

CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC MEETING TO CONSIDER APPROVAL OF A LIST OF PROPOSED EARLY ACTION MEASURES TO REDUCE GREENHOUSE GAS EMISSIONS UNDER THE CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006

The Air Resources Board (ARB or Board) will conduct a public meeting at the time and place noted below to consider the approval of a list of proposed discrete early action measures to reduce greenhouse gas emissions under the California Global Warming Solutions Act of 2006. The Board may also consider directions to staff to develop additional or different climate change mitigation strategies as the Board deems appropriate.

DATE: June 21 and June 22, 2007

TIME: 9:00 a.m.

PLACE: Los Angeles Airport Marriott
5855 West Century Blvd.
Los Angeles, CA 90045

This item will be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., Thursday, June 21, 2007, and may continue at 8:30 a.m., Friday, June 22, 2007. This item may not be considered until June 22, 2007. Please consult the agenda for the meeting, which will be available at least 10 days before June 21, 2007, to determine the day on which this item will be considered.

For individuals with sensory disabilities, this document is available in Braille, large print, audiocassette or computer disk. Please contact the ARB's Disability Coordinator at 916-323-4916 by voice or through the California Relay Services at 711, to place your request for disability services. If you are a person with limited English and would like to request interpreter services, please contact the ARB's Bilingual Manager at (916) 323-7053.

BACKGROUND

Assembly Bill 32 (Stats. 2006, Chapter 488), the California Global Warming Solutions Act of 2006 (the "Act") creates a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California, with the overall goal of restoring emissions to 1990 levels by the year 2020. The Act recognizes that such an ambitious effort requires careful planning and a well thought out set of strategies. By January 1, 2009 the Board must design and adopt an overall scoping plan to reduce GHG emissions to 1990 levels. The Board then has until January 1, 2011 to adopt the necessary regulations to implement that plan. Implementation of individual measures begins no later than January 1, 2012 so that the emissions reduction target can be fully achieved by 2020. As part of this comprehensive effort, the Board

is empowered to use traditional regulatory methods and to adopt and implement market-based compliance mechanisms provided certain criteria are met.

The Act also recognizes that immediate progress in reducing greenhouse gas emissions can and should be made. Accordingly, the Act requires ARB to identify a list of “discrete early action greenhouse gas reduction measures” by June 30, 2007 (Health and Safety Code section 38560(a)). Once on the list, these measures are to be developed into regulatory proposals, adopted by the Board, and made enforceable by January 1, 2010. The Act requires that measures adopted and implemented by the ARB be technologically feasible and cost-effective. The ARB staff is making the presumption, based on the best information currently available, that all of the measures that it is proposing will meet the Act’s legal requirements. If additional information or analysis reveals that a particular strategy cannot meet one or more of the requirements, it will not be put into effect.

In addition to the statutorily required list of early action measures, additional strategies for reductions in GHGs have been identified. While staff does not believe that these strategies meet the criteria for “discrete early action measures,” the staff is recommending vigorously developing all potentially viable options for mitigating GHG emissions.

The staff has identified a total of 36 ARB-specific actions to be developed into regulatory or non-regulatory measures in the 2007 – 2009 timeframe. These include three discrete early regulatory actions, 23 additional GHG reduction measures anticipated to encompass both regulations and other measures, and 10 conventional air pollution control measures that are scheduled for rulemaking by 2009 and that are expected to yield GHG emission reduction co-benefits. Voluntary and educational efforts are prominent examples of non-regulatory actions that can deliver real GHG emission reductions, and staff plans to pursue these efforts vigorously. All of these strategies are described in the staff report titled “Proposed Early Actions to Mitigate Climate Change in California.” (http://www.arb.ca.gov/cc/042307workshop/early_action_report.pdf).

At the public hearing the Board may adopt the staff recommendations or it may modify those recommendations as it deems appropriate.

Discrete ARB Early Actions Pursuant to AB 32

As indicated above, three strategies are proposed to meet the narrow statutory definition of “discrete early action greenhouse gas reduction measures” in Section 38560.5 of the Health and Safety Code (Group 1). These include the Governor’s Low Carbon Fuel Standard, reduction of refrigerant losses from motor vehicle air conditioning maintenance, and increased methane capture from landfills. Collectively, these actions are estimated to reduce GHG emissions between 13 and 26 MMTCO₂E annually by 2020 relative to projected levels. If approved for listing by the Board, these measures will be brought to the Board in the form of proposed regulations within in the next 12 to 18 months. A brief summary of each of the three discrete early action strategies is provided below:

1. Low Carbon Fuel Standard - Will require fuel providers (including producers, importers, refiners, and blenders) to ensure that the mix of fuels they sell in California meets, on average, a declining standard for greenhouse gas emissions that result from the use of transportation fuel.
2. Restrictions on High Global Warming Potential (GWP) Refrigerants - Would restrict the use of high GWP refrigerants for non-professional recharging of leaky automotive air conditioning systems.
3. Landfill Methane Capture - Would set statewide standards for the installation and performance of active gas collection/control systems at municipal solid waste (MSW) landfills.

Staff has received and continues to receive numerous comments and suggestions from a broad spectrum of stakeholders. Comments were provided at both the January 22, 2007 and April 23, 2007 workshops on early actions as well as via submittals before and after the workshops.

The suggestions ranged from support of the measures as proposed to recommendations for additional action or modification of a proposal. Specifically, in the case of the above discrete early actions (1) and (2), staff will consider concerns expressed by the Environmental Justice Advisory Committee regarding potential disproportionate impacts on the low-income sector of the general population during the regulatory development process. Furthermore, in the case of discrete early action (2), the affected industry has put forth an alternative proposal that will be seriously evaluated as it may offer a more efficient strategy for achieving similar emission reductions. Staff is now considering this alternative and will discuss it at the June Board hearing. At this point, staff acknowledges the proactive approach of this industry for pursuing what appears to be a sensible alternative that does not erode the climate benefit of the proposed discrete early action. However staff still recommends that the proposed measure remain on the early action list. If the Board approves the proposed list of early actions, staff will carefully consider all options for achieving the emission reductions during the regulatory development process, including those suggested by the affected industry.

Other Early Actions with Direct Climate Benefits

The ARB is also initiating work on another 23 GHG emission reduction measures in the 2007-2009 time period, with rulemaking to occur as soon as possible where applicable. These GHG measures were drawn from three separate sources. Some were identified in the March 2006 Climate Action Team (CAT) Report and are already underway. This group also includes strategies ARB staff has identified since March 2006 – such as cool automobile paints and tire inflation requirements – that could be developed relatively quickly and produce significant GHG reductions. These measures also reflect several stakeholder suggestions. In total, they are expected to yield at least 20 MMTCO₂E of reductions by 2020, with reductions for several measures still to be quantified.

Stakeholder suggestions have also been received concerning this group of early actions. A common denominator in those suggestions is the re-categorization of many of the proposed measures into the narrow (Group 1) list of discrete early actions. Staff has considered this suggestion carefully but is recommending no change to the proposed list of three discrete early actions, primarily due to the practical challenges of the 18-month regulation development requirement imposed by the narrow discrete early action definition. Instead, staff has committed to considering regulatory action as appropriate for the 23 additional actions with climate benefits. In this approach, an ongoing stream of rulemaking can be anticipated as individual measures are determined to meet all legal requirements under the Act.

Some of the comments regarding additional early actions have also advanced the staff's understanding of the potential for realizing additional climate benefits with expansion or refinement of some of the proposed actions. For instance, work on mitigation of emissions from the use of small disposable cans for recharging air conditioning systems revealed an opportunity for further reductions by limiting the global warming potential (GWP) of high GWP non-essential emissive use products such as hand-held horns and spray string (silly string). Staff anticipates the continued analysis of the proposed measures in the pursuit of additional abatement opportunities.

Criteria Pollutants and Air Toxics Efforts Underway With Climate Co-Benefits

Finally, ARB staff has identified 10 air pollution control measures that are scheduled for rulemaking in the 2007-2009 period. These control measures are aimed at reducing particulate matter, ozone precursors, and toxic air pollutants, but will have concurrent climate co-benefits through reductions in CO₂ or non-Kyoto pollutants (i.e., diesel particulate matter, other light-absorbing compounds and/or ozone precursors) that contribute to global warming. These measures were drawn from the ARB's annual rulemaking calendar, ARB's Diesel Risk Reduction Plan, the Goods Movement Emissions Reduction Plan, and the State Implementation Plan with actual emission reductions still being quantified.

These measures received extensive stakeholder comments, in general supporting the actions and suggesting a possible formal designation as "discrete early actions." Staff has considered this input carefully but has determined that given the remaining uncertainty in the science of the climate impact of some of the non-Kyoto GHGs, it is appropriate for these measures to be maintained as a separate category of actions to be implemented initially for their public health protection goals. As the science on their climate impacts firms up, the GHG reductions co-benefits can be integrated into the general climate protection plan if the measures meet all legal, technical and cost-effectiveness feasibility criteria.

Cumulative Early Action Emissions Reductions

The 36 measures described in this notice will reduce GHG emissions between 33-46 MMTCO₂E by 2020 relative to projected levels. Existing ARB regulations will contribute an additional 30 MMTCO₂E (e.g., the motor vehicle GHG standards developed in response to AB 1493). These estimates *exclude* the benefits from reducing diesel particulate matter, ozone precursors and other toxic pollutants since the science for quantifying their CO₂ equivalent emission reductions is not currently as robust as that for the pollutants explicitly identified in the Act.

Climate Action Team Early Actions

In recognition that actions by other state agencies are essential for meeting the GHG emission reduction targets of AB 32, the Governor established the Climate Action Team. The CAT has identified 13 near-term strategies that are expected to reduce and mitigate GHG emissions by about 17 MMTCO₂E. These measures are anticipated to be translated into regulations that would be in place by January 1, 2010. Similar to the ARB approach, the CAT has identified other actions where the January 1, 2010 enforceable regulatory deadline is not appropriate, but where efforts are already underway or expected. These additional 28 early actions by CAT members are estimated to reduce GHG emissions by about 60 MMTCO₂E.

The sum of the three ARB discrete early actions, ARB's existing AB 1493 regulation, and the 13 discrete early actions proposed by the CAT will make a substantial contribution of approximately 60 MMTCO₂E to the overall 2020 statewide emission reduction goal. The additional early actions proposed by ARB and the CAT will deliver another 80 MMTCO₂E resulting in an early action total "down payment" of more than half (140 MMTCO₂E) toward the approximate target of 174 MMTCO₂E of GHG emission reductions by 2020.

DESCRIPTION OF PROPOSED ACTION

Staff is proposing that the Board approve the list of three recommended discrete early action measures to reduce greenhouse gas emissions, and support staff's recommendation to actively pursue an additional 33 measures during calendar years 2007, 2008 and 2009. Specifically, staff proposes that the Board:

- (i) approve the list of early action measures and direct staff to develop regulations to implement these measures;
- (ii) direct staff to work with stakeholders to develop the additional early action strategies, and to bring to the Board for consideration technologically feasible and cost-effective regulations as appropriate; and
- (iii) direct staff to provide status reports to the Board approximately every six months on its progress in developing these measures and strategies.

PUBLIC REVIEW AND COMMENT

The staff's request for public input on its identification of early actions resulted in a broad range of suggestions. Many stakeholder comments and suggestions were coincident with the two public workshops on early actions held in Sacramento on January 22 and April 23, 2007. Additional input was obtained during the international symposium on near-term options for GHG emission reductions that ARB staff organized in March 2007. Details on the nature and scope of the comments are included next.

The ARB received more than 70 suggestions from stakeholders for early action measures as part of the January 22, 2007 workshop. Those within ARB's purview were carefully reviewed by staff while those under the jurisdiction of other agencies were forwarded to the appropriate CAT member(s) for consideration. The suggestions covered a wide range of ideas including comments on a low carbon fuel standard (LCFS), replacement of hydrofluorocarbons (HFCs) in fire suppression systems, a green ship incentive program, waste management methods, water management methods, and renewable energy initiatives. Some of the proposed strategies require new legislation to implement, some require subsidies, some are already being developed, and some require additional effort to evaluate and quantify.

Following the release of the draft early action report, the ARB has thus far received approximately two dozen additional public comments. The ARB staff expects comments to continue to be submitted up until and at the Board hearing. The comments received thus far can be categorized broadly into: (1) comments reiterating the importance of several of the measures captured in the April 2007 early actions report; (2) new ideas for expanding and improving strategies already previously identified; and (3) comments questioning the prioritization and ranking of the early actions in the draft report.

An example of the comments in the first category is the explicit endorsement for the 36 measures in the draft report and, in particular, for the three discrete early actions. New suggestions were submitted in areas that include carpool/rideshare incentives in transportation; carbon capture and storage requirements for electricity generation, efficiency improvement in cement production, and tighter emission standards for various applications including refineries and power plants. The ARB staff plan to address as part of its presentation to the Board recent stakeholder input including additional comments expected to be submitted shortly before the June Board Hearing.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

Staff has prepared a report titled "Proposed Early Actions to Mitigate Climate Change in California" (Staff Report) that was released on April 20, 2007. Comments that have been received on this report are reflected in this notice and will be reflected in the staff presentation at the June Board Hearing.

Copies of this notice, the Staff Report and all subsequent related documents are available on the ARB Internet site for climate change at: <http://www.arb.ca.gov/cc/cc.htm> or from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, CA 95814, (916) 322-2990.

Further Inquiries concerning this matter may be directed to Alberto Ayala, Chief of the Climate Change Mitigation and Emissions Branch, at (916) 327-2952, or by email at aayala@arb.ca.gov, or Michael Robert, Air Resources Engineer, at (916) 327-0604, or by email at mrobert@arb.ca.gov.

SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing at the hearing, and in writing or by email before the hearing. To be considered by the Board, written submissions not physically submitted at the hearing must be received **no later than 12:00 noon, June 20, 2007**, and addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Facsimile submittal: (916) 322-3928

Please note that under the California Public Records Act (Govt. Code Section 6250 et. seq.), your written and oral comments, attachments, and associated contact information (e.g. your address, phone, email, etc.) become part of the public record and can be released to the public upon request. Additionally, this information may become available via Google, Yahoo, and any other search engines.

The Board requests but does not require that 30 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed recommendations.

CALIFORNIA AIR RESOURCES BOARD

/s/
Catherine Witherspoon
Executive Officer

Date: May 21, 2007