

July 22, 2016

Sam Wilson
Department of Ecology
State of Washington

Re: Chapter 173-442 WAC, Clean Air Rule

Dear Mr. Wilson,

Thank you for the opportunity to comment on the Department of Ecology's proposed Clean Air Rule to reduce greenhouse gas emissions. Because the Department is contemplating allowing covered parties to satisfy their compliance obligations under the proposal using greenhouse gas allowances purchased from California's cap-and-trade system, I write to share important information about the status of the California market.

The Department should be aware that California's carbon market is significantly oversupplied at present, meaning that the total supply of compliance instruments available in the market significantly exceeds the demand for those instruments. The California program's legal future is also highly uncertain. If the program expires at the end of its current authorization through December 2020, then the oversupply conditions will worsen and the environmental consequences of allowing covered parties in Washington to use allowances issued by an expiring program in California will be severe.

While the Department's proposed Clean Air Rule does not by itself allow covered parties in Washington to submit California allowances for compliance, the accompanying cost-benefit analysis explicitly contemplates this outcome and the proposal itself creates a process for approving greenhouse gas allowances issued by external markets.

The presence of oversupply conditions in an approved external emission market would reduce the environmental integrity of the Department's proposal. Purchasing allowances from an oversupplied market would not lead to greenhouse gas emission reductions because such a purchase would have no impact on the emissions in the seller's market, and therefore the

credit generated for compliance under the Clean Air Rule would not reflect a real emission reduction. In the worst-case scenario, sufficient oversupply in an approved external emission market could completely negate the anticipated benefits of the proposed rule during the first two compliance periods, during which time these external allowances could be used for 100% of compliance obligations.

To account for the risks identified here, the Department should conduct additional analysis of oversupply conditions in California's cap-and-trade program prior to making any decision to approve allowances from this market. It should also explicitly consider the environmental integrity impacts of recognizing California allowances in its final cost-benefit assessment—including a consideration of the impacts should California's program expire at the end of 2020, as is currently codified in California state regulations.

1. The proposed Clean Air Rule is designed to allow covered parties to comply by purchasing allowances from California's cap-and-trade program.

Under the Department's proposed rule, covered parties with greenhouse gas emissions above their assigned targets must acquire sufficient Emission Reduction Units (ERUs) to cover the excess emissions,¹ with ERUs equivalent to one metric ton of carbon dioxide equivalent (tCO₂e).² ERUs can be generated by emission reductions made at covered parties' facilities, from approved projects or programs that reduce greenhouse gas emissions (including carbon offset protocols and renewable energy credits), or by the purchase of allowances from external emission markets approved by the Department.³ The use of allowances from approved external emission markets can account for 100% of the compliance

¹ WAC 173-442-200.

² WAC 173-442-020 subd. (1)(m) (defining "ERUs"); WAC 173-442-020 subd. (1)(d) (defining CO₂e with respect to global warming potentials (GWPs) listed in WAC 173-441-040). The Department proposes using 100-year GWPs from the 1995 IPCC Report for emissions in years 2013-14 and 100-year GWPs from the 2007 IPCC Report for emissions in 2015 and beyond. WAC 173-441-040, Table A-1.

³ WAC 173-442-110.

obligations in the first two compliance periods (2017–2019 and 2020–2022), with the allowable share falling to 50% and lower in subsequent compliance periods.⁴

In order for the Department to approve allowances from an external emission market under the proposed rule, three conditions must be met: (a) the allowances are issued by an established multi-sector greenhouse gas emission reduction program, (b) parties covered by the Department’s Clean Air rule must be eligible to purchase the external allowances, and (c) the external allowances must be derived from methodologies consistent with the Department’s own approach.⁵

While the decision to approve external allowances is left to future Department discretion, it is clear that the Department’s proposal contemplates the use of California allowances. On paper, California’s cap-and-trade program could potentially meet all of the Department’s criteria; and in practice, the Department’s preliminary cost-benefit analysis of the Clean Air Rule explicitly contemplates this outcome.⁶

2. California’s carbon market is currently oversupplied.

As has been widely reported in recent months, California’s carbon market is experiencing a significant oversupply condition in which the supply of available compliance instruments exceeds demand.⁷ In February 2016, the government-sponsored auction cleared at the price floor, but for the first

⁴ WAC 173-442-170, subd. (2)(a), Table 3.

⁵ WAC 173-442-170 subd. (1).

⁶ Department of Ecology, Preliminary Cost-Benefit and Least-Burdensome Alternative Analysis, Chapter 173-442 WAC (Clean Air Rule) & Chapter 173-441 WAC (Reporting of Greenhouse Gases), Report # 16-02-008 (June 2016) at 14–15 (estimating the cost of external market emissions by reference to the linked California-Québec cap-and-trade market, with costs estimated between \$13–14 per tCO₂e); *id.* at 22, 23, 33 (reporting the cost of compliance with reference to external market emissions cost estimates based on the linked California-Québec cap-and-trade market).

⁷ Danny Cullenward and Andy Coghlan, Structural oversupply and credibility in California’s carbon market. *The Electricity Journal* 29(5): 7–14 (2016). Free access to this article is available through August 13, 2016, at the following address: <http://authors.elsevier.com/a/1TGUH3ic~q2YZ>.

time in the program's history, not all available current-year vintage allowances sold out.⁸ Shortly thereafter, secondary markets began trading at slightly below the auction price floor.⁹ In May 2016, the auction failed spectacularly, with 90% of available allowances going unsold.¹⁰ Valued at the auction price floor, these allowances were worth over \$880 million.¹¹ As these auction and secondary market data indicate, California's cap-and-trade market is oversupplied.

The California Air Resources Board (CARB), which regulates the California carbon market, may be the only entity with the necessary data to calculate the full extent of oversupply. While CARB has not publicly quantified or acknowledged the oversupply condition, it has projected that expected emissions from regulated entities in 2020 will be below the market cap in that year¹²—a condition that guarantees oversupply. Meanwhile, the *Sacramento Bee* has cited an estimate from ICIS, a market intelligence firm, that the California cap-and-trade program is oversupplied by over 250 million tCO₂e.¹³

⁸ CARB, February 2016 Joint Auction #6 Summary Results Report, http://www.arb.ca.gov/cc/capandtrade/auction/feb-2016/summary_results_report.pdf.

⁹ Data from one secondary market index (ICE, Inc.) are freely available at <http://calcarbondash.org/>.

¹⁰ CARB, May 2016 Joint Auction #7 Summary Results Report, http://www.arb.ca.gov/cc/capandtrade/auction/may-2016/summary_results_report.pdf.

¹¹ Cullenward and Coghlan, *supra* note 7.

¹² CARB, Preliminary Draft Proposed Regulation Order and Staff Report (July 19, 2016) at 12 (projecting that emissions from sources regulated under the cap-and-trade program will be 322.6 million tCO₂e, which is lower than the cap for that year at 334.2 million tCO₂e), http://www.arb.ca.gov/cc/capandtrade/draft-ct-reg_071216.pdf.

¹³ Carbon Market Compliance Association, Fixing California's Cap-and-Trade (June 8, 2016) (on file with author); Dan Walters, California cap-and-trade emission auctions could face bleak future, *Sacramento Bee* (June 20, 2016) (referencing the CMCA memo and ICIS estimate), <http://www.sacbee.com/news/politics-government/politics-columns-blogs/dan-walters/article84930702.html>.

3. The legal authority to extend California’s carbon market beyond 2020 is uncertain and will likely be challenged in court.

Weak demand at auctions in California’s cap-and-trade market is a product of oversupply as well as uncertainty over the program’s post-2020 future. This uncertainty helps explain why market stakeholders are not buying all available allowances at auction and why allowances are trading on secondary markets slightly below the auction price floor.

In 2015, Governor Brown issued an executive order establishing a statewide target of reducing greenhouse gas emissions 40% below their 1990 levels by 2030 and 80% below 1990 levels by 2050.¹⁴ If allowances in a market that is oversupplied in the short term could be used to comply with these long-term targets, then one would expect buyers to purchase all available allowances at the low allowance price floor of \$12.73/tCO₂e.

However, the carbon market is currently authorized only through the end of 2020.¹⁵ The market’s enabling statute, AB 32, authorized CARB to develop market-based measures (including cap-and-trade) in order to meet a state target of reducing statewide emissions to their 1990 levels by 2020. Critically, the statutory provision under which CARB developed California’s cap-and-trade market is time-limited:

In furtherance of achieving the statewide greenhouse gas emissions limit, by January 1, 2011, the state board may adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, **applicable from January 1, 2012, to December 31, 2020, inclusive**, that the state board determines will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources.¹⁶ [Emphasis added.]

Whether and how this limit can be overcome is now the subject of significant controversy in California.

¹⁴ Governor Edmund G. Brown, Executive Order B-30-15 (April 29, 2015), <https://www.gov.ca.gov/news.php?id=18938>.

¹⁵ Cal. Code Regs. tit. 17, §§ 95840-41.

¹⁶ Cal. Health & Safety Code § 38562(c).

CARB contends that it can extend the cap-and-trade program after 2020 without legislative re-authorization, but has not explained its legal theory in detail. In July, CARB released draft proposed regulations to extend the cap-and-trade program through 2050.¹⁷ Remarkably, the draft proposal does not discuss the statutory language quoted above, on which CARB has traditionally justified its cap-and-trade program. Nowhere in the 66-page summary of staff reasoning does the draft proposal clarify CARB’s view of its authority to continue cap-and-trade beyond the program’s current expiration at the end of 2020.

CARB does, however, make reference to authority to “maintain and continue” emission reductions beyond 2020¹⁸ and to comply with the Governor’s executive order targets for 2030 and 2050, consistent with existing (but unspecified) statutory authority.¹⁹ For context, the “maintain and continue” language likely refers to another set of provisions in AB 32:

- (a) The [2020] statewide greenhouse gas emissions limit shall remain in effect unless otherwise amended or repealed.
- (b) **It is the intent of the Legislature that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020.** [Emphasis added.]
- (c) The state board shall make recommendations to the Governor and the Legislature on how to continue reductions of greenhouse gas emissions beyond 2020.²⁰

Again, CARB has not publicly analyzed how the “maintain and continue” provision overcomes the implied limitation of the authority to use market-based mechanisms only through the end of 2020.

It should also be noted that the Legislative Counsel Bureau, an independent legal office that advises the California legislature, has analyzed these questions. At the request of State Senator Jean Fuller

¹⁷ CARB, *supra* note 12.

¹⁸ *Id.* at ES-1; *id.* at 1.

¹⁹ *Id.* at 3.

²⁰ Cal. Health & Safety Code § 38551.

(R-Bakersfield), the Bureau wrote a 10-page memo concluding that (1) the Governor’s executive order could not establish a legally binding target for 2030 or 2050 in the absence of statutory authority and (2) the “maintain and continue” language in AB 32 does not authorize extension of the cap-and-trade program after 2020.²¹

To be clear, the Bureau’s analysis is only advisory and cannot substitute for what a reviewing court would independently determine in the course of litigation. Nevertheless, the Bureau’s analysis indicates that CARB’s decision to proceed with draft proposed regulations in July is, at a minimum, controversial.

Given the legal uncertainty over CARB’s post-2020 authority, the draft proposed regulation is likely to be challenged in court should CARB proceed with its stated intentions to extend the cap-and-trade program without legislative re-authorization.

4. Because California’s carbon market is oversupplied and could expire at the end of 2020, the Department should account for the environmental integrity impacts of allowing covered parties to use California allowances under the Clean Air Rule and in its accompanying cost-benefit analysis.

In light of the oversupply conditions present in California’s carbon market, the Department should explicitly evaluate whether it believes the purchase of allowances from an oversupplied market constitute real greenhouse gas emission reductions.²²

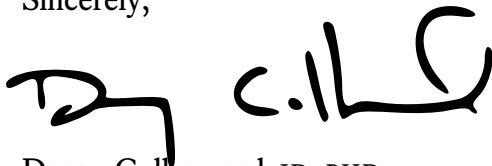
²¹ California Legislative Counsel Bureau, Letter to Senator Jean Fuller, California Global Warming Solutions Act of 2006: Executive Branch Authority - #1609054 (Apr. 19, 2006) (on file with author); *see also* David Siders, Legislature’s attorney says Jerry Brown can’t set climate target. *Sacramento Bee* (Apr. 21, 2016). <http://www.sacbee.com/news/politics-government/capitol-alert/article73227072.html>. Although the Bureau does not publish its advisory letters, a copy may be found online, *e.g.* at <http://careaboutenergy.org/wp-content/uploads/Leg-Counsel-Opinion-GGRF.PDF>.

²² *E.g.*, as the term “real” is defined under WAC 173-442-150 subd. (1)(a).

The Department's implied assumption in the draft cost-benefit analysis that an allowance from California's market is equivalent to an ERU generated in Washington²³ is mistaken. Buying allowances from an oversupplied market does not result in a one-for-one reduction in greenhouse gases and is therefore neither real nor comparable to a reduction in emissions from in-state sources or the use of compliance instruments from other market-based programs that are functioning properly. This concern is all the more pressing if California's market is not extended beyond 2020.

Thank you again for the opportunity to comment on the proposed rule. If it would be helpful, I can provide additional data and analysis on the issues discussed in this comment letter, as well as copies of any of the primary sources referenced herein.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Cullenward', written over a horizontal line.

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Disclaimer: I am writing in my personal capacity only, and not on behalf of my employer.

²³ Preliminary Cost-Benefit and Least-Burdensome Alternative Analysis, *supra* note 6 at 38–39 (calculating the benefits of avoided greenhouse gas emissions by assuming that the Clean Air Rule's target emission reductions are achieved); WAC 173-442-170 subd. (1)(c) (requiring that approved allowances from external emission markets use methodologies that are “congruent” with the Washington state reporting requirements in chapter 173-441 WAC).