



San Joaquin Valley

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DATE: June 21, 2007

TO: SJVUAPCD Governing Board 

FROM: Seyed Sadredin, Executive Director/APCO
Project Coordinator: Scott Nester

RE: **DUAL PATH STRATEGY: FAST TRACK ACTION PLAN**

BACKGROUND:

On April 30, 2007, your Board approved an innovative and comprehensive "dual-path" strategy to attain cleaner air, meeting the federal 8-hour ozone standard as expeditiously as possible.

To establish the legal foundation for the overall ozone strategy, your Board adopted the *2007 Ozone Plan*. The Plan is predicated on current and expected future technologies to reduce emissions as much as technologically possible, in consideration of the legal "credibility" constraints of the federal Clean Air Act and United States Environmental Protection Agency (US EPA or EPA) policies and regulations. As such, the Plan meets federal legal obligations and shields the Valley from devastating federal sanctions. This overarching and comprehensive Plan is designed to be as expeditious as possible, but given the Valley's low carrying capacity for air pollution, current and future technologies do not provide sufficient federally creditable reductions for attaining the new ozone standard. Therefore, the Plan contains a "black box" that represents control measures that cannot currently be defined to the extent needed for a "serious" or severe" ozone plan. The extreme designation with the "black box" approach is the only strategy that would be approvable by EPA, given that the need for emission reductions is greater than what prospective technologies will provide.

The dual path also includes a set of strategies to reduce or eliminate the "black box" as expeditiously as possible, and well in advance of the 2024 attainment deadline. District staff has adopted the term "Fast Track" to describe this accelerated path to attainment. The table

below illustrates the attainment gap over time and the added reductions that must be identified through our Fast Track to attainment:

OXIDES OF NITROGEN (NOx) ATTAINMENT GAP

	2017	2020	2023
NOx Reductions Needed to Reach Attainment from 2005, tons/day (t/d)	464	464	464
NOx Reduction from 2007 Ozone Plan, t/d	270	365	382
NOx Attainment Gap, t/d	194	99	82

The Fast Track measures were included in the *2007 Ozone Plan* in Chapters 7, 8, and 11. During the Plan adoption hearing on April 30, 2007, your Board directed staff to bring an item to the June 21, 2007 Governing Board meeting that defines the expedited path in more detail and that provides information on action items, responsibilities and timelines for implementing this important clean air strategy.

The Fast Track is being developed in an open public process. The Air Pollution Control Officer (APCO) has formed a task force comprised of members from environmental organizations, industry representatives, and the Governor’s San Joaquin Valley Partnership. District staff has been meeting regularly with the Fast Track Task force to devise and advance the new and innovative measures for early attainment. Members of the Fast Track Task Force include:

- Hal Bolan (Operation Clean Air),
- Liza Bolanos (Central Valley Air Quality Coalition),
- Les Clark (Independent Oil Producers Agency),
- Manuel Cunha (Nisei Farmers League),
- Kelly Deming (Kings County Citizens for a Healthy Environment),
- Jan Ennenga (Manufacturers Council of the Central Valley),
- Jim Ganduglia (Ganduglia Trucking/California Trucking Association),
- Roger Isom (California Cotton Ginners and Growers Associations),
- Mark Keppler (Maddy Institute – CSU Fresno),
- David Lighthall (Central Valley Health Policy Institute-CSU Fresno),
- Susan Noble (Western States Petroleum Association),
- Sarah Sharpe (Coalition for Clean Air),
- Ron Silva (Westar Transport/California Trucking Association),
- Katie Stevens (Maddy Institute-CSU Fresno/Governor’s Partnership for the San Joaquin Valley),
- Kim Thompson (Fresno-Madera Medical Society), and
- Peter Weber (Regional Jobs Initiative/Governor’s Partnership for the San Joaquin Valley).

The Fast Track Task Force will fulfill four important roles, as follows:

- An advisory group for refining Fast Track strategies;

- A source for new ideas for Fast Track strategies;
- Outreach to inform decision-makers and the public on the Dual Path and Fast Track concepts; and
- Advocacy to help develop the means (i.e., funding for incentives) to implement Fast Track strategies.

All meetings of the task force will be open to the general public and all interested parties.

FAST TRACK TO ATTAINMENT:

The Fast Track will contain three primary components:

Effective and expedited regulations by ARB and EPA: Attaining the federal 8-hour ozone standard will require a 75% reduction in NOx emissions. With mobile source emissions constituting 80% of the Valley's total NOx emissions, the bulk of the necessary emissions reductions must come from state and federal control measures for mobile sources. These measures will include more stringent tail-pipe standards for new on-road and off-road mobile sources, and regulations designed to accelerate the deployment of newer, cleaner engines. The District will work diligently to ensure stringent and expeditious controls on mobile sources are promulgated and implemented by California Air Resources Board (ARB) and EPA. Toward that end, the District will take a leadership role in devising effective control measures for mobile sources, and will utilize all available administrative, regulatory, legislative, and legal avenues to pressure ARB and EPA to do their fair share in controlling emissions from sources under their jurisdiction.

Significant increase in incentive funding: There is broad consensus that regulations alone cannot bring about all the reductions that are necessary to reach attainment. Stationary sources are already heavily controlled, and more stringent tail-pipe standards for new vehicles will not produce reductions until the old engines are replaced with cleaner new engines. With incentives, the full benefit of the new engine standards will be accelerated by several years. Incentive grants can also allow for adoption of cleaner technologies that may otherwise be unaffordable.

As the 2007 Ozone Plan is implemented, over 50% of the Valley's population will see attainment of the 8-hour ozone standard in 2015, with over 90% reaching attainment in 2020. Without the incentive funds identified in this plan, these figures will be reduced to 35% in 2015 and 65% in 2020. Therefore, without the incentive measures proposed in this plan, attainment of the ozone standard will be delayed to after 2020 for over 1,000,000 Valley residents. Furthermore, without the proposed incentives, the Valley may not reach attainment of the PM 2.5 federal standard by 2015 as currently mandated by the federal Clean Air Act. The amount of state and local funds currently

available for incentive-based programs is approximately \$40 million per year. The primary sources for these funds are the expected revenues from the District's Indirect Source Review rule, voluntary development mitigation agreements, local DMV surcharge fees, and the state's Carl Moyer program.

Fast Track requires a significant increase in incentives to bring a large segment of the Valley population into attainment earlier than otherwise possible and to allow for the application of advanced technologies that will be required for the bringing the entire Valley into attainment. To reach this goal, the Valley will need a total of approximately \$3.1 billion in incentive funding.

The District is retaining outside experts to develop a detailed plan for effective expenditure of incentive funds. The goal will be to spend incentive funds in a manner providing for the most expeditious and cost-effective reductions in emissions.

In addition to strongly advocating for new state and federal incentive funds, the District will also pursue all feasible self-help measures to generate funding locally. As a self-help measure, the District will establish a Community Clean Air Fund allowing for the receipt and expenditure of voluntary donations to fund projects that will improve Valley air quality. This program will allow individuals, corporations, non-profits, and governmental agencies to donate proceeds for emission reduction projects throughout the Valley. The program will be administered with adequate safeguards, accountability, and reporting to the public. The program details will be developed through a public process and will be presented to your Board for consideration in the coming months. If legally permissible, the program will be designed to allow tax deductibility of the donations.

Fast Track emission reduction measures: Reaching attainment ahead of the 2024 deadline will require development and implementation of a number of bold, innovative, and creative measures. The following is an initial list of such measures as outlined in the District's *2007 Ozone Plan*:

- **Green Contracting:** Encourage or require government agencies and private businesses to give preference to contractors/vendors who use low-emission processes and equipment. District does not currently have the authority to mandate green contracting.
- **Green Fleets:** Encourage or require government agencies and private businesses to upgrade existing fleets with low-emission vehicles. District does not currently have the authority to mandate the use of green fleets by private businesses.
- **Truck Replacement/Retrofit/Repower:** Provide incentives for early and cost effective fleet modernization. Could potentially produce 40 tons per day (tpd)

NOx emission reduction at a cost of approximately \$1.5 billion. Measure will depend heavily on participation and incentive funds.

- **Short Sea Shipping:** Reduce heavy-duty truck and locomotive vehicle miles traveled through the District by transporting goods by water carriers between northern and southern California. If short sea shipping replaces 20% of daily trips in 2010, approximately 8,000 heavy-heavy duty truck movements would be eliminated, resulting in 40 tpd of NOx and 1 tpd of PM emissions reductions.
- **High-Speed Rail:** Use high-speed rail to transport goods and people through the Valley. The California High-Speed Rail Authority projects that the system would be capable of handling up to 68 million passengers a year by 2020, at a total project cost of \$33 billion.
- **Alternative Energy:** Utilize lower-emitting sources of energy such as electric, solar, and hydrogen fuel cells, to reduce or slow the growth of NOx emissions in the Valley.
- **Energy Conservation:** Encourage or require government agencies, businesses, and residents to employ measures to reduce energy consumption in the San Joaquin Valley.
- **Heat Island Mitigation:** Adopt methods and practices, such as urban landscaping and highly-reflective roofing, to reduce the surface temperatures in urban centers and reduce the need for peak electricity generation. Additional benefits include cost savings, reduction of greenhouse gases, and aesthetic improvements. Mass planting of trees could result in increased water usage, maintenance costs, and emission of biogenic VOCs.
- **Episodic/Regional Controls:** Incentive and regulatory-based measures, such as enhancements to the Spare the Air program, designed to reduce ozone concentrations at hot-spot locations during the worst days of the ozone season. While the District is not proposing major curtailments in activity that could have a devastating effect on the Valley economy (e.g., no farm days, no construction days), it may be beneficial to include episodic provisions in many incentive and regulatory measures. The District averages 25 Spare the Air days and 100 days when the AQI is above 100 per year.
- **Inland Ports:** Provide linkages between ports and other modes of transportation, such as by train for the delivery of goods. Increase use of cargo containers and truck/rail combinations.

Annual Report: The District will prepare a Fast Track Annual Report and present it to the Governing Board. This report will address a number of key elements regarding program implementation, including the following:

- Summary of activities conducted during the past year to implement Fast Track, including District activities and those conducted by others;
- Status of implementation of each of the three primary components of Fast Track;
- Summary of estimated emission reductions from Fast Track that were achieved during the prior year, and the relative magnitude of these reductions with respect to the NOx emission reduction shortfall identified in the 2007 Ozone Plan;
- Discussion of the prioritized list of Fast Track emission reduction measures to determine if new information on potential emissions reductions, timeline to achieve reductions, total cost, and degree of District/local control would change the ranking.

ASSESSING FAST TRACK EMISSION REDUCTION MEASURES:

Reaching attainment ahead of the 2024 federal deadline demands a significant change in the state's goods and people movement infrastructure, accelerated modernization of on-road and off-road fleets, shift to cleaner energy, and major advancements in pollution control technology. Toward that end, the District committed to full exploration, development, and implementation of the Fast Track emission reduction measures. The following parameters are used in evaluating these measures:

- Potential Emission Reductions
- Timeline to Achieve Emission Reductions
- Total Cost
- Degree of District/local control

Each measure received a score for each of the parameters listed above, with one representing the lowest score and five the highest score. A score of five for each parameter means the measure would have the potential for substantial emission reductions, would take minimal time to implement, would have a low total cost, and the District would have strong control over the implementation of the measure. The following table lists the measures and the potential ranking for each measure.

ASSESSMENT OF FAST TRACK MEASURES

Measure	Potential Emission Reductions	Timeline	Total Cost	Degree of District/local Control
Truck Replacement/ Retrofit	5	4	2	2
Short Sea Shipping	5	3	2	1
Alternative Energy	4	2	2	4
Inland Ports	4	2	2	3
Green Contracting (public sector)	3	5	4	4
Episodic/ Regional Controls	3	3	3	3
Green Fleets (private sector)	3	3	3	2
High Speed Rail	3	2	1	2
Expanded Spare the Air	2	5	5	5
Energy Conservation	2	4	5	4
Green Contracting (private sector)	2	3	3	2
Green Fleets (public sector)	2	3	3	4
Heat Island Mitigation	1	1	5	3

A review of the scores indicates that there is no “perfect” Fast Track measure that achieves a large, quick, and highly enforceable emission reduction for a low total cost. In general, the measures with the most potential for emission reductions also have high total cost and lower enforceability. Therefore, the implementation schedules described below are designed to first secure funding for the measures with the most emission reductions, while simultaneously pursuing the relatively “quicker and easier” emission reduction measures.

INITIAL ACTION PLAN FOR IMPLEMENTING FAST TRACK TO ATTAINMENT:

Securing state and federal incentive funding

Incentive funding will play a key role in expediting attainment. Among the first actions to be implemented will be the following:

- State lobbying - The legislature is currently developing the mechanisms for allocating Proposition 1B air quality mitigation funds. During the current legislative session, the District will continue to lobby the state legislature and ARB to assure the Valley receives its fair share of Prop 1B funds.
- Federal lobbying – The District is currently working with California’s senators and the Valley’s congressional delegation to secure funding from several agencies within the federal government.
- Developing other sources of funding - Over the next year, the District will also investigate other possible ways to generate funds. For example, the District could support or sponsor legislation to impose a fee on pass-through trucks.

“Community Clean Air Fund”

Another very promising mechanism for increasing funding for pollution control projects is for the District to raise money through voluntary contributions. Actions to implement the Community Clean Air Fund will include:

- Investigation of issues including tax benefits for donors;
- Developing a draft program proposal;
- Public workshops in third and fourth quarter 2007;
- Public hearing to formally establish the program in fourth quarter 2007.

Effective and expeditious on-road and off-road regulations by ARB and EPA:

Because mobile sources are the largest part of the Valley's NOx emission inventory, it is essential that the state and federal governments establish the most effective mobile source regulations as are possible. Actions to be taken to pressure ARB and EPA include:

- Input on ARB standards - The District provided pointed comments and testimony to compel ARB to provide more stringent NOx standards in the recently proposed rule for construction equipment. The District will continue to provide additional input as the ARB develops more fleet rules.
- Input on EPA standards – Because locomotives are another significant source in the Valley, the District will take every opportunity to encourage EPA to reduce NOx emissions from the locomotive fleet as expeditiously as possible.

Expanded Spare The Air

Expanding the Spare the Air program has the potential to reduce peak ozone concentrations in a relatively expeditious timeframe. Actions to enhance Spare the Air will include:

- Incorporate a “Clean Air Days” concept in the District's Spare The Air program;
- Develop additional voluntary measures and a proposal for increasing the frequency of Spare the Air days - early 2008;
- For mandatory measures
 - Explore District authority and present public workshops – third and fourth quarter 2008;
 - Public Hearing by Governing Board to implement mandatory measures before 2009 ozone season.

Green Contracting (public sector)

Green contracting has the potential to reduce emissions from governmental vehicles and equipment in a relatively fast manner. Actions to implement this measure will include the following:

- Identify legal boundaries for mandatory approaches – third quarter of 2007;
- Exploratory meetings with governmental agencies – fourth quarter of 2008;
- Develop model ordinances for adoption by agencies through a public process – to be determined after exploratory meetings in 2008;

- Public hearing for District-developed model ordinances and/or District regulation – to be determined after exploratory meetings in 2008.

Green Contracting (private sector)

Green contracting also has the potential to reduce emissions from private sector sources in a relatively fast manner. Actions to implement this measure will include the following:

- Identify legal boundaries for mandatory approaches – early 2008;
- Develop guidelines/incentives for businesses to use to select contractors with cleanest fleets;
- Public meetings and workshops – 2009;
- Board presentation for program – 2009.

Short Sea Shipping

Short sea shipping could provide a very large emission reduction, but would require significant infrastructure changes and would therefore take a long time to implement. In the short term, the following actions would be taken:

- Facilitate a meeting with statewide stakeholders – 2007;
- Explore and identify funding sources for a feasibility study – beginning in 2007.

Inland Ports

Similar to short sea shipping, inland ports could provide a very large emission reduction, but would require significant additional infrastructure and would therefore take longer to implement. In the short term, the following actions would be taken:

- Lobby for Proposition 1B infrastructure funding – starting in June 2007;
- Facilitate a meeting with Port of Oakland, Valley agricultural representatives, and other stakeholders – 2007.

Green Fleets (public sector)

Public sector fleet turnover can be encouraged in a variety of ways, including incentives and possibly regulations or a combination of the two. In the short term, the following actions would be taken:

- Identify legal boundaries for mandatory approaches – third quarter of 2007;
- Exploratory meetings with governmental fleet managers – early 2008;
- Develop proposals for incentivizing and/or requiring fleet turnover through a public process – schedule to be determined after exploratory meetings in 2008;
- Public hearing for District incentive programs or regulations – schedule to be determined after exploratory meetings in 2008.

Green Fleets/Truck Replacement (private sector)

Private sector fleet turnover can be encouraged through incentives and state regulations. In the short term, the following actions would be taken:

- Develop cost effective proposals (e.g., Triangular Trade concept) for accelerating private sector fleet turnover – 2007;

- Coordinate with ARB to incorporate concepts into Moyer Program Guidelines – 2008;
- Public meetings and workshops – timing depends on funding availability;
- Board presentation for program after public review of proposed program.

High-Speed Rail

High speed rail is a long-term project that can spur further development and demand for cleaner transportation alternatives. The District can influence the process via the following actions:

- Advocate for funding – starting in June 2007;
- Help identify high speed rail infrastructure with optimal air quality benefit – as high speed rail proposals are developed.

Energy Conservation

The District can encourage additional energy savings through incentives and regulations, although the air quality benefits are relatively small. Actions will include:

- Investigate the potential air quality benefit of further energy conservation measures – 2008;
- Public meetings and workshops – to be determined after investigating potential benefits;
- Board presentation for program – after public review of proposed program.

Alternative Energy

The District can encourage the development of alternative energy through incentives and regulations, although the air quality benefits may be relatively small. Actions will include:

- Investigate the potential air quality benefit of alternative energy measures – 2008;
- Public meetings and workshops – to be determined after investigating potential benefits;
- Board presentation for program – after public review of proposed program.

FISCAL IMPACT:

The Fast Track Action Plan is a dynamic air quality management strategy designed to capitalize on evolving technologies, market opportunities, and public funding mechanisms over the coming years. The workload implications will likely be significant and impact several District departments. As the implementation of the Fast Track Action Plan progresses, staff will request any needed resources from your Board, either through annual budget requests or mid-year budget adjustments. Therefore, no modification of the District's Budget is necessary at this time.