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Cap-and-Trade Workshop California Air Resources Board 1001 I Street, Sacramento, CA 95814

(Submitted via the Workshop Comment Submittal Form and by email to ctworkshop@arb.ca.gov)

Re: WSPA Comments on the Joint California-Québec Public Workshop: Potential Amendments to the Cap-and-Trade Regulation

The Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the Joint California-Québec Public Workshop: Potential Amendments to the Cap-and-Trade Regulation, hosted by the California Air Resources Board (CARB) on June 14, 2023. WSPA is a non-profit trade association that represents companies that import and export, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California and four other western states, and has been an active participant in air quality planning issues for over 30 years.

WSPA appreciates the information CARB shared during the public workshop regarding the potential amendments to the Cap-and-Trade Regulation. We are supportive of utilizing market-based approaches like the Cap-and-Trade to help achieve California's greenhouse gas (GHG) emission reduction goals and the inclusion of carbon capture and storage (CCS) and carbon dioxide removal (CDR) technology options needed to achieve the State's decarbonization objectives.

Senate Bill (SB) X1-2 (2023) directs state agencies to evaluate how to ensure that petroleum and alternative transportation fuels are adequate, affordable, reliable, and equitable. In considering potential amendments to the Cap-and-Trade Regulation, it is essential to recognize that the potential amendments could have the effect to further increase California gasoline costs. Both the Cap-and-Trade Regulation and the Low Carbon Fuels Standard (LCFS) together add approximately 32 cents per gallon of cost, according to the California Energy Commission.² While California continues to face serious supply constraints as it relates to transportation fuels and the California legislature considered how to provide relief at the pump for California drivers, CARB should ensure that its proposed Cap-and-Trade Regulation amendments do not increase California fuels costs. WSPA is generally concerned that proposed amendments to the Cap-and-Trade Regulation could further compromise the supply reliability of critical transportation fuels, a consequence of which could increase energy costs at a time when energy affordability is a pressing priority for many Californians.

In particular, we have significant concerns about the consideration of mechanisms that directly conflict with the market-based approach or changes that would limit or end the banking of

CARB. Joint California-Québec Workshop: Potential Amendments to the Cap-and-Trade Regulation. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-06/nc-CapTradeWorkshop_June142023_0.pdf. Accessed: June 2023.

Based on OPIS, EIA, API, and AAA data. CEC staff presentations available at: https://www.energy.ca.gov/event/workshop/2022-11/commissioner-hearing-california-gasoline-price-spikes-refinery-operations. Accessed: June 2023.

allowances. We also urge CARB to consider establishing post-2030 targets and expand the exemptions for biogenic emissions to allow for the further development of renewable fuels. Our detailed comments are provided below:

1. WSPA supports market-based approaches like the Cap-and-Trade Regulation to help achieve California's GHG reduction goals, where technologically and economically feasible.

WSPA understands that Assembly Bill (AB) 1279³ has mandated an 85% reduction in anthropogenic GHG emissions below the 1990 level by 2045 and CARB projected such a reduction in the 2022 Scoping Plan.⁴ We look forward to the modeling results for how Capand-Trade Regulation can be used to achieve these targets.

WSPA highlighted in previous comments^{5,6,7,} that the modeling efforts conducted for the 2022 Scoping Plan were overly reliant on electrification and zero emission vehicle (ZEV) technologies for projected emission reductions and did not consider or develop an alternative scenario that would employ low-carbon technologies to mitigate the economic impacts of increased electricity cost, increased costs of passenger vehicles, or job losses. A study conducted by NERA Economic Consulting⁸ showed that market-based mechanisms could be more cost-effective than sector-specific mandates in helping the State achieve carbon neutrality by 2045. In fact, sector-specific mandates could double the adverse economic impacts of a market-based scenario. Perhaps even more notably, a market-based scenario could result in a greater amount of early GHG emission reductions in its trajectory to reach carbon neutrality.

The success of market-driven performance-based programs like Cap-and-Trade and LCFS have been central to previous efforts to reduce GHG emissions in the State. WSPA believes that a continued focus on such performance-based programs that allow low carbon fuels could allow the State to meet its GHG reduction goals in a manner while minimizing adverse economic impacts to Californians. WSPA encourages CARB to use this modeling opportunity to investigate how such mechanisms can be used to achieve greater GHG reductions in the State.

2. WSPA maintains its previous position that CCS and CDR technologies will be critical to the overall success of the Scoping Plan to achieve carbon neutrality by 2045.

WSPA supports the inclusion of CCS and CDR under the Cap-and-Trade program as required by SB 905. We agree with CARB that significant improvements are needed to streamline and speed up permitting for all low-carbon and negative carbon technologies

³ Assembly Bill 1279. The California Climate Crisis Act. September 19, 2022. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279. Accessed: June 2023.

⁴ CARB. 2022 Scoping Plan Update. December 2022. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf. Accessed: June 2023.

WSPA. 2022. Comments on the Draft 2022 Scoping Plan Update. June 24. Available at: https://www.arb.ca.gov/lists/com-attach/4416-scopingplan2022-BnEAdVQIBTdRCAZn.pdf. Accessed: June 2023.

WSPA. 2022. Comments on the Recirculated Draft Environmental Analysis for the Draft 2022 Scoping Plan Update. October 24. Available at: https://www.arb.ca.gov/lists/com-attach/35-sp22-recirc-ea-ws-UzICZIcJAmIKPIAP.pdf. Accessed: June 2023.

⁷ WSPA. 2022. Comments on the Final 2022 Scoping Plan Update and Appendices. December 15.

NERA Economic Consulting. 2022. Economic Impacts of Achieving California's 2022 Draft Scoping Plan's "Proposed Scenario". June. Available as Attachment D at: https://www.arb.ca.gov/lists/com-attach/4416-scopingplan2022-BnEAdVQIBTdRCAZn.pdf. Accessed: June 2023

including CCS and CDR. However, as stated in our October 24, 2022 Scoping Plan comment letter, 9 CARB must establish and clarify the roles of State agencies in order to ensure success.

We also recommend that CARB amend the Cap-and-Trade Regulation to include a methodology for crediting emissions reductions from CDR/CCS. This would allow industries to generate allowances and account for GHG emission reductions from CDR/CCS. CARB has already established a placeholder for such a concept in California Code Regulations title 17 Section 95852(g), and WSPA encourages CARB to finalize this concept.

Finally, we encourage CARB to work with the California legislature to remove the provision in SB 905 that prohibits the use of pipelines to transport CO₂ and develop an improved project environmental review process under the California Environmental Quality Act (CEQA). This could allow more timely deployment of CCS and CDR technologies which are necessary for the State to achieve carbon neutrality by 2045.

3. CARB's current modeling will project GHG reduction targets in 2030. WSPA stresses the importance of establishing post-2030 targets to set a clear post-2030 market signal to support project investments.

Given the existing aggressive long-term GHG reduction targets established by AB 1279, the 2022 Scoping Plan Update and other State policies and programs, industry needs the assurances of similar long-term targets under the Cap-and-Trade program to plan and invest in long-term infrastructure that will need capital recovery over multiple decades.

As discussed during the development of the 2022 Scoping Plan Update 10 and the Advanced Clean Fleets (ACF) regulation, 11 permitting and infrastructure development timelines remain a relevant concern among stakeholders looking both to comply with recent regulations or to invest in low-carbon technologies. The upgrades to utility infrastructure necessary for electrification, the installation of hydrogen feedstocks, production facilities, and transportation pipelines, and the development of other low-carbon technologies require planning horizons that often span more than a decade. Many emission reductions that will be achieved by projects initiated in the coming years will not be fully realized until 2030 or later and establishing post-2030 GHG reduction targets under Cap-and-Trade program would provide more certainty for these investments.

As acknowledged in CARB's Uncertainty Analysis, 12 much of the risk associated with the implementation of programs under the 2022 Scoping Plan involves delays in renewable energy capacity and transportation electrification, as stakeholders grapple the herculean task of tripling existing solar and wind build rates, increasing battery storage rates by eightfold, and deploying the estimated 1.2 million ZEV chargers needed by 2030. According to

WSPA. 2022. Comments on the Recirculated Draft Environmental Analysis for the Draft 2022 Scoping Plan Update. October 24. Available at: https://www.arb.ca.gov/lists/com-attach/35-sp22-recirc-ea-ws-UzICZIcJAmIKPIAP.pdf. Accessed: June 2023.

¹¹ WSPA. 2023. Comments on Advanced Clean Fleets (ACF) Regulation 15-Day Rulemaking Package. October 24. Available at: https://www.arb.ca.gov/lists/com-attach/697-acf2022-B3BSJ1UkVWdXDIU0.pdf. Accessed: June

¹² CARB. 2022 Scoping Plan Appendix J – Uncertainty Analysis. November 2022. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-j-uncertainty-analysis.pdf. Accessed: June 2023.

the analysis, any delays in zoning, permitting, and siting of renewable electricity generation, distribution, and transmission could jeopardize the goals of SB 100 and SB 32 and put California off track in achieving its 2030 target and carbon neutrality by 2045.

CARB should take into consideration the implementation timelines and potential for delays for the large-scale infrastructure and technology deployments necessary to achieve GHG reductions when establishing near-term and post-2030 targets. Rather than modeling a linear annual decrease in allowance budget scheduled through 2030, CARB should consider a curved trendline which is slower in early years and faster in later years, similar to what is being considered for the LCFS regulation.¹³

4. WSPA strongly opposes the introduction of concepts like "facility-level caps" or "notrade zones" in the Cap-and-Trade program as these directly interfere with the market-based approach under which Cap-and-Trade operates.

WSPA has serious concerns regarding any mechanism that includes concepts such as "facility-level caps" or "no-trade zones" like those discussed in the Independent Market Emissions Advisory Committee workshop held on June 20, 2023.¹⁴ We strongly oppose consideration of such mechanisms for a statewide, market-based, GHG reduction program as they directly conflict with AB 32 and the market-based structure under which Cap-and-Trade operates.

GHG emission impacts are realized on a global scale and should be regulated on an economy-wide scale rather than in localized areas. The Cap-and-Trade program was not established to regulate pollutants with localized impacts such as criteria air pollutants (CAP) or toxic air contaminants (TAC) emissions. Other regulatory programs, such as local air district regulatory programs including, new source review, and broad regulatory programs such as the State Implementation Plan and Assembly Bill 617, are the primary means of achieving localized air quality improvements related to CAPs and TACs. These programs serve to ensure there are no significant CAP and TAC impacts while working as a complement to CARB's GHG programs such as the Cap-and-Trade Regulation.

WSPA is concerned that any mechanism that establishes localized limits on GHG emissions would inhibit stakeholders from developing economically feasible and efficient strategies to reduce GHG emissions that are in line with the ambitious GHG reduction targets established by the State.

5. WSPA supports CARB's plan to conduct leakage analysis and strongly encourages CARB to share the results of the analysis with stakeholders.

CARB is obligated under AB 32¹⁵ to minimize leakage resulting from its regulatory activities. As part of this responsibility, CARB must estimate the emissions increases outside of California which result from leakage and policy-driven demand.

CARB. LCFS Public Workshop. May 23, 2023. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-05/LCFSPresentation 052223 0.pdf. Accessed June 2023.

CalEPA. Independent Emissions Market Advisory Committee Meeting Agenda. June 20, 2023. Available at: https://calepa.ca.gov/wp-content/uploads/sites/6/2023/06/IEMAC_Agenda_2023_06_20.pdf. Accessed: June 2023.

¹⁵ Health & Safety Code section 38562(b)(8).

In our previous comment letters, WSPA has identified several key activities driven by the California's policies that would result in significant leakage of GHG emissions, including but not limited to increased mining of critical mineral resources, increased battery production, recycling, and disposal, 16,17 and the limit on future in-State oil and gas development. We strongly encourage CARB to consider these comments and incorporate them in the proposed leakage analysis.

For instance, the demand for critical mineral and energy resources and associated infrastructure for battery production, recycling, and disposal are expected to surge under the adopted ZEV mandates for both light-duty vehicles (LDV) and medium- and heavy-duty vehicles (M/HDV). A typical electric car would require six times the amount of mineral inputs compared to a conventional vehicle and resources are not currently available to meet the demand. While CARB did not provide estimates for the individual or combined impacts to mineral resources from the Advanced Clean Cars II (ACC II) or ACF regulations, CARB does provide an estimate for the projected annual increase in battery production in Table 4 of the Draft Environmental Analysis for ACC II. These projections show an annual increase in battery production, ranging from 43.2 gigawatt-hours (GWh) in 2026 to 150.8 GWh in 2035, which is a significant step up from the 60 GWh of lithium-ion battery capacity cumulatively deployed in the United States (U.S.) electric vehicle (EV) market from 2010 to 2020. Therefore, it is necessary to conduct a comprehensive study to understand the leakage impacts of the ZEV mandates versus market-based approaches.

Similarly, activities that would limit future in-state oil and gas development may result in emissions leakage because California refineries supply fuels to other U.S. states including states in the U.S. Southwest. Through the possible future application of CCS technologies in the Cap-and-Trade program for industrial emissions and production of low-carbon and renewable liquid fuels at California refineries, California's exports could play a pivotal role in reducing the carbon intensity of fuels consumed in other states compared to fuels produced elsewhere. WSPA strongly recommends that CARB conduct a comprehensive leakage analysis to understand the significant leakage risks of its oil and gas policies.

Ensuring that market-based approaches like the Cap-and-Trade program are technologically and economically viable can effectively prevent leakage and assist the State in achieving carbon neutrality. We look forward to seeing more updates from CARB on the leakage

WSPA. Comments on ACC II Regulation Initial Statement of Reasons (ISOR) Documents. May 31, 2022. Available at: https://www.arb.ca.gov/lists/com-attach/477-accii2022-AHcAdQBxBDZSeVc2.pdf. Accessed: June 2023.

WSPA. Comments on ACF Regulation 15-Day Rulemaking Package. April 7, 2023. Available at: https://www.arb.ca.gov/lists/com-attach/697-acf2022-B3BSJ1UkVWdXDIU0.pdf. Accessed: June 2023.

WSPA. Comments on the Draft 2022 Scoping Plan Update. June 24, 2022. Available at: https://www.arb.ca.gov/lists/com-attach/4416-scopingplan2022-BnEAdVQIBTdRCAZn.pdf. Accessed: June 2023.

WSPA. Comments on the Recirculated Draft Environmental Analysis for the Draft 2022 Scoping Plan Update. October 24, 2022. Available at: https://www.arb.ca.gov/lists/com-attach/35-sp22-recirc-ea-ws-UzICZIcJAmIKPIAP.pdf. Accessed: June 2023.

International Energy Agency (IEA). World Energy Outlook Special Report. The Role of Critical Minerals in Clean Energy Transitions. 2021. Available at: https://www.iea.org/reports/the-role-of-criticalminerals-in-clean-energy-transitions. Accessed: June 2023.

²¹ CARB. Draft Environmental Assessment. April 12, 2022. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/appe1.pdf. Accessed: June 2023.

²² CalEPA. Lithium-ion Car Battery Recycling Advisory Group Final Report. March 16, 2022. Available at: https://calepa.ca.gov/wp-content/uploads/sites/6/2022/05/2022_AB-2832_Lithium-lon-Car-Battery-Recycling-Advisory-Goup-Final-Report.pdf. Accessed: June 2023.

analysis, and strongly encourage CARB to share the results of the analysis with stakeholders in a timely manner.

6. WSPA supports the continued use of the allowance banking mechanism under the Cap-and-Trade program and encourages CARB to consider raising the allowance cap in future years.

WSPA emphasizes that the current allowance banking mechanism is an important cost containment feature under Cap-and-Trade that spurs innovation and incentivizes the early achievement of GHG reductions. Any changes made to limit or end the banking of allowances would be a significant detriment to the Cap-and-Trade program and the State's climate goals. Specifically, WSPA encourages CARB to reevaluate and consider raising the allowance cap in 2030 and make necessary adjustments in future years.

As we have discussed, Cap-and-Trade has served as a technologically and economically feasible program and an integral part of the State's plan to achieve its GHG reduction goals. CARB's development of the allowance banking mechanisms has been pivotal to the overall success of the program and has incentivized industries, including the transportation fuels sector, to develop innovative technologies that generate GHG reductions earlier than the proposed timeline. The removal of this mechanism would significantly handicap the Cap-and-Trade program by disincentivizing early actions. This could create a barrier to developing large-scale projects that reduce GHG emissions in favor of incremental/inefficient emission reduction programs, thereby increasing the risk of failing to achieve the State's emission reduction targets.

In addition to keeping this key cost containment feature, WSPA recommends that the allowance banking under the Cap-and-Trade program should be enhanced in future years by raising the existing allowance cap and expanding the pathways in which emissions credits can be earned. In the later years of the program, when contributions from existing banking become limited, the stringent allowance cap could disincentivize industries from innovating additional advanced GHG reducing technologies. Therefore, CARB should consider raising the limit on banking of allowance in future years, which can incentivize the industry to continue to innovate and invest in technologies that continue to achieve additional GHG reductions ahead of the proposed timeline.

7. WSPA supports the current exemptions for biogenic emissions under the Cap-and-Trade program and encourages CARB to expand these exemptions to allow for the further development of renewable fuels.

GHG emission impacts are realized on a global scale rather than a localized level. Hence, it is critical to maintain a lifecycle perspective when developing strategies to reduce GHG emissions in the State. The current exemptions for biogenic emissions align with this perspective, allowing renewable fuels to play an important role in California's decarbonization.

These exemptions encourage the continued development of low-carbon and carbonnegative technologies and allow for the success of other key State programs such as SB Cap-and-Trade Workshop July 7, 2023 Page 7

1383²³ and forestry management programs,²⁴ both of which result in a supply of biogenic feedstocks that can be utilized in hard-to-decarbonize and hard-to-electrify sectors. The elimination of these exemptions would significantly strain industries that are integrally tied to these State efforts, such as waste and wastewater sector, and other in-State developers of renewable fuels who would no longer receive benefits under the Cap-and-Trade program.

Given the extended timelines required for electrical grid infrastructure upgrades, renewable fuels will play a critical role in the State's decarbonization not only as a bridge between existing technologies and electrification, but also as means to address intermittency concerns within the electric grid, as the State transitions to renewable generation while simultaneously expanding energy demand. Hence, WSPA encourages CARB to expand the exemptions for biogenic emission which are essential for continued production of renewable fuels in California.

Thank you for your consideration of our comments. We would welcome the opportunity to discuss these concerns in more detail. If you have any immediate questions, please feel free to contact me at televiology.com. We look forward to working with you on these important issues.

Sincerely,

Tanya DeRivi

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WSPA

Senate Bill 1383. Short-Lived Climate Pollutant Reduction Law. September 19, 2016. Available at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB1383. Accessed: June 2023.

²⁴ CARB. Draft California 2030 Natural and Working Lands Climate Change Implementation Plan, January 2019. Available at: https://ww2.arb.ca.gov/sites/default/files/2019-06/draft-nwl-ip-040419.pdf. Accessed: June 2023.