Attachment A-4

Proposed Regulation Order

Proposed Amendments to the Regulation for the Low Carbon Fuel Standard

[Note: This version of the Proposed Regulation Order complies with Government Code section 11346.2 subdivision (a)(3). The proposed amendments are shown in underline to indicate additions and strikethrough to indicate deletions from the existing regulatory text. For ease of readability, CARB has also provided a version of the proposed amendments that can toggle between amendments in strikeout/underline and a “clean" version with amendments incorporated into the regulatory text, which can be found in the Word version of this Proposed Regulation Order.]

Subarticle 7. Low Carbon Fuel Standard

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§ 95481. Definitions and Acronyms.

(a) *Definitions*. For the purposes of sections 95480 through 95503, the definitions in Health and Safety Code sections 39010 through 39060 shall apply, except as otherwise specified in this section or sections 95482 through 95503:

"Carbon capture and sequestration (CCS) project" means a project that captures CO_2 by an eligible entity specified in *section* 95490(a), transports the captured CO_2 to an injection site, and injects and permanently sequesters the captured CO_2 pursuant to the Geologic Carbon Storage Protocol (GCS Protocol) and the Greenhouse Gas Quantification Methodology for Carbon Capture and Sequestration under the Low Carbon Fuel Standard (LCFS CCS QM)~~Carbon Capture and Sequestration Protocol~~, as specified in section 95490.

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NOTE: Authority cited: Sections 38510, 38530, 38560, 38560.5, 38562.2, 38571, 38580, 39600, 39601, 41510, 41511 and 43018, Health and Safety Code. Reference: Sections 38501, 38510, 39515, 39516, 38571, 38580, 39000, 39001, 39002, 39003, 39515, 39516, 41510, 41511 and 43000, Health and Safety Code; Section 25000.5, Public Resources Code; 42 U.S.C. section 7545; and Western Oil and Gas Ass'n v. Orange County Air Pollution Control District, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

* * *

§ 95486. Generating and Calculating Credits and Deficits.

(a) *Generation and Acquisition of Transferrable Credits*.

(3) *Buffer Account*. The Executive Officer may create an LRT-CBTS account under the control of the Executive Officer. In this account, the Executive Officer may place:

(C) Contribution from CCS projects pursuant to the ~~CCS Protocol~~GCS Protocol and the LCFS CCS QM.

* * *

NOTE: Authority cited: Sections 38510, 38530, 38560, 38560.5, 38562.2, 38571, 38580, 39600, 39601 and 43018, Health and Safety Code. Reference: Sections 38501,

38510, 39515, 39516, 38571, 38580, 39000, 39001, 39002, 39003, 39515, 39516 and 43000, Health and Safety Code; Section 25000.5, Public Resources Code; 42 U.S.C. section 7545; and Western Oil and Gas Ass'n v. Orange County Air Pollution Control District, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

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§ 95489. Provisions for Petroleum-Based Fuels.

(e) *Refinery Investment Credit Program*. A refinery, or a hydrogen production facility physically providing hydrogen to a refinery, may receive credit for reducing greenhouse gas emissions from its facility. For projects at hydrogen production facilities not owned by the refinery, the refinery and hydrogen production facility must apply as joint applicants. Any such credits must be based on fuel volumes sold, supplied, or offered for sale in California as set forth below.

(2) Calculation of Credits.

(A) For carbon capture and sequestration projects, determine the credit in accordance with sections 95489(e)(2), 95490, and the ~~CCS protocol~~ LCFS CCS QM.

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NOTE: Authority cited: Sections 38510, 38530, 38560, 38560.5, 38562.2, 38571, 38580, 39600, 39601, 41510, 41511 and 43018, Health and Safety Code. Reference: Sections 38501, 38510, 39515, 39516, 38571, 38580, 39000, 39001, 39002, 39003, 39515, 39516, 41510, 41511 and 43000, Health and Safety Code; Section 25000.5, Public Resources Code; 42 U.S.C. section 7545; and Western Oil and Gas Ass'n v. Orange County Air Pollution Control District, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

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§ 95490. Provisions for Fuels Produced Using Carbon Capture and Sequestration.

(a) *Eligibility*. The following entities are eligible to submit applications and, if approved, receive credits associated with net GHG reductions from CCS projects, in accordance with following protocol and quantification methodology which ~~is~~are incorporated herein by reference and ~~is~~are referred to as the "~~CCS Protocol~~GCS Protocol" and the "LCFS CCS QM" hereafter.

~~Industrial Strategies Division,~~ California Air Resources Board. ~~August 13, 2018~~[Date]. ~~Carbon Capture and Sequestration Protocol under the Low Carbon Fuel Standard~~Geologic Carbon Storage Protocol.

~~Industrial Strategies Division,~~ California Air Resources Board. [Date]. Greenhouse Gas Quantification Methodology for Carbon Capture and Sequestration under the Low Carbon Fuel Standard.

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(b) *General Requirements*.

(1) Projects and fuel pathways claiming CCS credits must comply with the ~~CCS Protocol~~GCS Protocol and the LCFS CCS QM. To be considered in compliance with the ~~CCS protocol~~GCS Protocol, a project must be issued executive orders and meet all the requirements throughout the project life in accordance with the permanence requirements of the ~~CCS protocol~~GCS Protocol.

(2) Credit determination for any project that utilizes CCS must be performed in accordance with the accounting requirements of the ~~CCS protocol~~LCFS CCS QM.

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(c) *Application Contents and Submittal*. Unless otherwise noted, an application for CCS credits must comply with the following requirements

(2) An application must contain the following materials:

* * *

(F) An estimate of the CCS credit, calculated in accordance with the accounting requirements of the ~~CCS Protocol~~LCFS CCS QM including descriptions and copies of production and operational data or other technical; and documentation utilized in support of the calculation. The application must contain process-specific data showing that the reductions are part of the CCS project, and

(G) Executive orders issued pursuant to the permanence requirements of the ~~CCS protocol~~GCS Protocol, certifying the sequestration site as capable of permanently storing CO_2 and authorizing operation and credit generation.

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(e) *Reporting*. Each CCS project operator must report to the Executive Officer the net amount of annual sequestered CO2 and meet all other applicable reporting requirements in accordance with the ~~CCS Protocol~~GCS Protocol, the LCFS CCS QM, and section 95490(d)(3).

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(g) *Recordkeeping*. Pursuant to section 95491.1 and the ~~CCS Protocol~~GCS Protocol, each applicant that receives approval as a CCS credit generator must maintain records for the CCS project, including records necessary to verify permanent sequestration. At a minimum, the following records must be kept:

(3) The ~~Accounting Protocol~~LCFS CCS QM and ~~Permanence~~ GCS Protocol documents; and

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(h) *CO2 Leakage and Credit Invalidation.*

(2) The number of invalidated credits is equal to the quantity of CO_2 released or leaked from the sequestration zone ($CO_{2leakage}$~~leakage~~), which must be determined in accordance with the ~~CCS Protocol~~GCS Protocol and the LCFS CCS QM.

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NOTE: Authority cited: Sections 38510, 38530, 38560, 38560.5, 38562.2, 38571, 38580, 39600, 39601, 41510, 41511 and 43018, Health and Safety Code. Reference: Sections 38501, 38510, 39515, 39516, 38571, 38580, 39000, 39001, 39002, 39003, 39515, 39516, 41510, 41511 and 43000, Health and Safety Code; Section 25000.5, Public Resources Code; 42 U.S.C. section 7545; and Western Oil and Gas Ass'n v. Orange County Air Pollution Control District, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).