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California Air Resources Board
1001 I Street
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RE: Comments on proposed cap-and-trade regulatory amendments

Dear ARB staff,

Thank you again for the opportunity to provide comments on draft cap-and-trade regulation amendments. The below comments are on the material presented at the April 26th cap-and-trade regulation workshop, and build on comments I submitted on the March 2nd workshop.

1. Not all projects in a watershed of a river flowing into or adjacent to the state have Direct Environmental Benefits in the State (DEBS)

One of the proposals put forward for defining DEBS is to consider any project within a watershed of a river that impacts water quality of the state to be considered to meet the DEBS requirement. To note, the Colorado River basin covers almost all of Arizona, and portions of Colorado, Utah, Nevada, New Mexico, and Wyoming.

I understand the intention of the DEBS requirement to be that the offset projects should provide tangible benefits to the state's air and water quality (see discussion in my March comments). Not all improved forest management, dairy digester, ODS, and mine methane capture projects in the large area of the Colorado river basin meaningfully affect the quality of water entering the state. Factors affecting a project's impact on waters entering the state include distance from California, distance from a waterway, and scale and type of pollution entering the water system.

If DEBS are defined in such a way that could include projects outside of California, clear standards and evaluation procedures should be established for assessing whether a project meaningfully impacts the quality of waters entering the state.

2. Offset usage limits

AB 398 establishes an offset usage limit of 4% for 2021-2025, and 6% for 2026-2030. The usage limits proposed in the table on page 25 of the March 2nd cap-and-trade workshop presentation seems to propose allowing the majority of emissions from 2024 and 2025 to be covered by a 6% usage limit. This interpretation, while allowing for a greater use of offsets, would go against an intuitive understanding of the law and is in contradiction with definitions in the current cap-and-trade regulation.

The opening for ARB's possible reinterpretation of the law comes from the discrepancy between when emissions are emitted, and the deadline by when compliance obligations covering those emissions must be surrendered to ARB. Because of the regulation's three-year compliance periods, compliance obligations covering at least 30% of emissions from 2024 and 2025 must be surrendered in 2025 and 2026. The deadline for submitting the remaining 70% of compliance obligations for emissions in years 2024 and 2025 is in 2027.

Near Zero published a full description of this issue here:

<http://wp.nearzero.org/wp-content/uploads/2018/03/AB-398-offsets-limit-final.pdf>

The question is whether the 4% and 6% applies to the year the emissions happen, or the deadline for submitting compliance obligations.

AB 398 states that:

(I) From January 1, 2021, to December 31, 2025, inclusive, a total of 4 percent of a covered entity's compliance obligation may be met by surrendering offset credits... (II) From January 1, 2026, to December 31, 2030, inclusive, a total of 6 percent of a covered entity's compliance obligation may be met by surrendering offset credits...

Intuitively, the law applies to years, not the three-year commitment periods; half of the years are covered by a 4% limit, and half by a 6% limit. The language of the law and regulation also supports the application of the 4% limit to the years when the emissions occurred, not when the compliance obligations must be surrendered to ARB. In AB 398, the 4% limit applies to a covered entity's *compliance obligation*. The *compliance obligation* is defined in the regulation by the emissions they cover, not the timing of when they are surrendered:

"Compliance Obligation" means the quantity of verified reported emissions or assigned emissions for which an entity must submit compliance instruments to ARB. (California Code of Regulations, title 17, § 95802)

I hope that ARB will clarify that the 4% offset limit is applied to all covered emissions emitted during 2021-2025.

3. Investments of price ceiling funds

ARB described in its April 26th cap-and-trade workshop presentation one set of proposals for the use of price ceiling funds that would dedicate those funds to purchasing tons of emissions reductions from a discrete set of project types defined in the near term. I briefly raise a few concerns about this approach. Individual projects of types determined now will not necessarily be the most effective use of funds to reduce emissions over the next 12 years. If ARB retains flexibility over use

of price ceiling funds it would be able to invest them in a wider range of activities, programs and projects that it sees as being most urgent for enabling the state to reach its 2030 and 2050 targets.

While the law requires price ceiling proceeds to be used towards reductions that are real, permanent, quantifiable, verifiable, enforceable, and additional, this does not restrict ARB to an offset-type protocol-based approach. ARB can use conservative methods for estimating the emissions reduced by a wide range of programs and projects.

4. Technical changes to the U.S. Forest Projects offset protocol – Leakage

Below is a refined discussion of several changes that may be needed to the leakage and reversal provisions in the U.S. Forest Projects offset protocol, building on the comments I submitted on the March 2nd cap-and-trade workshop. Because of weak provisions to account for leakage, the Forest protocol is generating more credits today than increased carbon storage achieved to date by the protocol.

(1) Leakage rate: The Climate Action Reserve (CAR) updated its leakage rate from 20% to a range up to 80% in Version 4 of its Forest Project Protocol. This revision better reflects literature on leakage rates from changes in forest management in the United States. Is ARB considering increasing its leakage rate?

(2) Leakage timing: Currently the protocol credits an improved forest management (IFM) project today for reductions that are expected to happen over 100-years. Given the urgency of climate change mitigation and the risk of tipping points, a ton reduced today is not the same as a ton reduced decades from now. IFM projects credit on-site carbon stocks that are above the baseline in year one of an IFM project, while accounting for the leakage associated with the credited reduction in harvesting over 100-years. In other words, in the first year of an IFM project the project receives credits associated with the total on-site carbon storage above the baseline, but only 1/100th of the leakage associated with that avoided harvesting is accounted for in that first year.

This accounting discrepancy can be remedied by deducting the leakage associated with the avoided harvesting credited in year one of a project, at the same time the avoided harvesting is credited. I am happy to provide a quantitative example to illustrate this issue and my proposed solution.

(3) Full accounting for leakage: Currently it is unclear if the protocol credits all of the leakage associated with year one's avoided harvesting, or only 25% of that leakage. Equations 3.1 and 5.1 define a reversal as a net negative change in forest carbon, taking into account on site carbon, leakage, and carbon held long term in harvested wood products and landfills. ARB should clarify whether these equations are applied throughout the project life – through 100 years after the last credit issuance, or through the end of the final crediting period, which could be only 25 years if a project owner does not choose to renew the project. Until the change to the leakage timing described in #2 above is made, it will be important that leakage is counted as part of the reversal assessment for 100 years. Otherwise, if a project does not renew its first 25-year crediting period, only 25% of the leakage associated with the reduction in harvested in the first year of the project compared to the baseline is accounted for.

(4) Definition of a reversal: Equations 3.1 and 5.1 define a reversal as net negative changes in carbon storage *every year* over the project life. If that equation is applied during the years following the final issuance of credits, then there is another problem that needs to be addressed.

The reversal provisions would be triggered if net carbon storage were negative in any single year over a project's >100-year life. I believe what is important, and perhaps this was the intent of the protocol, is to ensure that there is no net over-crediting—that the total credits generated never exceed the effect of the offset project on emissions. It doesn't matter what happens in any one year as long as there is no reversal of the increase in carbon storage that has been credited.

I believe the following definition of a reversal is a more feasible requirement for a forestland owner for the period following the final credit issuance and one year later at the end of the project life. I also believe it better reflects what is needed to avoid over-crediting. I suggest instead defining a reversal thus:

A reversal has occurred if: the sum of all credits generated from the start of the project to the current reporting period is greater than the sum of (1) actual onsite carbon storage in the current reporting year minus baseline carbon storage in the reporting year, (2) the sum of long-term carbon storage in harvested wood products and landfills from the first reporting period to the present reporting period minus the sum of long-term carbon storage in harvested wood product and landfills in the baseline from the first reporting period to the present reporting period, taking into account leakage, and (3) the sum of all secondary effects (which include leakage) from the first reporting period to the present reporting period.

Thank you for considering these comments.

Sincerely,

Barbara Haya