

State of California
AIR RESOURCES BOARD

California Cap-and-Trade Program

Resolution 10-42

December 16, 2010

Agenda Item No.: 10-11-1

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or Board) to adopt standards, rules, and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, the California Global Warming Solutions Act of 2006 (AB 32; Chapter 488, Statutes of 2006; Health & Safety Code §38500 et seq.) declares that global warming poses a serious threat to the economic well-being, public health, natural resources, and environment of California and creates a comprehensive multi-year program to reduce California's greenhouse gas (GHG) emissions to 1990 levels by 2020;

WHEREAS, AB 32 added section 38501 to the Health and Safety Code, which expresses the Legislature's intent that ARB coordinate with State agencies and consult with the environmental justice community, industry sectors, business groups, academic institutions, environmental organizations, and other stakeholders in implementing AB 32; and design emissions reduction measures to meet the statewide emissions limits for greenhouse gases in a manner that minimizes costs and maximizes benefits for California's economy, maximizes additional environmental and economic co-benefits for California, and complements the State's efforts to improve air quality;

WHEREAS, section 38501(c) of the Health and Safety Code declares that California has long been a national and international leader on energy conservation and environmental stewardship efforts, and the program established pursuant to AB 32 will continue this tradition of environmental leadership by placing California at the forefront of national and international efforts to reduce GHG emissions;

WHEREAS, section 38501(d) of the Health and Safety Code confirms that national and international actions are necessary to fully address the issue of global warming, but action taken by California to reduce GHG emissions will have far reaching effects by encouraging other states, the federal government, and other countries to act;

WHEREAS, section 38510 of the Health and Safety Code designates ARB as the State agency charged with monitoring and regulating sources of GHG emissions in order to reduce these emissions;

WHEREAS, section 38560 of the Health and Safety Code directs ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emissions reductions from sources or categories of sources;

WHEREAS, section 38562 of the Health and Safety Code requires ARB to adopt GHG emissions limits and emissions reduction measures by regulation to achieve the maximum technologically feasible and cost-effective reductions in GHG emissions in furtherance of achieving the statewide GHG emissions limit, to become operative beginning on January 1, 2012;

WHEREAS, section 38562 of the Health and Safety Code requires ARB, to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, to do all of the following:

Design the regulations, including distribution of emissions allowances where appropriate, in a manner that is equitable, seeks to minimize costs and maximize total benefits to California, and encourages early action to reduce greenhouse gas emissions;

Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities;

Ensure that entities that have voluntarily reduced their greenhouse gas emissions prior to the implementation of this section receive appropriate credit for early voluntary reductions;

Ensure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions;

Consider cost-effectiveness of these regulations;

Consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health;

Minimize the administrative burden of implementing and complying with these regulations;

Minimize leakage; and

Consider the significance of the contribution of each source or category of sources to statewide emissions of greenhouse gases;

WHEREAS, sections 38562(c) and 38570 of the Health and Safety Code authorize ARB to adopt regulations pursuant to section 38562 that utilize market-based compliance mechanisms;

WHEREAS, section 38570 of the Health and Safety Code also directs ARB, to the extent feasible and in furtherance of achieving the statewide GHG emissions limit, to do all of the following before including any market-based compliance mechanism in the regulations:

Consider the potential for direct, indirect, and cumulative emissions impacts from these mechanisms, including localized impacts in communities that are already adversely impacted by air pollution;

Design any market-based compliance mechanism to prevent any increase in the emissions of toxic air contaminants or criteria air pollutants; and

Maximize additional environmental and economic benefits for California, as appropriate.

WHEREAS, section 38570(c) of the Health and Safety Code further directs ARB to adopt regulations governing how market-based compliance mechanisms may be used by regulated entities subject to GHG emissions limits and mandatory emissions reporting requirements to achieve compliance with their GHG emissions limits;

WHEREAS, section 38571 of the Health and Safety Code directs ARB to adopt methodologies for the quantification of voluntary GHG emissions reductions and regulations to verify and enforce any voluntary GHG emissions reductions that are authorized by ARB for use to comply with GHG emissions limits established by ARB; the adoption of methodologies is exempt from the rulemaking provisions of the Administrative Procedure Act;

WHEREAS, section 38561 of the Health and Safety Code directs ARB to approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions;

WHEREAS, the Board approved the Climate Change Scoping Plan, which includes a recommendation that California adopt a portfolio of emissions reduction measures, including, if appropriate, a California greenhouse gas cap-and-trade program that can link with other programs to create a regional market system;

WHEREAS, in 2007, California helped establish the Western Climate Initiative (WCI), a cooperative effort of seven U.S. states and four Canadian provinces that are collaborating to identify, evaluate, and implement policies to reduce GHG emissions, including the design and implementation of a regional cap-and-trade program;

WHEREAS, section 38591 of the Health and Safety Code directed ARB to create an Environmental Justice Advisory Committee (EJAC) and an Economic and Technology Advancement Advisory Committee (ETAAC) to advise ARB on implementation of AB 32;

WHEREAS, the Board has considered the comments and recommendations provided to date by EJAC and ETAAC on a cap-and-trade program;

WHEREAS, in May 2009, the Economic and Allocation Advisory Committee (EAAC) was appointed to advise on the implementation of AB 32 and a cap-and-trade program; the EAAC consisted of economic, financial, and policy experts, and provided advice on allocation of allowances and use of their value;

WHEREAS, the Board has considered the comments and recommendations provided to date by the EAAC on a cap-and-trade program; in addressing allowance allocation, the EAAC recommended that the cap-and-trade program employ free allocation only for the purpose of addressing emissions leakage associated with energy-intensive trade-exposed industries, and only in circumstances where the alternative of some form of border adjustment is not practical;

WHEREAS, the high emissions intensity of cement production relative to the value of the product produced makes the cement sector particularly well-suited as a pilot project for the development and consideration of a border adjustment approach to addressing the potential for leakage that could result from increases in cement importation;

WHEREAS, the EACC recommended that ARB adopt policy instruments that can be substantially modified or eliminated as leakage problems change with the emergence of regional or federal policies;

WHEREAS, staff has proposed a new regulation establishing a GHG cap-and-trade program for California; the draft regulation is set forth in Attachment A hereto and includes the following elements:

Addresses emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃);

Identifies the program scope: starting in 2012, electricity, including imports, and large (>25,000 metric tons carbon dioxide per year) industrial facilities are included; starting in 2015, distributors of transportation fuels, natural gas, and other fuels are included;

Establishes a declining aggregated emissions cap on included sectors. The cap starts at 165.8 million allowances in 2012, which is equal to the emissions

forecast for that year. The cap declines approximately 2 percent per year in the initial period (2012–2014). In 2015, the cap increases to 394.5 million allowances to account for the expansion in program scope. The cap declines at approximately 3 percent per year between 2015 and 2020. The 2020 cap is set at 334.2 million allowances;

Provides for distribution of allowances through a mix of direct allocation and auction in a system designed to reward early action and investment in energy efficiency and GHG emissions reduction; allowances will be distributed for the purposes of price containment, industry transition and assistance, and fulfillment of AB 32 statutory objectives;

Establishes a market platform for allowance auction and sale;

Establishes cost-containment mechanisms and market flexibility mechanisms, including trading of allowances and offsets, allowance banking, three-year compliance periods, the ability to use offsets for up to 8 percent of an entity's compliance obligation, and an allowance reserve that provides allowances at fixed prices to those with compliance obligations;

Establishes a mechanism to link with other GHG trading programs and approve the use of compliance instruments issued by a linked external GHG trading program;

Establishes requirements and procedures for ARB to issue offset credits according to offset protocols adopted by the Board;

Includes four offset protocols to be considered by the Board as part of this regulatory package;

Establishes a mechanism to include international offset programs from an entire sector within a region;

Establishes a robust enforcement mechanism that will discourage gaming of the system and deter and punish fraudulent activities;

Provides an opt-in provision for entities whose annual GHG emissions are below the threshold to voluntarily participate in this program; and

Incorporates adaptive management to mitigate potential adverse environmental effects.

WHEREAS, staff conducted forty public workshops regarding the proposed cap-and-trade regulation during the period 2008–2010, and also participated in numerous other

meetings with various stakeholders to include them in the regulatory development process;

WHEREAS, the Board strongly supports the critical role that U.S. EPA plays in the design of national strategies to reduce GHG emissions;

WHEREAS, the Board is committed to a continued, strong State-federal collaboration that maximizes California's long-standing and growing investments in low-carbon technologies, fuels, and energy efficiency;

WHEREAS, the Board believes that this State-federal collaboration can advance climate policies that significantly reduce GHG emissions while reinvigorating the nation's industrial base and energy sector;

WHEREAS, the Board has considered the community impacts of the proposed regulation, including environmental justice concerns;

WHEREAS, the Board believes that the success of a cap-and-trade program is predicated on GHG regulations that are clear, consistent, enforceable, and transparent;

WHEREAS, staff has prepared a document entitled "Staff Report: Initial Statement of Reasons for Proposed Regulation to Implement the California Cap-and-Trade Program" (ISOR), which presents the rationale and basis for the proposed regulation and identifies the data, reports, and information relied upon;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, the ISOR and proposed regulatory language were made available to the public at least 45 days prior to the public hearing to consider the proposed regulation;

WHEREAS, in consideration of the ISOR, written comments, and public testimony it has received to date, the Board finds that:

GHG emissions associated with entities covered by the cap-and-trade regulation account for about 80 percent of GHG emissions in the State;

Covered entities would be able to reduce emissions to comply with the cap-and-trade regulation using a variety of currently available GHG reduction strategies, including those complementary measures identified in the Scoping Plan;

The cap-and-trade regulation is expected to significantly reduce GHG emissions; together with the complementary measures identified in the Scoping Plan, by

2020 the cap-and-trade regulation is expected to reduce GHG emissions to 1990 levels;

The cap-and-trade regulation was developed using the best available economic and scientific information and will achieve the maximum technologically feasible and cost-effective GHG emissions reductions from covered entities and offset projects;

The GHG emissions reductions resulting from the implementation of the cap-and-trade regulation are expected to be real, permanent, quantifiable, verifiable, and enforceable by ARB, and the cap-and-trade regulation complements and does not interfere with other air quality efforts;

The proposed cap-and-trade regulation meets the statutory requirements identified in section 38562 of the Health and Safety Code;

The cap-and-trade regulation meets the statutory requirements for a market-based mechanism identified in section 38570 of the Health and Safety Code;

The cap-and-trade regulation was developed in an open public process, in consultation with affected parties, through numerous public workshops, individual meetings, and other outreach efforts, and these efforts are expected to continue until a final decision is made;

The benefits to human health, public safety, public welfare, or the environment justify the costs of the cap-and-trade regulation;

The cost-effectiveness of the cap-and-trade regulation has been considered, and the regulation will achieve cost-effective GHG emissions reductions;

The cap-and-trade regulation is consistent with ARB's environmental justice policies and will equally benefit residents of any race, culture, or income level;

Robust reporting and verification requirements associated with the cap-and-trade regulation are necessary for the health, safety, and welfare of the people of the State; and

No reasonable alternative considered to date, or that has otherwise been identified and brought to the attention of ARB, would be more effective at carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected entities than the proposed regulation;

WHEREAS, the Board further finds that:

Staff performed economic modeling to consider the impact of the proposed regulation on the economy of the State and the potential for adverse economic impacts on California business enterprises and individuals as required by California law; the conclusions and supporting documentation for this analysis are set forth in the ISOR;

Increased investment in efficient buildings and technologies and in advanced fuels, spurred by the cap-and-trade program, will reduce fuel use by 2 to 4 percent in 2020, while economic growth between 2007 and 2020 is projected to continue at a rate virtually on par with the projected rate of 2.4 percent; and implementation of the California cap-and-trade program will reduce California's dependence on fossil fuels, thereby reducing vulnerability to price spikes.

WHEREAS, the California Environmental Quality Act (CEQA) and Board regulations at California Code of Regulations, title 17, section 60006, require that no project which may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, CEQA allows public agencies to prepare a plan or other written documentation in lieu of an environmental impact report (i.e., a functional equivalent environmental document) once the Secretary of the Resources Agency has certified an agency's program pursuant to section 21080.5 of the Public Resources Code;

WHEREAS, pursuant to section 21080.5 of the Public Resources Code, the Secretary of the Resources Agency has certified that portion of ARB's program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans;

WHEREAS, the Board's regulations under ARB's certified program provide that prior to taking final action on any proposal for which significant environmental issues have been raised, the decision maker shall approve a written response to each such issue;

WHEREAS, pursuant to the requirements of CEQA and the Board's regulations under its certified regulatory program, ARB staff prepared a functional equivalent document (FED), which contains the following analyses and elements:

The FED determined that the proposed regulation is expected to improve air quality in California on a statewide and regional basis by reducing GHG and criteria and toxic pollutants, based on the best available data;

Because the proposed regulation provides covered entities flexibility to select the most cost-effective strategies to reduce GHG emissions, the potential exists for

increases in co-pollutant air emissions levels, but not beyond permitted levels; because ARB cannot determine the exact locations of possible local emissions increases, the FED conservatively determined that such increases, although unlikely, could result in a potentially significant adverse impact;

An adaptive management strategy has been incorporated into the project to address any potential adverse impacts; ARB will monitor the implementation of the cap-and-trade regulation to identify and address any situations where the program may cause an increase in criteria or toxic pollutant emissions; if unanticipated adverse environmental effects are identified that are substantial enough to interfere with or undermine the achievement of the objectives for the cap-and-trade program as defined by AB 32, ARB will develop and implement appropriate responses to rectify any identified environmental issues;

The FED determined that there may be potentially significant adverse impacts from project-specific construction and ground-disturbing activities, and associated increases in truck traffic;

The FED determined that there may be potentially significant and unavoidable project-specific impacts to biological resources, cultural resources, geology, soils and mineral resources, hydrology, water quality and water supply, land use, noise, transportation and traffic; the FED identified mitigation that would substantially reduce these identified impacts, but not to a level of insignificance for all resource areas;

The Board does not have the authority to impose mitigation measures for these identified project-specific impacts for future projects outside ARB's regulatory purview and must rely on the agencies that will ultimately conduct project-level review and approve those projects to impose required mitigation;

The FED also considered feasible alternatives to the proposed regulation that could reduce potentially significant adverse impacts;

WHEREAS the FED was circulated for public comment from October 28, 2010 until the date of this hearing, and no final decision will be made until comments on the FED are fully considered and addressed by the decision maker;

WHEREAS the Executive Officer is the decision maker for the purposes of title 17, California Code of Regulations (CCR), section 60007.

NOW, THEREFORE, BE IT RESOLVED that the Board directs the Executive Officer to take the following actions:

1. Before making modified regulatory language available for formal public comment, hold one or more workshops on the modifications as set forth in Attachment B to provide an opportunity for public input on the details of the suggested modifications;
2. Make the modified regulatory language set forth in Attachment B, with such other conforming modifications as may be appropriate, available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulation to the Board for further consideration if he determines that this is warranted;
3. Evaluate all comments received during the public comment periods, including comments raising significant environmental issues, and prepare and approve written responses as required by CEQA, ARB regulations under its certified regulatory program (title 17, CCR, section 60007), and Government Code section 11346.9;
4. Determine whether there are feasible alternatives or mitigation measures that could be implemented to reduce or eliminate any potential adverse environmental impacts, while at the same addressing the serious economic recession and its impact on industry and residents of the State;
5. Make findings as required by Public Resources Code section 21081 if the regulation would result in one or more significant adverse environmental effects; and
6. Take final action to adopt the proposed regulation set forth in Attachment A, with the modifications set forth in Attachment B, any additional conforming modifications that may be appropriate, and any modifications that are necessary to ensure that all feasible mitigation measures or feasible alternatives that would substantially reduce any significant adverse environmental impacts have been incorporated into the final action; or return the proposed amendments and findings to the Board for further consideration before taking final action, if he determines that this is warranted.

BE IT FURTHER RESOLVED that, as part of the modifications to be made available for a 15-day public comment period, the Board directs the Executive Officer to finalize a proposal for the allowance allocation system as described in Attachment B, including finalizing benchmarks for allocation to industry and allocation to electric distribution utilities, and to report to the Board on the final allocation system prior to the start of the cap-and-trade program.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to review the treatment of combined heat and power facilities in the cap-and-trade program to ensure that appropriate incentives are being provided for increased use of efficient combined heat and power.

BE IT FURTHER RESOLVED that in accordance with Section 41516(d) of the Health and Safety Code, which requires that resource recovery projects should be encouraged as a matter of State policy, the Board directs the Executive Officer to determine and report back to the Board a mechanism to satisfy all the risk of emissions leakage and compliance obligations of existing municipal waste-to-energy facilities in the proposed cap and trade program.

BE IT FURTHER RESOLVED that, as part of the modifications to be made available for a 15-day public comment period, the Board directs the Executive Officer to finalize a proposal for establishment of a set-aside for voluntary renewable electricity, and to initiate a process for quantification of GHG emissions reductions that result from voluntary renewable projects, and rules for retiring allowances from the set-aside based on those projects.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to review the technical and legal issues related to implementation of a border adjustment to impose obligations on importers of cement that are equivalent to those faced by California cement manufacturers under the cap-and-trade regulation, and to implement such a provision (either as part of the 15-day modifications, if it is feasible, or as part of another process) if it is necessary to avoid leakage in the cement sector.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with interested stakeholders to review the appropriate point of regulation for transportation fuels to ensure that all transportation fuels imported and/or delivered into California are covered under the program once and only once, and, if necessary, to incorporate in the 15-day modifications any revisions to the regulation necessary to achieve that end.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to review the requirements of the compliance offset program, the compliance protocols, the early action offset provisions, and the role of approved offset project registries, and, if necessary, to incorporate in the 15-day changes any revisions to the regulation necessary to ensure consistency throughout the offset program.

BE IT FURTHER RESOLVED that the Board agrees that the potential uses of allowance value recommended by the EAAC represent good uses of allowance value; these recommended uses include:

Financing public and private investments oriented toward:

- low-cost GHG emissions reductions, including investments in energy efficiency, public transit, transportation and land-use planning, and research, development, and deployment,
- adaptation to climate change,
- environmental remediation in any communities found to experience increased exposure to co-pollutants as a result of any possible fossil-fuel burning stemming from AB 32 implementation,
- economic opportunities and environmental improvements in disadvantaged communities, and
- green job training;

Returning allowance value to households either through lump-sum rebates (as under the "cap and dividend" proposal) or through cuts or avoided increases in the State's individual income or sales tax rates; if allowance value is returned to households through tax rate cuts, a small fraction of the allowance value should be reserved to finance income transfers to low-income households to avoid disproportionate economic impacts on such households; and

Addressing leakage through the use of output-based free allocation.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to deposit a minimum of 10 percent of annual proceeds generated from the direct auction of allowances in the Air Pollution Control fund for appropriation by the Legislature to programs and projects that reduce GHG emissions or mitigate direct health impacts of climate change, and promote green collar employment opportunities in the most impacted and disadvantaged communities in California; the Board directs the Executive Officer to initiate a public process to develop recommendations to the Legislature and Governor describing the types of projects and programs to be funded, eligibility criteria, and the selection, oversight, and accountability process for the projects and programs to be funded.

BE IT FURTHER RESOLVED that staff will further develop requirements to ensure changes in reported emissions from imported electricity that serves California does not result merely in a shift of emissions within the Western Electricity Coordinating Council region, but reduces overall emissions.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to continue working with stakeholders and regulated entities to make such modifications as may be appropriate to the proposed enforcement provisions of section 96014.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to initiate a public process for the review of additional compliance offset protocols no later than

February 2011, for the purpose of bringing additional protocols to the Board for consideration as soon as is practical.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with U.S. EPA on the development of a federal regulatory framework to grant delegation or equivalency to California's climate program where appropriate.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with the California Public Utilities Commission (CPUC) and the publicly owned utilities (POU) to ensure that the proposed allowance value directed to the electric distribution utilities is used for the benefit of residential, commercial, and industrial ratepayers that might otherwise face indirect costs from implementation of this regulation, with particular consideration of the potential for impacts from this program on low-income customers, and for the purposes of AB 32, which could include investment in energy efficiency programs beyond those already required by California law and in renewable energy projects that achieve environmental and public health co-benefits for Californians.

BE IT FURTHER RESOLVED that the Board strongly advises the CPUC and the POU governing boards to work with local governments and non-governmental organizations to direct a portion of allowance value, if the cap-and-trade regulation is approved, into investments in local communities, especially the most disadvantaged communities, and to provide an opportunity for small businesses, schools, affordable housing associations, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with the CPUC, the California Energy Commission, the California Independent System Operator, and other interested parties to monitor the proposed greenhouse gas cap-and-trade market, including the effect of the cap-and-trade program on the State's energy markets, and monitoring to the extent feasible the ability of affected entities to pass on costs.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to contract with an independent entity with appropriate expertise that will monitor and provide public reports on the operation of the market, including auctions and reserve sales, on a quarterly basis and recommend appropriate action, which could include taking corrective action prior to the next auction, adding future allowances to the allowance reserve or future auctions, or temporarily suspending trading in the market.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to establish a Board-member facilitated dialogue with the California Air Pollution Control Officers Association regarding involvement of the air pollution control and air quality management districts (air districts) in the implementation of the cap-and-trade regulation, development of compliance offset protocols, and other AB 32 programs.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to develop amendments to the cap-and-trade regulation to provide for the air district verification of offsets.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to report to the Board no later than July 31, 2011, on the progress being made on implementing the cap-and-trade program, provided the cap-and-trade regulation is approved, including information on the status of the following:

Finalization of the allowance allocation system;

Assessment of issues related to the treatment of biomass and biofuel emissions in the cap-and-trade program, including consideration of air quality impacts in the San Joaquin Valley;

Implementation of cap-and-trade programs by other Western Climate Initiative (WCI) partner jurisdictions, and the expected timing of Board consideration of linking with WCI partner programs;

Implementation of a market tracking system, and a schedule for initial deployment of the system and making training available for covered entities and others that will need to register in the system and use it for participating in the program;

Implementation of an auction system;

Implementation of an offset tracking system, and information on any entities that have indicated an interest in applying to become third-party registries under the cap-and-trade regulation;

Efforts to address potential issues associated with the air district development of offset projects using ARB-verified offset protocols that are verified by a third party;

Work with other agencies and other interested parties on market oversight, including any market simulation efforts;

Efforts to solicit expert advice on the design of the market to ensure that it is protected and ensure the ongoing proper operation of the market;

Review of additional compliance offset protocols and the schedule for bringing them to the Board for consideration;

Estimates of expected offset supply during the first compliance period based on the four compliance protocols that are part of this rulemaking and on additional protocols that are currently under review; and

Identification of any remaining tasks that must be completed before the start of the cap-and-trade program, and a schedule for completing these tasks.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to hold public consultations over the next year to identify potential obstacles to compliance and, as necessary, incorporate or enhance compliance assistance mechanisms into the program, provided the cap-and-trade regulation is approved.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to initiate a public process to establish a protocol for accounting for sequestration of CO₂ through geologic means and recommendations for how such sequestration should be addressed in the cap-and-trade program, including separate requirements for carbon capture and geologic sequestration performed with CO₂-enhanced oil recovery; carbon dioxide injected underground for the purposes of enhanced oil recovery will not be considered to be an emissions reduction without meeting ARB's monitoring, reporting, verification, and permanence requirements.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to continue to review information concerning the emissions intensity and trade exposure of different industries in California, and to recommend to the Board changes to the leakage risk determinations, if needed, to be implemented prior to the initial allocation of allowances for the first compliance period starting in 2012 for industries not identified in Table 8-1 of the cap-and-trade regulation, or prior to the initial allocation of allowances for the second compliance period starting in 2015 for industries identified in Table 8-1 of the cap-and-trade regulation.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to initiate a public process for determining whether allowances should be allocated directly to natural gas utilities on behalf of their customers and, if so, to recommend to the Board what method should be used for that allocation to be implemented prior to the initial allocation of allowances for the second compliance period starting in 2015.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to evaluate the cross-sectoral equity issues related to the treatment of transportation fuels in the cap-and-trade program, including the effects of allowance distribution to different sectors and the expected increased use of electricity in the transportation sector, and to recommend to the Board any changes to the program, if needed, to be implemented prior to the initial allocation of allowances for the second compliance period starting in 2015.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to make information periodically available to the public relating to the operation of the market, including timely provision of information on the results of each auction and each sale from the allowance reserve.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to update the Board annually on the status of the cap-and-trade program, including:

Information on the operation of the California program and any linked programs;

Actions being taken by covered entities to comply with the program;

Information on shifts in business activity that may result in emissions leakage and changes in market share for covered entities and sectors;

Shifts in fuel use in different sectors, including information on the use of electricity in the transportation sector, and the use of biofuels and biomass;

Effects on small business and on low-income households;

Any sales of allowances from the allowance reserve;

The supply of offset credits registered in ARB's tracking system, approved third-party registries, or the tracking systems of linked programs;

The expected offset supply from projects listed on these systems, including the geographic locations of listed offset projects; and


Any changes to linked cap-and-trade programs.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to evaluate the operation of the market if all allowances are sold from any tier of the allowance reserve, to report to the Board on the reasons that the reserve is being depleted, and to make recommendations within six months for any corrective action that is required to ensure that the cap-and-trade program's cost containment mechanisms remain robust.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to develop regulatory amendments to the cap-and-trade regulation at least once each compliance period, timed to adjust the program prior to the start of the next compliance period to make any modifications to the regulation needed based on information gained through the implementation of the cap-and-trade program, monitoring of the market, interaction of the cap-and-trade program with other AB 32 measures, the adaptive management program initiated to monitor implementation of the program, and changes in regional,

federal or international climate policy, or to report to the Board that no rulemaking is needed.

I hereby certify that the above is a true and correct copy of Resolution 10-42, as adopted by the Air Resources Board.


Mary Alice Morency, Clerk of the Board

Resolution 10-42

December 16, 2010

Identification of Attachments to the Board Resolution

Attachment A: Proposed Regulation Order for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms, title 17, California Code of Regulations, sections 95800 to 96022, as set forth in Appendix A to the Initial Statement of Reasons, released October 28, 2010.

Attachment B: Staff's Suggested Modifications to the Original Proposal, distributed at the December 16, 2010 Board hearing.