - Require hybrid switcher locomotives.
 - Require use of locomotive technology that meets or exceeds the latest EPA emission regulations for locomotives.
 - Apply the 2005 Statewide MOU for Rail Yard Risk Reduction.
 - Require the installation of electrical hookups at loading docks and the connection of trucks equipped with electrical hookups to eliminate the need to operate diesel-powered TRUs at the loading docks.
 - Implement incentive for improved communications of fluctuating demand forecasts for labor and equipment among carriers and operators.
 - Install newer air filters in adjacent receptor buildings (i.e. High Efficiency Particulate Air [HEPA] cleaners, electrostatic air filters, and electronic air cleaners).
 - Improve alternative transportation options such as biodiesel or CNG-powered buses, light rail, community shuttles, etc.
 - Require new development to incorporate:
 - Bicycle parking, bicycle infrastructure (i.e. bike lanes and bike racks), and “end-of-trip” facilities.
 - Pedestrian infrastructure (i.e. pedestrian network, minimize barriers, etc.).
 - Traffic calming measures.
 - Bus shelters on the perimeter of development.
 - Parking measures (paid parking, shared parking among land uses, and preferential parking for alternative-fueled vehicles, etc.).
 - Incentives for ridesharing and use of alternative-fueled vehicles (carpool lanes, electric-vehicle charging stations, car-share programs, etc.).
 - Smart landscaping utilizing vegetation which requires minimal maintenance.
 - Electrical outlets at building exterior areas and complimentary electric lawnmowers for residents.

Potential Ways to Strengthen Existing Measures:

- Exceed current truck idling restrictions:

Table 3. Potential PM2.5/TAC Measures Based on CAPCOA, California EPA, and ARB Guidance

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- State law limits to 5 minutes of idling, and includes various exemptions; set more stringent standards for idling duration.
 - State law prohibits use of diesel-fueled auxiliary power units for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle equipped with a sleeper berth, at any location; set more stringent standards for APU operations.
 - Enhance and enforce idling limits, truck routes, parking restrictions.
 - Strengthen no-idle zones (i.e. prohibit idling of trucks and school buses more than 2 minutes near schools, residential areas, hospitals, parks, and other public facilities).
 - Strengthen trip reduction measures for large employers by requiring:
 - Employers with 50 or more employees at a work site to prepare a trip reduction plan
 - Trip reduction plans to incorporate more stringent alternative vehicle ridership (AVR) goals than are currently required
 - Performance standards for mobile emission sources by category, such as:
 - Restrict or provide incentives to use 2007 model year or newer trucks and buses.
 - Require or provide incentives to use diesel particulate filters for all diesel engines.
 - Require or provide incentives to use diesel oxidation catalysts for all diesel engines.
 - Require or provide incentives to use fuel-borne catalysts or other exhaust treatment technologies for all diesel engines.
 - Require or provide incentives to use Tier 3 or Tier 4 diesel engines for trucks and buses.
 - Electrification of buses, shuttles, off-road construction equipment, and other applicable vehicles.
 - Fund “clean” street sweepers.

Stationary Sources

Potential New Measures:

- Zoning to provide segregation of stationary sources from receptors such as requiring:
 - Minimum setbacks of new housing chemical producers.
 - Minimum setbacks of new housing from ports.
 - Minimum setbacks of new housing from petroleum refineries, dry cleaners, gas stations, and other stationary sources.
- Separation of stationary sources from community facilities, such as allowing storefront dry cleaning in communities with off-site actual cleaning operations.
- Siting of new land uses and new sources as recommended by ARB (2005).
- Require more stringent siting requirements than those recommended by ARB (2005).
- Establishment of hazard areas around stationary sources during peak operational hours where pedestrians are strongly discouraged from entering.
- Use of a TAC- and PM2.5-related questionnaire as part of the permitting process as recommended by ARB (2005).
- Establishment or zoning of buffer zones, such as vegetated areas or wall barriers, around stationary sources and/or receptors.
- Performance standards for stationary emission sources by category, such as:
 - Thermal efficiency requirements for fossil fuel-fired boilers, steam generators and process heaters.
 - Replace onsite fossil fuel-fired power generation units with electric power generation.
- Limitations on cumulative stationary sources within any specific Area of Influence.
- Site design to bias emission sources on site locations with greatest separation from sensitive receptors.
- Electrification of yard equipment for warehousing and industrial uses and electric hookups for

Table 3. Potential PM2.5/TAC Measures Based on CAPCOA, California EPA, and ARB Guidance

<p>transportation refrigeration units (TRUs).</p> <ul style="list-style-type: none"> • Industrial process design modifications to lower emissions. • Require emission vent location, height, and orientation to reduce exposure potential. • Operational hour limitations for stationary sources. • Require alternative fuels for stationary source combustion processes, such as natural gas, biofuels, ultra-low sulfur diesel, etc. • Throughput reduction for stationary sources. • Enhanced building ventilation or filtering systems: <ul style="list-style-type: none"> ○ Install HEPA cleaners, electrostatic air filters, and /or electronic air cleaners to remove particulate matter. ○ Install mechanical ventilation systems to remove indoor air and/or distribute filtered and conditioned outdoor air within buildings (i.e. exhaust fans and air to air heat exchangers). ○ Locate HVAC intakes away from emissions sources. ○ Require new buildings to ensure that HVAC systems are properly designed, installed, operated, and maintained, and require periodic audits to confirm HVAC effectiveness. • Install and maintain air filtration systems in new development (such as new housing or commercial facilities) certified to remove at least 80% of ambient particulate matter concentrations. • Install indoor air quality monitoring units in buildings. • Plant trees around sources of toxic particulate matter. • Operational hour limitations for day-time activities bringing receptors into exposure settings. • Require restaurants that involve charbroiling to install emission reduction technologies such as catalytic oxidizers, fiber-bed filters, electrostatic precipitators, wet scrubbers, and HEPA filters. <p>Potential Ways to Strengthen Existing Measures:</p> <ul style="list-style-type: none"> • Exceed BAAQMD’s requirement for installing Best Available Control Technology (BACT) and Best Available Control Technology for Toxics (TBACT) for new sources: <ul style="list-style-type: none"> ○ Require installation of most stringent control devices available. ○ Require periodic monitoring and assessment of control device effectiveness. ○ Require replacement of outdated control technology when more effective and stringent controls become available. ○ Require more stringent standards for BACT and TBACT (i.e. require ≥99.5% destruction efficiency for industrial flares, vapor recovery systems for organic liquid storage tanks with overall system efficiency >99%, Phase II or better vapor recovery systems at all gasoline dispensing facilities, etc.).

Source: CAPCOA, 2009, Health Risk Assessments for Proposed Land Use Projects, CAPCOA Guidance Document, July 2009, CALEPA and CARB, 2005, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005, and CARB, 2000, Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, October 2000. <http://www.epa.gov/iaq/pubs/ventilat.html>, <http://www.cdc.gov/niosh/topics/indoorenv/BuildingVentilation.html#management>

In selecting or developing measures for a CRRP, the entity will need to determine if the measures are sufficient to meet the reduction target. Both qualitative and quantitative reduction measures should be considered when evaluating an individual projects consistency with a CRRP.

How are measures and strategies implemented?

Much like measures aimed at reducing greenhouse gases within a Greenhouse Gas Reduction Plan, the responsibility of implementing measures to reduce emissions of and risk related to TACs and PM_{2.5} falls on several parties. First, the state, primarily through the ARB, has the authority to regulate vehicles and equipment statewide. Measures, or suites of measures such as the Diesel Risk Reduction Plan, while implemented statewide, result in significant local reductions. Second, the local jurisdiction has authority over zoning, permitting, standards for new development, and the institution of local-level programs to reduce emissions or risk. Third, the proponent of a project within the Area of Influence can incorporate design features into a project that reduce emissions from a new source, or include as mitigation actions that address an existing source within the Area of Influence, or select a site for a project that minimizes risk to existing receptors in the Plan Area.

Monitoring and Updating

Why does a CRRP need to be monitored and updated?

A CRRP is a goal-based plan. It defines a path to overall reduced health risk exposure in the Plan Area by a target date. Because the task of risk reduction is significant for many communities, the target date may be far into the future, e.g. 2020. The BAAQMD's primary goal is to reduce health risk to residents in the region. A CRRP must periodically demonstrate that it is achieving real health results equivalent to those achieved through individual project analysis. The ability of a community to reduce risk is inextricably related to efforts at the state level. A CRRP should reflect the most current projections of the effectiveness of these regulations.

How often should a CRRP be updated?

A CRRP should be updated whenever the BAAQMD updates its district-wide TAC and PM_{2.5} emissions inventory and/or whenever a significant change in the underlying assumptions or baseline conditions of a CRRP have changed. For example, if some fraction of the Plan Area is rezoned, a CRRP update would be appropriate. Because a CRRP relies on district-wide TAC and PM_{2.5} inventory data compiled by the BAAQMD, an individual CRRP can be updated at a maximum frequency in sync with BAAQMD inventory updates. However, if a community has the resources to update more frequently, it is certainly encouraged to do so. The BAAQMD anticipates updates to the district inventory at 5-year intervals. A CRRP can also be updated when new reduction measures may be more effective than those in the existing CRRP and which the preparing entity desires to formally adopt into a CRRP.

Can CRRP reduction targets be revised?

Communities may want to pursue additional analysis or revise a CRRP if the underlying assumptions and analysis of the original CRRP are no longer valid or applicable. Because significant reductions in DPM exposure are expected in the coming years due to state regulations, a community's ability to reach a target will be inextricably tied to the success of these programs. These issues will be taken into account through milestone years and updates as discussed above. The BAAQMD is currently considering options available for a community that is failing to meet the goals of a CRRP. At a

minimum, CEQA analysis will not be able to adopt streamlining utilizing a CRRP that is not meeting its reduction goals—this issue is discussed in greater detail in the section titled, “CEQA and a CRRP.”

What are the minimum requirements of a CRRP update?

At a minimum, a CRRP update should incorporate the BAAQMD’s latest inventory data for TAC and PM2.5 sources, model runs using this data, and the latest projections of effects of state and local measures. Any update must meet the BAAQMD’s minimum CRPP goal as well as the specific targets included in a CRRP. This means that additional or different measures may need to be added if and when new sources or receptors are contemplated than were included in the last version of a CRRP. The BAAQMD expects that the update process will be less labor intensive than plan development and that a large portion of the analysis performed at CRRP development, can be leveraged for the update.

Is our community making progress?

In general, a community’s progress can be determined by comparing current emissions (or current year’s monitoring data) within the Area of Influence to the baseline emissions and to the BAU emissions. Comparison to the baseline emissions will identify whether emissions are being reduced over time. Comparison to the BAU emissions will identify the degree to which the CRRP is providing additional reductions beyond a BAU (no action) condition. When local measurement data is used as a basis for assessment, a CRRP community should work closely with the BAAQMD because discrepancies between models and measurement can arise for a variety of reasons that may not be indicative of the effectiveness of a CRRP or a community’s progress towards its goal. The BAAQMD does not require a community to establish an extensive monitoring network within the Plan Area, nor does it preclude communities from doing so if resources permit.

The BAAQMD is considering several options for assessing progress for the “community as a whole” and is seeking input on appropriate metrics. These options could include:

- A weighted average of the concentration of TAC and PM2.5 at receptor locations across the Plan Area.
- A minimum amount by which exposure levels at all receptors has improved.
- Predetermined metrics for specific receptors in the Plan Area.
- Other metrics logically related to the reduction goals established in the CRRP.

In assessing progress, a community will organize and display modeling runs or measurement data in the same format (source, location in the Plan Area, activity, mass emissions, current emissions factor) as the baseline and BAU data such that areas of improvement can be clearly identified and areas of concern can be targeted moving forward.

Public Involvement Process

Is public involvement required?

Yes. The BAAQMD encourages public involvement in CRRP development and public outreach regarding the adopted CRRP, however the nature and amount of public involvement is at the discretion of the community preparing a CRRP. The BAAQMD anticipates taking a partnering role with a community in facilitating and supporting the public outreach.

CEQA and a CRRP

Is a project subject to project analysis for TAC and PM_{2.5} if it is consistent with a CRRP?

Possibly. In theory, a project that is fully consistent with all CRRP required measures and is included in the emission forecast would not result in a significant impact to the environment as defined under CEQA. This would be a valid determination only if the CRRP is lowering cumulative risk levels below the base year risk levels and is meeting other reduction goals by the target year identified by the preparing entity. The BAAQMD is still soliciting input on the minimum reduction goal for CRRPs through circulation of this document, and it cannot be concluded at this time what kind of project analysis for health risk might be necessary for projects fully consistent with a CRRP under CEQA. However, the BAAQMD supports the concept that some level of streamlining is appropriate for projects consistent with a CRRP.

Is a project subject to the proposed BAAQMD CEQA significance thresholds if it is fully consistent with a CRRP?

Possibly. Stationary sources will remain subject to all BAAQMD permit requirements regardless of whether a CRRP is prepared or not. However, as discussed above, the BAAQMD is still considering what the minimum goal of CRRP should be. Until that minimum goal is defined, no determination can be made regarding whether and which BAAQMD CEQA significance thresholds should or should not apply to projects that are fully consistent with a CRRP.

When is partial streamlining allowed?

For some areas, a CRRP, in combination with state measures, may be able to feasibly reduce risk to below the BAAQMD minimum goal and CRRP additional targets. In these areas, new source projects that are included in a CRRP forecasted emissions could streamline their CEQA analysis by demonstrating their consistency with all CRRP required measures. New receptor projects that are included in such areas could also streamline their CEQA analysis.

For other areas, a CRRP in combination with state measures may not be able to feasibly reduce risks to below the CRRP reduction goals. A CRRP should identify such areas and consider potential land use changes to avoid the introduction of new receptors within such areas if no feasible approach to risk reduction can be identified. New source projects that contribute new risks to areas with

cumulative total risks above the CRRP reduction goals will not be able to utilize a CRRP to streamline their CEQA analysis. New projects that place sensitive receptors within such areas will also not be able to streamline their CEQA analysis. In future years, if conditions improve to the point that the CRRP reduction goal could be achieved, development may be able to streamline their CEQA analysis provided it complied with all CRRP requirements.

How should a CRRP be adopted?

CEQA compliance will be necessary for CRRP adoption in order to allow for future streamlining of analysis of TAC/PM_{2.5} health risks for project fully consistent with a CRRP. A CRRP will include the discretionary adoption by the local municipality of certain standards and measures that could have secondary impacts on the environment. Thus a CRRP is a project under CEQA. However, it may be possible that a CRRP could be adopted using a Categorical Exemption or an IS/MND depending on the measures included in a CRRP and the secondary effects identified by the lead agency in its evaluation.

Resources

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