

Sam Wade Branch Chief Low Carbon Fuel Standard California Air Resources Board State of California U.S.A.

28 March 2018

Dear Mr. Wade,

LCFS18 – Proposed Amendments to the Low Carbon Fuel Standard Regulation

Parhelion Underwriting Inc. ("Parhelion") appreciates the opportunity to offer these comments to the California Air Resources Board ("CARB") as part of its consideration of the *Staff Report: Initial Statement of Reasons for the Proposed Rulemaking* in respect of the proposed 2018 amendments to the Low Carbon Fuel Standard ("LCFS") Regulation. Our comments relate to the regulatory approach to credit invalidation.

We wholeheartedly support the concept of 'invalidation' for both the cap and trade and the LCFS market. An invalidation mechanism is critical to ensure the environmental integrity of any environmental credit market. Indeed, the inability of the Clean Development Mechanism ("CDM") to invalidate offsets that were not environmentally robust was a significant factor in its demise.

We also support the concept of 'buyer liability'. In the CDM market the liability was placed on the verifiers, who stated that they would walk away from the market if the liability was ever imposed upon them. This was why the CDM Executive Board were unable to invalidate offsets that were not robust. The concept of caveat emptor is well established and makes sense in environmental commodity markets.

We note that when developing the cap-and-trade rules the ARB took the position that "the market will find a solution to buyer liability". Accordingly, Parhelion developed a low cost invalidation insurance solution for the cap and trade market, and other providers similarly developed other solutions.

We also recognise the ARBs aspiration to increase liquidity in to the LCFS market. In order to increase liquidity, it would be useful for LCFS credits to be listed on an exchange. Our investigations have shown that whilst potential exchanges are interested to list LCFS credits the invalidation risk makes this difficult since it means the LCFS credits are not effectively commodities. An insurance wrap would be a way to commoditise the offsets and credits, thereby enabling an exchange to list them.



Parhelion has, in response to these discussions and a number of other enquiries, been working to offer an 'invalidation risk' insurance solution for the LCFS market, analogous to our offering for the cap-and-trade market. There are however a number of barriers to this.

Firstly, in the LCFS market, the buyer liability concept, whilst there in theory, is somewhat difficult to pin down. This makes it difficult to clearly manage this liability - "the Executive Officer retains the flexibility to invalidate the credits held by an entity other than the initial credit generator at the time of discovery". Recommendation: that liability is clearly allocated to one party, being the current owner of the LCFS credit. Thus they will retain the ability to transfer this liability via contractual arrangements, allow market participants to choose from a range of solutions that will allow them to transfer that liability.

Secondly, we note that there is no tracking/serialisation of LCFS credits in the LRT-CBTS system, and that the resulting inability to track the originators of credits and their subsequent buyers further compounds the uncertainty regarding clear allocation of liability. *Recommendation: the LRT-CBTS system be adapted to include the serialisation of LCFS credits which would remove this layer of uncertainty from credit invalidation liability.* For example, the RINS market uses unique reference numbers at the point of creation which enables tracking throughout the system.

Whilst we understand that the proposed creation of a buffer account (s. 95486(a)(3) is intended to resolve the problem where the person responsible for the credits' invalidity no longer exists, or is otherwise unable to reimburse the program, we are unable to ascertain whether the outcome of this proposal will be as intended as we do not know how many credits will fall into the categories detailed in the proposed regulations for populating the buffer account, and hence be available for retirement to offset credit invalidations.

There would also seem to be a potential mismatch between the decision to invalidate credits and the replacement of these invalidated credits from a different source to the entity responsible for the invalidated credits. Whilst this may ensure environmental integrity in so far as the number of credits in the system more accurately reflects the carbon intensity of fuel produced, it doesn't address the issue of invalidation at source and hence the problem of buyer uncertainty. Similarly, the need you refer to of the buyer having to "evaluate the likelihood of each credit generator being able to cover any invalid credits on a firm-by-firm basis" still remains. We believe that the risk transfer mechanism of insurance can solve this problem more efficiently as it allows the market to remain liquid and can remove the uncertainty surrounding credits being transferred from one party to another. Similarly, any insurance solution can be more easily assessed for its credit-worthiness since all reputable insurers benefit from transparent and publically available credit rating from rating agencies such as A.M.Best, S&P, Fitch etc.

Thirdly, as noted above we also support your aims of increasing liquidity in the LCFS market and hence we understand why you have allowed quarterly reporting but annual verification. Whilst this does allow projects to monetise those credits generated on a quarter to quarter basis over a 12 month period, the fact that verification is done after issuance means that the perceived risk of invalidation is significantly higher than say for the cap-and-trade offset invalidation. The cap-and-trade approach of having a rigorous offset creation process BEFORE issuance significantly reduces the risk of invalidation (albeit not totally removing it).



Lastly, we also note that the current market performance for invalidation appears to be uncertain relative to the cap-and-trade market. We believe that it would be of benefit to provide market participants with additional details of the extent of invalidation. The penalties in failing to generate credits correctly are potentially severe, with custodial sentences in the most extreme cases. Recommendation: To inform the market better we would recommend that a table of the number of credits invalidated during each year of the program be produced. This would be of especial benefit as the certification regime is about to change. Furthermore, we believe the number of audits carried out during each year of the program would be useful information for the market. As the certification regime is about to change the extent of the likely burden moving forward can then be assessed. A projection of the number of audits to be carried out would provide further clarity.

In conclusion, if the invalidation risk can be clearly allocated and therefore transferred, we believe that low carbon intensity projects would be able to monetise significantly more than 12 months revenue and market liquidity would increase. This would in turn reduce LCFS credit generators cost of funding and production. This will also lower the cost of compliance.

We thank CARB Staff for their work and for their consideration of our comments in this matter.

Yours sincerely

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