CHAPTER 4

ALTERNATIVES

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4.0 ALTERNATIVES ANALYSIS

An EIR is required to describe a reasonable range of feasible alternatives to the proposed project that could feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the significant environmental impacts of the proposed project (CEQA Guidelines § 15126.6(a).) The purpose of the alternatives analysis is to identify potential ways to avoid significant impacts, and it accordingly focuses on alternatives that may avoid or lessen significant impacts. (CEQA Guidelines § 15126.6(b).) If a project will not result in a significant impact, then by definition there are no alternatives that can avoid any such impacts and there would be no purpose in considering alternatives. (See also Remy, Thomas 2007, p. 567, note 73.) As discussed in Chapter 3, the proposed amendments are not expected to result in any significant adverse environmental impacts. Accordingly, the EIR is not required to evaluate any alternatives.

Nevertheless, there are a number of policy alternatives that the District considered in developing the proposed amendments. These alternatives were not evaluated because they would reduce or avoid any significant impacts associated with the proposed amendments (as there are none). They were evaluated because of the potential that they could present a better means to implement sound air quality regulatory policy in the Bay Area. After considering all such alternatives, the District concluded the approach reflected in the proposed amendments is the most appropriate manner in which to implement the updates to the District's NSR and Title V programs. (The issues involved and the reasons why the proposed amendments reflect the best policy choices are addressed in the Staff Report accompanying the proposed amendments.) Given that the District considered these alternatives during the rule development process, this EIR also discusses them, in order to provide the public with as much information as possible about this project.

The evaluation presented here is not legally required under CEQA because there are no significant adverse impacts to be avoided or substantially lessened through an alternative to the proposed amendments. Rather, it is presented to provide the Board of Directors and members of the public with as much information as possible regarding the proposed amendments and the issues that have been considered in developing them. CEQA serves an informational purpose, and providing additional information on policy alternatives that the District considered beyond what is legally required by CEQA is in keeping with this informational purpose. Furthermore, to the extent that there is any contention that alternatives need to be considered under CEQA even where there are no significant impacts, this discussion will address any such concerns.

4.1 DISCUSSION OF ALTERNATIVES

When an EIR considers alternatives, is describes a reasonable range of feasible alternatives to the proposed project that could feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the significant environmental impacts of the proposed project. (CEQA Guidelines §15126.6(a).) The objectives of the

proposed amendments are described in Chapter 2, Section 2.3., and (in summary) include the following:

- Incorporating federal NSR and Title V permitting requirements into District Regulation 2 so that they can be approved by EPA, which will allow the District to continue to implement these programs for stationary sources in the Bay Area;

- Ensuring compliance with additional state law requirements applicable to the District's permitting programs, such as SB 288 and other applicable requirements in the Health & Safety Code;

- Ensuring that the District's NSR and Title V permitting programs are implemented as efficiently and effectively as possible;

- Ensure that the NSR and Title V permitting regulations are drafted and presented in a manner that is clear and easy to understand and implement.

The proposed amendments seek to achieve these objectives through the revisions and additions to Regulation 2 contained in the proposed amendments. (See Chapter 2 for a further, detailed description.)

In considering potential alternatives, an EIR should address feasible measures to attain the basic objectives of the proposed project and should provide means for evaluating the comparative merits of each alternative. In addition, although the lead agencies should consider a sufficiently broad range of alternatives that can avoid significant impacts to permit a reasoned choice of the most appropriate alternative, it need not consider every conceivable alternative to the proposed project. The purposes of considering alternatives by a governmental agency are informed decision making and public participation. (See CEQA Guidelines, § 15126.6(a).)

The EIR should also identify any alternatives that were considered by the lead agency, but were rejected as not feasible and are therefore not considered in the EIR. Factors to be considered in eliminating alternatives from detailed consideration in an EIR are: (1) failure to meet most of the basic project objectives; (2) infeasibility; or (3) inability to avoid significant environmental impacts. (See CEQA Guidelines, § 15126.6(c).)

The possible alternatives to the proposed amendments are limited by the nature of the project. The proposed amendments are designed primarily to implement federal air quality permitting requirements, fulfilling the Air District's intended role in implementing the federal Clean Air Act under EPA's oversight. If the District fails to adopt these regulations, that would not (for the most part) relieve stationary sources and facilities within the Bay Area from being subject to these permitting requirements. It would simply mean that the requirements would be implemented federally under EPA's authority, instead of locally by the Air District under its own regulatory authority. EPA would also impose sanctions in the event it had to step in and regulate Bay Area sources

itself under its federal authority, including the loss of federal highway funds for Bay Area transportation projects.

4.2 DESCRIPTION OF PROJECT ALTERNATIVES

4.2.1 ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

CEQA Guidelines § 15126.6(e) requires evaluation of a "No Project Alternative". Under the "No Project Alternative," none of the proposed rule amendments would occur and the NSR and Title V programs would continue to operate under the existing regulatory provisions. EPA would not be able to approve the District's NSR and Title V regulations, and so it would be required to adopt its own implementation programs to regulate sources in the Bay Area directly under its own federal regulatory authority. Major sources would thus be required to comply with the Clean Air Act's NSR and Title V permit requirements by obtaining permits directly from EPA, rather than through the District as the implementing agency. The District's current Regulation 2 would still remain in effect under state law, however, and so regulated facilities would also have to comply with the District's NSR and Title V programs and would be required to obtain District permits under the Health & Safety Code. These permits would continue to be required under state law, although they would no longer be effective for federal purposes upon EPA's dis-approval of the District's regulations. In addition, the Bay Area would face sanctions for failure to have an approved State Implementation Plan, include a loss of federal highway funds.

Alternative 1 is not a feasible alternative for these reasons. Failure to update the District's NSR and Title V permitting programs, and the resulting EPA dis-approval of the District's programs, implementation of federal regulation in lieu of the District's program for federal Clean Air Act purposes, and the imposition of sanctions on the Bay Area, would thwart the objectives of the proposed amendments. The proposed amendments have been developed specifically to allow EPA to continue to approve the District's NSR and Title V programs and thereby avoid these outcomes. The No Project Alternative is not a reasonable or feasible alternative to the proposed amendments.

4.2.2 ALTERNATIVE 2 – NO BANKING PROVISIONS FOR $PM_{2.5}$ EMISSION REDUCTION CREDITS

Alternative 2 would implement the $PM_{2.5}$ offsets requirements for NSR permitting as proposed in Section 2-2-303, but without providing for the use of banked emission reduction credits as a means of complying with the requirement. Compliance would have to be achieved by providing contemporaneous on-site emission reduction credits, not through the use of banked credits. The District considered this as a policy alternative during development of the proposed amendments, and it is discussed in Section IV.B.1.c.iv. of the Staff Report. All the other proposed amendments would occur as proposed.

Alternative 2 would remove an essential element of flexibility in how NSR offsets requirements are implemented under state and federal law. Emissions banking is a system through which facilities can voluntarily shut down emissions sources and bank the resulting emission reductions to use later to offset new emissions. Facilities shutting down equipment and banking the resulting emissions reductions can either use the banked reductions themselves, or can sell them to other facilities for use in offsetting new emissions there. Banking provides an incentive for facilities to voluntarily shut down existing equipment when it is no longer needed and take credit for resulting reductions. Without banking, the reductions could only be used to offset new emissions if the old equipment was still in operation at the time the new source is built. If that were the case, facilities would have an incentive to keep such unneeded emissions sources online solely for the purpose of having a source to shut down when an emission reduction is needed. This would discourage voluntary shutdowns and the emissions reduction benefits that would arise from them. Moreover, banking also provides the flexibility to allow for future economic growth and development while at the same time achieving the emission reduction goals of the NSR program. Without emissions banking, no new sources subject to the offset requirements could be built except in the same location where an existing source is located that can be shut down to allow for the new source's emissions. This would remove any flexibility for the Bay Area to locate any such sources except in locations where existing sources are already present. Constraining the siting of new sources in this way would seriously hinder the Bay Area's cities and counties in their land use planning efforts. Such a result would thwart the District's goal – and the objective of the proposed amendments – to implement its regulations in the most effective and efficient manner possible.

Alternative 2 is not a feasible alternative for these reasons. Although Alternative 2 would achieve the objective of implementing the $PM_{2.5}$ NSR offsets requirements for facilities in the Bay Area, it would not achieve the objective of doing so in an efficient manner. To the contrary, requiring $PM_{2.5}$ offsets without providing for the use of banked emission reduction credits would severely hinder the flexibility of the NSR program. This is the reason why the District did not pursue this alternative during the development of the proposed amendments, as discussed in the Staff Report.

4.2.3 ALTERNATIVE 3 – USING "NSR REFORM" APPLICABILITY TEST FOR PSD PERMITTING

Alternative 3 would adopt/amend PSD provisions in Regulation 2, Rule 2 to obtain EPA approval of a District PSD program, but using the NSR Reform applicability methodologies described in Chapter 3, Sections and 3.2.3.3 and 3.3.4.2. (The NSR Reform applicability methodologies are also described in Section IV.C.3.g.ii. of the Staff Report.)

Alternative 3(a) would adopt/amend PSD provisions using the NSR Reform methodologies for all PSD pollutants. Specifically, Alternative 3(a) would allow facilities to determine whether a modification will result in a "significant" increase in emissions and trigger PSD permitting requirements using (i) their highest 24-month

emissions average in the past 10 years as their emissions baseline before the modification and (ii) their projected future emissions, rather than their maximum permitted emissions, as their future emissions after the modification. This emissions increase calculation methodology would be less stringent than the District's current Regulation 2, Rule 2, which uses average emissions over the most recent 3 years as the baseline emissions before the modification and the maximum permitted emissions as the future emissions after the modification. Relaxing the applicability procedures for pollutants that are currently regulated under the PSD provisions in Regulation 2, Rule 2 would violate state law because those procedures were in effect in 2002. SB 288 prohibits any relaxation of any elements of an air district's NSR program, including PSD provisions, that were in effect as of 2002. Adopting NSR Reform for these pollutants would therefore violate SB 288. This is not a feasible alternative for this reason.

Alternative 3(b) would adopt the NSR Reform methodologies for PSD permitting requirements for GHGs only. The proposed amendments already incorporate the more flexible 10-year baseline provision for GHGs. This alternative would also allow facilities to use their unenforceable projections of future emissions to determine whether the emissions increase from a modification will be "significant" and trigger PSD permitting requirements. Allowing the use of unenforceable projections instead of enforceable permit limits for GHG permitting would not violate SB 288, because GHGs were not regulated in 2002. SB 288 prohibits relaxing any NSR rules that were in effect as of that time, but this does not apply to GHGs because GHGs were not subject to regulation at that time. Alternative 3(b) could potentially be feasible, because SB 288 does not prohibit it and so the alternative would satisfy the objective of complying with state law requirements for the District's NSR program. Alternative 3(b) would hinder the objective of implementing effective and efficient regulation, however, as it would undermine the enforceability of the District's PSD requirements for GHGs. The PSD program is designed to ensure that important requirements such as the BACT requirement are implemented whenever there is a "significant" increase in emissions. If PSD is implemented for GHGs based on unenforceable emission projections instead of on enforceable permit limits, it is highly possible that certain modifications will result in a "significant" increase in actual emissions after they are implemented, and yet not implement BACT to control their GHG emissions. Such a result would undermine the effectiveness of the PSD permitting program.

4.3 ENVIRONMENTAL IMPACTS OF PROJECT ALTERNATIVES

4.3.1 ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

Alternative 1 would not avoid or lessen any significant impacts associated with the proposed amendments. No significant impacts have been identified that would potentially result from the proposed amendments, and so there are no significant impacts to be avoided by not adopting the proposed amendments.

Moreover, Alternative 1 may result in an increase in emissions, compared to the proposed amendments, to the extent that the proposed amendments will have the potential to achieve emission reductions. For example, to the extent that the proposed NAAQS Compliance Demonstration requirement in proposed Section 2-2-308 will identify and prohibit emissions sources that will cause air quality to violate the National Ambient Air Quality Standards, the benefit from having this provision would be lost if the proposed amendments are not adopted. It is difficult to quantify the extent of any emission reductions that will be directly attributable to the proposed amendments, as they primarily implement regulatory requirements that have already been adopted and are part of the existing regulatory baseline conditions (among other reasons). To the extent that there will be environmental benefits from the proposed amendments, however, the "No Project" alternative would forego these benefits.

4.3.2 ALTERNATIVE 2 – NO BANKED CREDITS FOR SATISFYING $PM_{2.5}$ OFFSETS REQUIREMENTS

Alternative 2 would eliminate the use of banked $PM_{2.5}$ emission reduction credits for purposes of complying with the $PM_{2.5}$ emission offsets requirements being added in Section 2-2-303. Without the provision allowing banked credits to be used to satisfy the offsets requirements, $PM_{2.5}$ emissions sources subject to the offsets requirements would have to offset their own emissions on-site using contemporaneous on-site emission reduction credits. All the other proposed amendments would occur as proposed. (The existing offsets requirements in Sections 2-2-302 and 2-2-303 for other regulated pollutants would remain the same; those provisions are not being addressed as part of this update project. Facilities would continue to be able to use banked credits to comply with those offset obligations under the regulations currently in effect.)

Alternative 2 would not avoid or lessen any significant impacts associated with the addition of the $PM_{2.5}$ offsets requirements, as there will not be any such significant impacts. This is a new requirement being added in the District's NSR regulations, and as such it can only strengthen the regulations compared to existing regulatory conditions. It is not a weakening or relaxation of any regulatory requirements that could allow for an increase in emissions. Moreover, requiring offsets does not involve the addition of any new control equipment or other physical change at any facility, and so there is no potential for any secondary impacts at facilities that will have to comply with this requirement. These issues are discussed in more detail in Chapter 3, Section 3.2.3.2.

Moreover, allowing compliance with the $PM_{2.5}$ offsets requirements by providing banked credits will not result in any emissions increases that could result in significant localized air quality impacts. Thus even if the $PM_{2.5}$ offsets provisions in the proposed amendments were a relaxation from the current regulatory situation instead of a strengthening of current regulations, there would still be no potential for significant impacts that could be avoided by prohibiting banked credits. There are a number of stringent regulatory requirements in place that will prevent any source from causing such impacts, whether it complies with applicable offsets requirements with banked credits or with contemporaneous on-site emission reductions. These include the District's Toxics New Source Review requirements in District Regulation 2, Rule 5, which require that any new or modified toxics sources must demonstrate that they will not have any significant adverse toxic health impacts on any nearby sensitive receptors. In addition, for criteria pollutants the proposed amendments include the new NAAQS compliance analysis requirement (which will apply in addition to existing PSD NAAQS compliance requirements) which will require all new and modified sources with more than a *de minimis* increase in emissions of criteria pollutant to demonstrate that they will not cause or contribute to any exceedance of the health-based NAAQS standards. And all new and modified sources subject to NSR requirements will also have to comply with CEQA at the time of permitting, which will require evaluation and identification of any potential localized air quality impacts. If there were to be any significant impacts in such a situation, CEQA would also require the implementation of all feasible mitigation measures to reduce such impacts to less than significance.

4.3.3 ALTERNATIVE 3 – "NSR REFORM" APPLICABILITY TESTS

Alternative 3 involves using a less stringent applicability methodology for NSR permitting (for both sub-alternatives, Alternative 3(a) and Alternative 3(b)). Alternative 3 would result in the potential for increased emissions in cases where a project's protected emissions are not above the PSD "significant" threshold, but they turn out to be significant once the project is built and starts operating. Such projects would not be required to implement important requirements such as using Best Available Control Technology (BACT) to reduce their emissions, even though they ultimately result in significant emissions increases. These projects would have higher emissions as a result of not implementing BACT for their significant emissions increases under Alternative 3.

Industry commenters have speculated that using the more stringent applicability methodology would actually increase emissions. They have speculated that less stringent permitting requirements will allow them to voluntarily reduce their emissions, because they will be able to avoid PSD permitting requirements that discourage them from voluntarily implementing beneficial equipment upgrades that increase the efficiency of their plants and thereby reduce emissions. They claim that if the District adopts a more relaxed applicability standard for its PSD permitting requirements, they will voluntarily undertake more of these beneficial projects, which will reduce emissions in the Bay Area. The District evaluated these claims and found no evidence to support them. The District's detailed discussion of this issue is presented in Chapter 3, in Section 3.2.5.3.

(for air pollutants generally – relevant to Alternative 3(a)) and Section 3.3.4.2. (for GHGs – relevant to Alternative 3(b)). As explained there, adopting the weaker NSR Reform applicability standards would not be expected to have any such beneficial impact on sources in the Bay Area, for multiple reasons.

Therefore, Alternatives 3(a) and 3(b) would not avoid any significant air quality impacts. To the contrary, they would result in an increase in air quality impacts from sources that would be able to escape PSD permitting requirements such as the use of Best Available Control Technology based on their projected emissions, but which subsequently turn out to have significant actual emissions increases that are not subject to any permit limits.

4.4 CONCLUSIONS

Alternative 1 (the "No Project Alternative") would not reduce any potentially significant impacts, as no significant impacts have been identified for the proposed amendments. Alternative 1 could also potentially result in some additional emission increases, although it is difficult to quantify the extent of any such increases at this time. Further, Alternative 1 would not achieve any of the project objectives.

Alternative 2 would not reduce any potentially significant impacts, as no significant impacts have been identified for the proposed amendments. Alternative 2 is also not a feasible alternative, as it would not achieve an important objective of the proposed amendments. It would not allow for the flexibility in implementing the offsets requirements for $PM_{2.5}$ that is necessary for effectively implementing these requirements in the Bay Area.

Alternative 3 would not reduce any potentially significant impacts, as no significant impacts have been identified for the proposed amendments. Moreover, Alternative 3 would result in increased impacts because it would allow some projects to be built without implementing PSD emission control requirements that result in significant actual emissions increases. Alternative 3(a) would also not be feasible, as it would involve violating SB 288. Alternative 3(b) would not be prohibited by SB 288, but its feasibility is questionable given that it would undermine the enforceability of the PSD requirements for GHG emissions.

Accordingly, none of the three alternatives discussed herein would have the potential to reduce or eliminate any significant impacts; and none of them would feasibly achieve all of the objectives of this project. These are the reasons why none of these alternatives were adopted by the District in developing the proposed amendments. The same reasons would support a conclusion under CEQA that none of them is a preferred alternative (to the extent that an alternatives analysis is required for this project). The proposed project is the preferred alternative to update the District's NSR and Title V permitting regulations.