ConocoPhillips

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December 16, 2010

Ms. Mary Nichols, Chair California Air Resources Board 1001 I Street Sacramento, CA 95814

Subject: ConocoPhillips Comments, Agenda Item # 10-11-1 California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms Regulation

Dear Chairwoman Nichols:

ConocoPhillips submits these comments to California's Air Resources Board regarding the proposed regulation "California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms" for your consideration at the Board's December 16, 2010 meeting.

ConocoPhillips supports the development of federal climate change policy in the United States that is economically efficient, environmentally effective and that ensures the availability of secure, affordable and reliable energy. We believe that a mandatory national framework with international linkages will be the most effective approach for achieving a meaningful impact on global greenhouse gas emissions. We oppose development of a patchwork of state-level programs but remain engaged in discussions in areas where we operate and make an important contribution to local economies.

ConocoPhillips has significant operations in California including oil refineries, crude oil and petroleum product pipelines and terminals. As the third largest U.S. energy company, we also have important operations in other Western Climate Initiative states, throughout the U.S. and worldwide. We operate refineries and offshore facilities in Europe and have gained important experience with the greenhouse gas programs there.

California's standalone actions on climate change will have a very negative impact on ConocoPhillips' operations in the State. The cost impacts will be significant and, depending on market reactions, may necessitate reduced operations that impact jobs and potentially increasing the State's dependence on gasoline and diesel imports.

The cap-and-trade program as proposed, along with the State's LCFS program, disproportionately burdens our operations and California citizens. These combined actions will affect the viability of California refining, already trade-exposed to product imports, and adversely impact California consumers as cost of these programs become included in the price of goods and services. Transportation products

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should be excluded from cap-and-trade and CARB should classify California refining as "high risk" due to trade exposure.

We continue to engage in the California climate discussion and resulting regulations due to the potential impact on our operations and because it has important implications for the development of climate change policy elsewhere. Absent the adoption of national and international climate frameworks that avoid economic dislocation and emission "leakage", state programs must move cautiously if at all.

We welcome this opportunity to submit comments and look forward to working closely with you and your staff in the New Year and beyond to further refine these regulations. Feel free to contact us with additional questions and feedback.

Sincerely, Jarry Ziemba by Jay D. Churchill

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LMZ/brm

 cc: Linda Adams, Secretary Cal-EPA Cindy Tuck, Under Secretary Cal-EPA CARB Board Members
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California Cap on Greenhouse Gas Emission and Market-Based Compliance Mechanisms Regulation

ConocoPhillips Comments

Submitted to the California Air Resources Board for consideration at its December 16, 2010 meeting

Executive Summary - ConocoPhillips Recommendations

1. Exclude transportation fuels from the State emission cap

The cap-and-trade program should not be extended to transportation consumer emissions as provisions of other federal and state programs address these. Additionally, fuel providers should not be responsible for these emissions that are directly consumer related. Transportation emissions should be considered only if a formal review determines that this action is necessary and implementation would be more cost-effective than other policy approaches in achieving greenhouse gas (GHG) reductions from the sector.

2. Allow cap-and-trade allowances to qualify as credits within the California Low Carbon Fuel Standard (LCFS)

The per-tonne cost to reduce GHG emissions through the LCFS is expected to be very large compared to the forecast price of allowances in the proposed cap-and-trade program. Refiners and importers with an LCFS obligation should be allowed to use cap-and-trade allowances and offsets for LCFS compliance. This will reduce the impact on the consumer of gasoline and diesel products and the California economy while still meeting the State's prime objective of overall GHG reduction.

- 3. Classify California refining as "high risk" for leakage due to trade exposure
- 4. Create a refinery benchmarking process that does not reward or penalize individual refineries
- 5. Refiners and other trade-exposed industries that purchase electric power should receive either direct rebates from utilities or allowances to compensate for trade exposure. This will help provide equity in allowance distribution.
- 6. If transportation fuels are included in cap-and-trade, create a fixed-price allowance program for the sale of those fuels

ConocoPhillips has a proposal to share with CARB that would: 1) create a clear carbon price signal for consumers, 2) reduce refinery exposure to allowance price volatility, and 3) help refiners manage working capital requirements associated with compliance.

7. If transportation fuels are included in cap-and-trade, allowance value associated with the use of gasoline and diesel should flow back to fuel customers.

The proposed regulation unfairly treats transportation fuel customers relative to electricity (and presumably natural gas) consumers that will receive cost compensating value. Allowance value from the fuel sector should be used to ease the cost burden on gasoline and diesel fuel consumers. Compensation should be proportionate to other consumer groups.

Discussion and Recommendations

These comments are directed at specific elements of the proposed cap-and-trade regulations. We recommend changes to the regulations to improve their effectiveness while providing a more practical, equitable, and economically appropriate approach. We also comment on several key provisions that we support as proposed. *Note: italicized text identifies the specific area of regulation referred to in Discussion.*

1. Exclude transportation fuels from the State emission cap

The proposed regulations include GHG emissions from consumer use of transportation fuels under the state emission cap starting in 2015 (§ 95812(d)(1)). This results in a clear overlay to the existing federal Renewable Fuels Standard, the California Low Carbon Fuel Standard ["LCFS"], and state/federal vehicle GHG performance standards.

<u>Discussion</u>: Transportation GHG emissions are being substantially addressed through current federal and state programs (i.e. federal fuel economy programs, federal renewables programs and state LCFS programs). Stacking of state and federal requirements removes compliance flexibility, compromising efficiencies of often competing GHG control measures. Cap-and-trade is not well-suited to address emissions from millions of distributed point sources such as automobiles. Inclusion of transportation fuel emissions within the cap-and-trade program will add a volatile carbon cost to the price consumers already pay for GHG control measure such as LCFS and vehicle efficiency standards. In addition, fuels under the cap will increase administrative complexity and the market price of emission allowances for all the other capped sectors.

Specifically, a carbon cost of \$20/T would add a fuel cost burden in excess of \$3 billion per year to the California economy. In addition to individual consumers, much of this cost will fall to businesses and municipalities impacting small business owners, truck drivers, city bus and trash services, construction companies, rail services, and others. This carbon cost, along with the cost of compliance for LCFS and federal programs, will be embedded into the costs of all goods and services that rely on transportation.

<u>*Recommendations:*</u> CARB should not extend the cap-and-trade program to consumer emissions from use of transportation fuels. Instead, CARB should allow existing federal/state programs to address GHG emissions in this sector. This is consistent with the approach adopted in the European Union.

Any inclusion of consumer use of transportation fuels under the state emission cap in 2015 should be contingent on a formal review and a conclusion that such a measure is necessary and cost-effective for achieving the State's GHG reduction goals.

We seek the Board's resolution that would require staff to review inclusion of transportation consumer emissions in the cap. This review should be completed well before the proposed 2015 start date.

2. Allow cap and trade allowances to qualify as credits within the California Low Carbon Fuel Standard

As set forth in California's LCFS (§ 95485), allowances and offset credits used for compliance within the proposed cap-and-trade program would not qualify as credits within the LCFS.

<u>Discussion</u>: The California LCFS imposes significant compliance challenges and uncertainties. If fact, the program becomes infeasible starting as early as 2014 when existing biofuels blending alternatives make it impossible to achieve mandated GHG fuel standards as currently designed. The current LCFS program allows carbon credits to transfer from the LCFS to the proposed capand-trade program but fails to provide the reverse exchange.

<u>Recommendation</u>: When a California cap-and-trade program is established, CARB should adopt provisions that would allow fuel producers and importers regulated under the California LCFS to meet all or part of their annual LCFS compliance obligation with allowances and qualifying offset credits from the cap-and-trade program. This approach does not compromise the integrity of either the cap-and-trade or LCFS program/targets and enhances the feasibility of the LCFS. This would directionally ease the major compliance concerns with LCFS but certainly not fully resolve all concerns. Failure to adopt this recommendation disproportionately imposes large carbon costs on transportation consumers and leaves the program vulnerable to isolated market volatility dynamics.

We seek the Board's resolution to improve cost-effectiveness and feasibility of the LCFS program by allowing the use of allowances and credits from the cap-and-trade program for compliance.

3. Classify California refining as "high risk" for leakage due to trade exposure *The proposed regulations classify petroleum refining as "medium risk" for emission leakage with significant implications for allowance allocation to the sector in the second and third compliance periods (§ 95870).*

Discussion: The California refining sector is in direct competition with domestic and foreign refineries. These California operations would incur costs for refinery GHG emissions. Similarly, California refiners would be penalized for selecting heavy crude oils as per the LCFS program. Without appropriate protection, the fundamentals of the fuels market could force California refiners to curtail production or shut down. For instance, each 25% reduction in the allowance factor (high risk versus medium risk) adds approximately \$150 million in annual compliance costs to the refining sector. Imports would likely increase from foreign refineries not required to hold allowances for refinery emissions. Large new refineries in India and the Middle East, with relatively low costs to operate, have been built or are planned. They are expected to have the capability to produce California-grade clean products for export to California as market conditions justify. Product imports to the U.S. east coast are large due to world pricing; significant imports to the U.S. west coast are equally possible. The result would be lost jobs, reduced State revenues, and decreased fuel system security at no net benefit to the environment.

Recommendations:

Support: CARB has appropriately classified the oil and gas sector as "high risk".

<u>*Revise:*</u> CARB should classify the California refining sector as "high risk" for emission leakage through 2020, and issue allowances on this basis. Just as CARB has recognized that the State is subject to imports of crude oil cargoes, the state is also very much subject to imports of petroleum product cargoes.

4. Create a refinery benchmarking process that does not reward or penalize individual refineries

CARB is proposing that allowances be distributed within the refining sector in part based on energy efficiency benchmarking (§ 95891(b)). The use of the Solomon Energy Intensity Index (EII) has been suggested as a potential tool, but with the critical caveat that it include "tempering" to soften the competitive differences between more efficient refineries and less efficient refineries.

<u>Discussion</u>: We have two concerns that need addressed. First, as proposed, benchmarking would begin immediately in January 2012. The additional and immediate competitive costs borne by some refiners would make them less competitive at a time when investments in energy efficiency are needed. Refineries should not be rewarded or penalized in the issuance of allowances based on current energy efficiency. Refineries in general are complex with different energy efficiencies based on prior history, business decisions, size, configuration and technology selection. Improvements in energy efficiency may be possible, but projects that would have significant impact (e.g. cogeneration units) would take up to four years to engineer, fund, construct and place in operation.

Second, the Solomon EII metric has traditionally been used as a <u>relative</u> indicator of energy efficiency versus peers. It was not envisioned or designed for any financial use, is a theoretical tool, and is highly dependent on the user's data and assumptions. While the EII has a correlation with GHG emissions, it is not precise in that it excludes significant process emissions of carbon dioxide from hydrogen plant operations and other sources. Lower refinery utilization (throughput) can significantly increase EII without any changes to the facility. Solomon has also updated the tool in recent years, which can make year-to-year comparisons challenging. It is an imperfect tool for distribution of allowances to the refining sector.

<u>*Recommendations:*</u> Benchmarking should be deferred to 2015 to avoid immediate competitive impacts that would start in January 2012. Energy costs and the cap-and trade system will provide immediate incentive for energy efficiency improvement.

If Solomon EII or surrogate be selected as the benchmarking metric for refinery energy efficiency, the use of it should include significant phase-in and "tempering." This tempering would be a simple smoothing of the mathematical application of EII to reduce the current and immediate competitive differences between various refineries. CARB should work with our industry to develop the best tool for greenhouse gas benchmarking for use as soon as possible and no later than 2015, incorporating best practices from the European system.

Finally, ConocoPhillips has made significant changes to our operations in the last few years that must be recognized. We look forward to working with your staff to develop a tool appropriate for our operation and other refiners.

5. Refiners and other trade-exposed industries that purchase electric power should receive either direct rebates from utilities or allowances to compensate for trade exposure.

The proposed regulations do not specifically state how Energy Intensive/Trade Exposed ["EITE'] entities that import electric power are to be compensated for the GHG compliance costs associated with purchased power. As a result, these entities are at risk of not being adequately compensated for the GHG compliance costs associated with imported power.

<u>Discussion</u>: Competitiveness of trade-exposed entities can only be maintained if allowance allocation to energy sectors is equitable. Under the proposed regulations, refineries that do not have on-site cogeneration facilities are not at parity with those that do. In the Initial Statement of Reasons, CARB appropriately contemplates direct rebates to residential electricity customers to compensate for the GHG compliance cost. However, in that same document CARB suggests that industrial customers' allowance value might be best provided through energy efficiency (EE) benefits, rather than direct cost relief. Codifying such a recommendation would create uncertainty in the extent to which refineries and other EITE entities might be adequately protected.

<u>Recommendations</u>: CARB should clarify the regulations regarding importation of power by EITE entities to address the potential impact on competitiveness by adopting one of two approaches. Under the proposed framework, CARB could require the utility to share the benefits of free allowance value with trade-exposed entities through direct rebates. Alternatively, CARB could provide an EITE entity a direct allocation of free allowances for power purchased from a distribution utility. To avoid double counting, CARB should exclude these allowances from the allocation of free allowances to the entity's serving utility.

6. If transportation fuels are included in cap-and-trade, create a fixed-price allowance program for the sale of those fuels

The proposed regulations place the burden of compliance for consumer transportation emissions with the owner of the fuel at the fuel terminal (95811(d)). CARB assumes that fuel providers can fully embed the cost of compliance in product price. Fuel providers should not be exposed to unnecessary financial risks for consumer emissions for which they have no direct control.

Discussion: The proposed regulations create two significant challenges for fuel providers.

Fuel providers would need to devote significant working capital to meeting an annual consumer compliance obligation in excess of \$3 billion. While ongoing cost recovery in the fuels market may be possible, companies will need to ensure they have sufficient working capital continually on hand to make efficient carbon market transactions.

Fuel providers' rate of cost recovery for carbon costs remains indeterminate, but several factors are likely to prevent full cost pass-through. All obligated parties would be purchasing allowances to meet compliance at different times in a dynamic market and every fuel provider would necessarily generate a unique cost of compliance for consumer emissions. Fuel providers would then face the challenge of imbedding that variable cost of carbon into wholesale and retail fuel purchase agreements. Given the multi-step chain of commerce from terminal rack to pump, it is very likely that fuel providers will be faced with stranded costs for emissions over which they have no control. Given the volumes of fuel sold and the magnitude of resulting emissions, failure to pass on even a small fraction of the cost of compliance could result in significant economic harm to fuel providers. At \$20/tonne, failure by refiners to pass along even 10% of this cost would result in as much as a 15% increase in refining operating costs. This increased operating expense could lead to additional refinery closures and increased imports. Further, the proposed system of regulation would result in a constantly variable and therefore confusing price signal for consumers, reducing the opportunity for those consumers to make informed decisions about fuel purchases.

Recommendations:

<u>Support:</u> CARB regulations appropriately place the point of regulation for transportation consumer emissions at the fuel terminal. In the event that fuel emissions remain under the cap, this provision will help facilitate cost pass-through, reducing the risk of refinery stranded costs and providing a more consistent carbon price signal for consumers.

<u>*Revise:*</u> If it is determined necessary to include emissions from the consumer use of transportation fuels in the cap-and-trade system, the program should be designed to 1) create a clear carbon price signal for consumers, 2) reduce obligated party exposure to allowance price volatility with respect to the consumer compliance obligation and, 3) help companies manage working capital requirements associated with the consumer emissions compliance obligation.

ConocoPhillips has considered various options for managing transportation fuel emissions in a cap-and-trade program. We believe the program elements outlined below could address some of the identified concerns. We look forward to discussing this program in more detail.

Fixed Price Allowance Program for Transportation Fuels

- The State would set aside the volume of allowances necessary to cover transportation consumer emissions from use of gasoline and diesel fuel.
- The State would establish a set price for those allowances based on some average of recent allowance market prices. That price would be adjusted periodically;
- Only obligated fuel providers could purchase the set-aside allowances at the established price noted above.

7. If transportation fuels are included in cap-and-trade, allowance value associated with the sale of gasoline and diesel should flow back to fuel customers

Under the proposed regulations, electricity consumers will see a significant proportion of the costs of regulation offset over the life of the program via allowance allocation to local distribution companies for the purpose of consumer protection (§ 95870(c)). In contrast, commercial and light-duty vehicle transportation consumers will pay the full cost of carbon associated with transportation fuels from the time those emissions come under the emission cap starting in 2015.

<u>Discussion</u>: We believe that equitable treatment of all energy consumer groups is critical to public acceptance of climate change policy and therefore to the ultimate success of that policy. Emissions from commercial and light-duty vehicle use of transportation fuels accounts for 48% of California GHG emissions. The inclusion of transportation fuels in the cap could increase the consumer cost of these products by nearly \$0.20 per gallon (at \$20 per tonne CO2e). In aggregate, this represents an additional annual financial burden for California consumers of over \$3 billion starting in 2015.

<u>Recommendations</u>: CARB regulations should direct the bulk of the allowance value attributable to transportation consumer emission towards easing the cost burden on those consumers. Compensation of transportation consumers could take the form of 1) direct rebates or offsets of existing taxes, 2) incentives to promote the safe and efficient use of transportation fuel and 3) infrastructure improvements to increase transportation system efficiency. Transportation consumer compensation should be proportionate to compensation received by other energy consumer groups (e.g. electricity consumers).

8. Define LPG/NGL as odorized propane and butane and regulate at the point of odorization

Under the proposed regulations, NGL/LPG producers are responsible for securing emission allowances for consumer use of these products (§ 95811(e)).

<u>Discussion</u>: The proposed regulations 1) are inconsistent in the use of the terms NGL and LPG, 2) unnecessarily move the point of regulation farther "upstream" from the point of consumption and 3) do not account for NGL/LPG potentially used for non-emissive purposes (e.g. feedstock for chemical manufacturing).

<u>*Recommendations*</u>: Following the model adopted by the federal American Power Act of 2010, CARB should combine NGL and LPG in a single definition. NGL/LPG should be defined specifically as odorized propane and butane. Further, the point of regulation for NGL/LPG should be at the point of odorization, i.e. where the product becomes merchantable as a combustion fuel. The party responsible for compliance should be the entity holding title to the fuel at the point of odorization.

9. Do not aggregate oil and natural gas systems' GHG emissions for defining a regulated source

The proposed regulations tie the definition of an oil and natural gas system compliance entity to CARB GHG reporting requirements which aggregate small oil and gas production emission sources at the basin level oil and natural gas system (§ 95802(138)).

Discussion: Oil and natural gas operations at a company are seldom organized at a basin level. Aggregating the reporting obligations at a basin level for oil and natural gas operations poses particular issues that are being discussed in the context of EPA's reporting rule. They raise similar and more relevant issues for the purpose of compliance. Historically, EPA has relied on a different definition of a facility that does not include the concept of aggregation at basin level for the purpose of compliance pursuant to the Clean Air Act. We believe that the inclusion of a basin level concept creates an artificial organizational layer that does not typically have a parallel in the organization structure of an oil and gas company. This would make it difficult to implement and demonstrate compliance obligations associated with the proposed regulations. In fact the reporting rule does state that the definition of a facility (that includes the concept of a basin) is for the purpose of that rule only. We agree and do not believe that it is logical to expand the definition of a facility beyond the reporting rule.

<u>*Recommendations*</u>: CARB should limit the definition of an oil and natural gas system compliance entity to single point sources emitting greater than 25,000 TCO2 (eq) per year. CARB should maintain oil and gas extraction in the "high" risk category for emission leakage.

10. Expand the use of offsets and emission allowances for compliance

The proposed regulations place an 8% limit on the offsets available to individual covered entities (§ 95854), list only four protocols used to classify compliance-eligible offsets and those eligible to receive early action credit (§ 95990) and limit the use of international emission allowances as qualifying compliance instruments (§ 95940).

<u>Discussion</u>: Extensive modeling of climate change policy by a variety of stakeholders has concluded that access to significant volumes of high-quality GHG offset credits for use towards compliance will result in a significantly lower market cost of emission allowances and therefore a lower cost for reaching the environmental targets of cap-and-trade program. Therefore, expanded opportunity to use offset credits from qualifying emission reduction projects outside of California should lower the total cost of implementing AB32 for California taxpayers and consumers.

Given that GHG emissions constitute a global concern, ConocoPhillips supports unlimited use of high-quality offsets for compliance with any cap-and-trade program. High-quality offsets are defined as environmentally additional, verifiable, permanent and enforceable. In addition, we believe that emission allowances from similarly stringent cap-and-trade programs should qualify for compliance within the California system.

<u>*Recommendations*</u>: CARB should increase the percentage of high-quality offset credits covered entities may use towards compliance and should include emission allowances from international trading programs (e.g. EU ETS) as a viable alternative compliance mechanism. In addition, CARB should expand the list of eligible domestic offset protocols.

11. Remove restrictive allowance holding limits

The draft proposes holding limits to all participants based on the overall market cap (§ 95920(b)). The holding limit is roughly 5.5 MT CO2e in the first compliance period and 11.5 MT CO2(e) in the second compliance period for most obligated parties.

<u>Discussion</u>: Any regulations that dictate when a qualifying market participant must buy, sell or hold allowances (e.g. holding limits) will reduce the efficiency of the allowance market resulting in higher compliance costs and decreased ability of firms to manage risk.

<u>Recommendation</u>: CARB should remove all holding limits for all qualifying market participants.

12. List biofuel plants as a covered stationary source

The proposed regulation includes a list of specific industrial processes (e.g. petroleum refining) in the definition of entities covered by the emission cap (§ 95811). This list does not specifically include biofuel production facilities but appears to capture such facilities under the more general category of "stationary combustion".

<u>Discussion</u>: All transportation fuels must be treated equitably within the regulatory framework. While it is appropriate that CO2 emissions from the combustion of biofuels not be included under the state emission cap, fossil carbon emissions from stationary source production of biofuels should be included in the cap if individual biofuel production facilities exceed the 25,000 TPY emission threshold.

<u>*Recommendation:*</u> CARB should clarify that biofuel plants with emissions greater than 25,000 TPY qualify as covered sources by specifically including them in the list of covered facilities in section 95811.

13. Include full life-cycle accounting of biofuel emissions

The proposed regulations exclude emissions from the combustion of biomass-derived fuels, biodiesel, fuel ethanol, municipal solid waste and biomethane from compliance (section § 95852.2).

<u>Discussion</u>: Life-cycle GHG emissions from the production and use of biofuels includes emissions from land-use change, fuel production and fuel consumption. The exclusion of biofuel combustion emissions is appropriate for the organic carbon in the fuel. Other provisions in the regulation account for stationary and transportation emission sources associated with biofuel production. However, the regulations do not account for the GHG emissions resulting from land-use change when crops are grown for fuel. <u>*Recommendation:*</u> CARB regulations should ensure that the full GHG impacts of biofuel production (e.g. land-use change) are accounted for in the cap-and-trade program.