MEMORANDUM OF AGREEMENT BETWEEN THE CALIFORNIA AIR RESOURCES BOARD AND THE

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT REGARDING IMPLEMENTATION AND ENFORCEMENT OF GREENHOUSE GAS EMISSION STANDARDS FOR CRUDE OIL AND NATURAL GAS FACILITIES

1. PARTIES

This Memorandum of Agreement is entered into by and between the California Air Resources Board ("CARB" or "Board") and the Yolo-Solano Air Quality Management District ("District"). CARB and the District are collectively referred to herein as "the Parties."

2. PURPOSE

- 2.1 The Parties, two government agencies, share a common goal of protecting the People of the State of California through regulation and enforcement of air pollutant emission reduction programs and implementing this task in an efficient manner. By entering into this Memorandum of Agreement ("MOA") the Parties commit to efficiently pursuing this common goal, considering their respective financial constraints and available resources, and recognizing the very substantial emissions control efforts many districts already have in place at regulated facilities.
- Oil and gas systems are responsible for approximately 15 percent of methane emissions in California. CARB has promulgated regulations controlling methane emissions from oil and gas systems in response to the mandates of AB 32, the California Global Warming Solutions Act of 2006, SB 32 (codifying 2030 greenhouse gas reduction targets), SB 1383^[2] (codifying methane reduction targets and call for a Short-Lived Climate Pollutant Strategy), and SB 887^[3] (mandating leak detection program enhancements at underground natural storage facilities), among other authorities. AB 398 (2017), which amended the California Global Warming Solutions Act of 2006, explicitly preserved the districts' authority to adopt or implement "[a] rule, regulation, standard, or requirement authorized pursuant to a law affecting emissions associated with . . . methane" and reiterated CARB's authority to "adopt, maintain or revise . . . [m]easures governing methane and fugitive emissions at refineries and oil and gas facilities."
- 2.3 This MOA is intended to: (1) provide for the coordination of the Parties' efforts to implement and enforce the Regulation for Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities, as considered by the Board and effective on January 1, 2018 (hereinafter "CARB Oil and Gas Regulation"); (2) create a framework by which CARB and the District can help owners and operators of oil and gas operations meet both

^[1] Health & Saf. Code, § 3850, et seq.

^[2] Health & Saf. Code, § 39730, et seq.

^[3] Health & Saf. Code, § 42710, et seq.

- local, state and federal requirements; and, (3) further a collaborative model that builds upon the Parties' extensive implementation and enforcement experience.
- 2.4 Nothing in this MOA shall limit, extend, or otherwise modify the existing authority of the Air Board or the District.

3. BACKGROUND

- 3.1 <u>Powers of CARB.</u> Pursuant to California Health and Safety Code section 39603, CARB may enter into agreements for services as necessary for the performance of its powers and duties, including powers and duties arising under AB 32 and other greenhouse gas control statutes.
- Powers of District. Pursuant to California Health and Safety Code section 40701, the District may enter into agreements with a state agency as necessary or proper to accomplish the purposes of Division 26 of the Health and Safety Code. One such purpose is for the District to enter into an MOA with CARB in order to coordinate enforcement of CARB's Oil and Natural Gas Regulation.
- Responsibilities under State Law. Under California law, CARB is the state agency charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases (Health and Safety Code § 38510), and CARB is to monitor compliance with and enforce any regulation it adopts pursuant to AB 32 (Health and Safety Code § 38580). CARB is further charged with reducing statewide methane emissions by 40 percent from 2013 levels by 2030. (Health and Safety Code § 39730.5). Pursuant to Health and Safety Code sections 39002 and 40000, districts have primary responsibility for control of air pollution from all sources other than vehicular sources; and, pursuant to Health and Safety Code section 40001, districts shall, subject to the Board's powers and duties, enforce all applicable provisions of state and federal law.
- 3.4 <u>Coordinated Effort.</u> In Health and Safety Code § 39001, the Legislature declares that a coordinated state, regional, and local effort to protect and enhance ambient air quality should be encouraged whenever possible. In Health and Safety Code section 38501, the Legislature stated its intent for the Board to design greenhouse gas emission reduction regulations to complement the state's efforts to improve air quality and to consult with various stakeholders in implementing AB 32.
- 3.5 The Scoping Plan and the Short-Lived Climate Pollutant Reduction Strategy. Pursuant to Health and Safety Code § 38561, the board approved the 2008 Climate Change Scoping Plan, and the First Update to the Climate Change Scoping Plan. Both Plans included the regulation of oil and gas operations. Board Resolution 08-47 adopting the Climate Change Scoping Plan directed CARB's Executive Officer to "design greenhouse gas regulations that affect stationary sources so that they utilize, to the extent practical and appropriate, local air district permitting programs and compliance determination mechanisms." Further, pursuant to Health and Safety Code §39730 and 39730.5, CARB has a Short-Lived Climate Pollutant Reduction Strategy, which includes a recommended comprehensive approach to reduce methane from oil and gas systems.

- 3.6 Applicable Federal Law: In 2012 and 2016, pursuant to §§ 111(b) and 111(h) of the Clean Air Act, (CAA) the U.S. Environmental Protection Agency (EPA) codified pollution control requirements for the oil and gas production sector in 40 C.F.R. Part 60 Subparts OOOO and OOOOa, which amended existing regulations governing VOC and SO₂ emissions from natural gas processing plants. Subpart OOOO updates the earlier standards for VOC and SO₂ emissions, and establishes VOC standards for oil and natural gas sources not covered by existing regulations. Subpart OOOOa sets standards for both VOC and methane emissions as well as expanding regulatory obligations for new oil and gas sources. Many sources regulated by CARB's Oil and Gas Rule are also subject to Subparts OOOO and OOOOa. Additionally, EPA has issued Control Technique Guidelines (CTGs) for reducing VOC emissions in existing ozone nonattainment areas. which some districts and CARB will need to address in ozone state implementation plans. Further, while EPA's current NSPS regulations only apply to new sources, future § 111 regulations may expand to address existing oil and gas operations as well. In 2016, the Bureau of Land Management (BLM) also finalized regulations that limit methane emissions from operations on federal lands primarily to prevent waste, codifying those regulations at 43 C.F.R. Parts 3100, 3160, and 3170.
- 3.7 <u>CARB Oil and Gas Regulation</u>. In implementing its plans and carrying out its responsibilities under state law, the Board has adopted the "Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities," effective in final form on October 1, 2017. The adopted regulations are set forth at California Code of Regulations, title 17, sections 95665 through 95677, and Appendices A, B, and C thereto.
 - 3.7.1 California Code of Regulations, title 17, section 95674 explicitly affirms CARB's Executive Officer's discretion to enter into an agreement with any air quality management or air pollution control district ("district") to cooperatively and jointly implement and enforce the CARB Oil and Gas Regulation.
 - 3.7.2 Section 95674 further provides that pursuant to such an agreement, an owner or operator of an oil or gas operation subject to this regulation must pay any fees assessed by the District for the purpose of recovering the District's cost of implementing and enforcing the CARB Oil and Gas Regulation.
 - 3.7.3 Section 95674 further provides that District implementation and enforcement of other law as described in Section 95675 cannot result in a standard, requirement, or prohibition less stringent than provided in the regulation, as determined by CARB's Executive Officer.
 - 3.7.4 CARB Board Resolutions 16-9 and 17-10 express the Board's understanding that it is appropriate for CARB staff to work with Districts to develop and consider agreements with Districts to implement and enforce the CARB Oil and Gas Regulation.

3.8 <u>Authority to Coordination Enforcement</u>

3.8.1 CARB Enforcement Authority

- 3.8.1.1 Health and Safety Code section 39515 directs the Board to appoint an Executive Officer, who shall serve at the pleasure of the Board, and provides that the Board may delegate any duty to the Executive Officer that the Board deems appropriate, except that certain statutory reviews by the Executive Officer of district attainment plan activities are subject to the California Administrative Procedure Act, Government Code sections 11340 et seq.
- 3.8.1.2 Health and Safety Code section 39516 provides that any power, duty, purpose, function, or jurisdiction which the Board may lawfully delegate shall be conclusively presumed to have been delegated to the Executive Officer unless it is shown that the Board, by affirmative vote recorded in its minutes, specifically has reserved the same for the Board's own action.
- 3.8.1.3 Resolution 78-10, adopted by the Board on February 23, 1978, identifies powers, duties, purposes, functions and jurisdictions that the Board has specifically reserved unto itself. Regulation 05-40, requires Board approval of certain memoranda of understanding with pollution sources, but not with the air districts.
- 3.8.1.4 Enforcement of CARB regulations is not a power or function that the Board has specifically reserved to itself under Resolution 78-10 or Resolution 05-40 and is therefore conclusively presumed to have been delegated to the CARB Executive Officer.
- 3.8.1.5 In addition to Health and Safety Code Sections 38501, 39001, 39603, 40701, which provide for and authorize joint efforts, case law further establishes that the CARB Executive Officer may delegate the investigation and determination of facts preliminary to agency action. (California School Employees Assn. v. Personnel Com. of Pajaro Valley Unified School Dist. (1970) 3 Cal.3d 139.)

3.8.2 <u>District Permitting and Enforcement Authority</u>

- 3.8.2.1 Pursuant to Health and Safety Code section 40001, the District shall enforce rules and regulations, including applicable state and federal law, subject to the powers and duties of the Board.
- 3.8.2.2 Pursuant to Health and Safety Code section 40752, the Air Pollution Control Officer ("APCO") of each district shall enforce Parts 3 and 4 of Health and Safety Code Division 26 (§§ 10000 41357, and 41500 41708, respectively) as well as all orders, regulations, and rules prescribed by the district's governing board. Further, pursuant to Health

- and Safety Code section 42301, district permit systems allow the districts to ensure compliance with applicable district and state rules, regulations, and orders.
- 3.8.2.3 Health and Safety Code section 42300 authorizes the districts to require permits prior to construction or operation of machines, equipment or other contrivances that may cause the emission of air contaminates. AB 32 includes methane in its list of pollutants and CARB has identified, through its Scoping Plans, methane control as a key step under AB 32.
- 3.8.2.4 Pursuant to Health and Safety Code sections 38594, 39013, 40702, and 42300, and Western Oil & Gas Association v. Monterey Bay Air Pollution Control District (1989) 49 Cal.3d 408, the districts generally have independent authority to adopt, implement, and enforce local rules and regulations that are as stringent or more stringent than those in CARB regulations.
- 3.8.2.5 The District will adopt a registration rule for sources covered by the CARB Oil and Gas Regulation, or determine that its existing permit program authorizes it to issue and enforce the permits required under this MOA.

3.9 Need for Implementation and Enforcement of CARB Regulations

- 3.9.1 Many local air districts already regulate oil and gas operations for pollutants other than methane, such as PM_{2.5}, NO_x, and VOC, in order to meet ambient air quality requirements. Additionally, the Districts, including the Yolo-Solano Air Quality Management District, currently issue Title V operating permits to some oil and gas operations regulated under federal rules, including some sources subject to New Source Performance Standards (NSPS) governing VOC and methane emissions (40 CFR 60 Subparts OOOO and OOOOa).
- 3.9.2 The CARB Oil and Gas Regulation builds on equipment and processes already utilized, in many instances, by several of the districts through their current rules, such as leak detection and repair programs, which the districts have been implementing for decades.
- 3.9.3 Compliance with the CARB Oil and Gas Regulation will achieve the additional methane reductions needed to comply with the California AB 32 and SB 32 2020 and 2030 emissions targets, the methane targets codified in SB 1383 and to be implemented by the CARB Short-Lived Climate Pollutant Reduction Strategy, and will support compliance with federal programs.

4. AGREEMENT

- 4.1 <u>Implementation and Enforcement of the CARB Oil and Gas Regulation</u>
 - 4.1.1 The Parties hereby agree to the following in order to coordinate enforcement efforts and roles, and to authorize the District to exercise certain duties and discretion of the CARB Executive Officer regarding the CARB Oil and Gas Regulation.
 - 4.1.1.1 As set forth in detail below, in implementing and enforcing the CARB Oil and Gas Regulation, the District will perform the functions necessary to determine a source's compliance, including, but not limited to, receiving and reviewing relevant source plans and reports and conducting investigations.
 - 4.1.1.2 The District may perform one or more of the implementation and enforcement tasks identified in this section 4.1 in conjunction with exercising other District powers, including permitting powers, or fulfilling other District responsibilities under federal, state, or local law.
 - 4.1.2 In order to facilitate efficient implementation and enforcement of the Oil and Gas Regulation, CARB has identified provisions for which the District will have primary authority, for purposes of implementation and enforcement, though CARB retains its ultimate authority in all instances. The APCO of a District delegated primary authority over a provision in the Oil and Gas Regulation will serve as the "CARB Executive Officer" as stated in the text of the regulation for purposes of that provision.
 - 4.1.2.1 Except as specified in section 4.1.2.2, the District will serve as the primary authority for enforcement and implementation of the Oil and Gas Regulation.
 - 4.1.2.2 CARB will serve as the primary authority only for the following provisions of the Oil and Gas Regulation:
 - Review of the monitoring plans required by section 95668(h), relating to Natural Gas Underground Storage Facility Monitoring Requirements. CARB will transmit its decisions on these monitoring plans to the District.
 - Requirements for owners or operators with regard to well stimulation treatments set forth at section 95668(b). CARB will transmit its determinations regarding these requirements to the District.
 - Requirements related to the determination of critical components with regard to facilities and components

regulated solely as a result of the Regulation, as set forth in section 95670 of the Regulation.

- Requirements and authorities specifically set forth for CARB in sections 95674 and 95676 of the Regulation.
- Notwithstanding the above, with regard to idle wells, CARB understands that District enforcement and inspection resources are limited. Although the District will make best efforts to address enforcement and compliance issues at idle wells, CARB will also contribute resources and time to ensure these sources are in compliance. In particular, CARB understands that some idle wells may effectively be "orphaned" - that is, due diligence may reveal no party responsible for them. understands that Districts may choose not to focus their limited resources on compliance at these wells in instances where the District has determined that the wells do not appear to pose an immediate risk to health and safety, or to have potential or actual emissions which would compromise the purposes of the Regulation. CARB will work cooperatively with the districts, including via offering available CARB resources, to address issues at these wells in instances where orphaned wells require focused enforcement attention and District resources are not reasonably available. The District will provide a list of any orphaned wells they are aware of to CARB.
- 4.1.3 The District will exercise its enforcement discretion, as appropriate, to issue Notices of Violation (NOV) or other citations for violations of any portion of the CARB Oil and Gas Regulation and any amendments thereto.
- 4.1.4 The District will implement and enforce the regulation via a registration rule.
- 4.1.5 CARB retains enforcement authority to enforce the CARB Oil and Gas Regulation, and this MOA shall not be interpreted to diminish in any manner CARB authority to enforce its own regulations, either alone or jointly with the District,
- 4.1.6 The District retains enforcement authority to enforce any duly adopted local rules applicable to oil and gas operations, and this MOA shall not be interpreted to diminish in any manner the District's independent authority to implement and enforce its regulations, either alone or jointly with the CARB.
- 4.1.7 This agreement does not preclude the District from imposing more stringent requirements on oil and gas operations than the CARB Oil and Gas Regulation. Pursuant to section 95676 of this regulation, the CARB retains the authority to determine whether the District's requirements are more stringent than those imposed by this regulation.

4.1.8 Variances from State law are prohibited under Health and Safety Code section 42350. Nothing in this agreement shall be interpreted to allow variances from the CARB Oil and Gas Regulation.

4.2 <u>Standards of Performance</u>

- 4.2.1 When implementing and enforcing the CARB Oil and Gas Regulation, the following standards of performance shall apply:
 - 4.2.1.1 The District shall not implement or enforce the CARB Oil and Gas Regulation in a manner less stringent than provided for in the Regulation, as determined by the CARB Executive Officer. Districts may, however, exercise appropriate enforcement discretion. CARB retains its right to enforce the regulation independently as appropriate.
 - 4.2.1.2 The District's implementation and enforcement activities pursuant to this MOA shall be carried out by appropriate District staff.
 - 4.2.1.3 CARB shall provide the District with periodic training as needed, and will also make the District aware of guidance materials and policies that CARB may issue regarding the CARB Oil and Gas Regulation.
 - 4.2.1.4 In the event of a disagreement between the District and a third party regarding the interpretation of this CARB regulation, CARB must be notified by the District in a timely manner and CARB will provide input and assistance in resolving the dispute.

4.3 <u>Information Sharing Processes</u>

- 4.3.1 Information required to be reported by the CARB Oil and Gas Regulation will be gathered and collected as follows.
 - 4.3.1.1 CARB will provide information upon request to the District as completely and as expeditiously as is practicable, consistent with relevant law.
 - 4.3.1.2 Owners and operators within the District shall continue to report information to the CARB Executive Officer as required under sections 95668 and 95673. By August 1 of each calendar year, CARB will share with the District information that owners and operators within the District have submitted, as required under sections 95668 and 95673, to CARB. CARB will share information related to flash analysis testing within the District within 10 business days of receipt.
 - 4.3.1.3 The registration and permitting information required to be submitted by section 95674(b)(2) by January 1 of each calendar year shall be submitted to the District consistent with the District's registration and

- permitting programs. The District shall annually transmit this information to CARB by May 15 of each calendar year.
- 4.3.1.4 CARB may develop electronic submittal tools to aid in transmission of these reports, and in gathering underlying data.
- 4.3.2 The District will summarize enforcement and implementation data for each year (including, but not limited to, a description of issued NOVs and their resolution, including the amount of any penalties and a description of other required remedies, and the numbers, types, and locations of sources inspected, and any outstanding issues) in a report to CARB by February 1 of the next calendar year. This annual report shall include a list of facilities subject to this CARB regulation that have been inspected by District personnel in the preceding year. The District will make inspection reports for those inspections available to CARB upon request.
- 4.3.3 The District will promptly inform CARB of significant enforcement and implementation matters, and will provide information regarding implementation and enforcement promptly upon CARB request. "Significant" matters include, but are not limited to, violations associated with large emissions releases or risks to the public, patterns of violations or noncompliance regarding a particular owner or operator, disputes over rule interpretation likely to affect implementation or enforcement by CARB or other districts, major settlements, and threatened or actual litigation regarding the regulation. CARB will promptly inform the District of significant implementation and enforcement matters regarding owners, operators, areas, or issues that concern the District.
- 4.3.4 All written correspondence from the District alleging that an administrative or civil penalty will be, or could be, imposed by the District under this MOA shall include the information required by Health and Safety Code section 39619.7(a). The District will provide CARB with copies of each settlement agreement reached by the District for alleged violations of this CARB regulation. All final settlement agreements reached by the District under this MOA shall include the information required by Health and Safety Code section 39619.7(a) and will be published by CARB on CARB's website (consistent with CARB practices).

4.4 <u>CARB Coordination with the District</u>

- 4.4.1 With advance notice to the District, CARB personnel may accompany District personnel on inspections and other enforcement activities. District personnel may accompany CARB personnel on inspections for purposes of training, ensuring consistency, and joint enforcement.
- 4.4.2 Any District records related to enforcement of the CARB Oil and Gas Regulation shall be provided to CARB upon request. Clearly marked confidential information will be protected from public release by CARB, except after consultation with the District or under other legal mandate.

- 4.4.3 CARB may periodically review actions taken by the District in implementing and enforcing the CARB Oil and Gas Regulation and provide advice aimed at ensuring consistency between CARB and District enforcement activities.
- 4.4.4 CARB and the District will coordinate to provide assistance to owners and operators seeking to obtain approval from the EPA to use the CARB Oil and Gas Regulation as an Alternative Means of Emissions Limitation (AMEL) to support compliance with 40 CFR Part 60 Subparts OOOO or OOOOa. CARB will also work with the District to support compliance with the CTG issued for the oil and gas sector, and with other federal rulemakings as appropriate.
- 4.4.5 CARB will continue to explore options to assist the District with additional staffing, equipment, funding, and training needs resulting from the Oil and Gas Regulation.

4.5 <u>Implementation and Enforcement Coordination</u>

- 4.5.1 CARB will conduct joint inspections and investigations as requested by the District.
- 4.5.2 CARB may pursue litigation or settlement using the authority, mechanisms, and remedies available to it under California law.
- 4.6 <u>Civil Penalties</u>. Pursuant to section 95674(a)(1) of the regulation, any penalties secured by the District as a result of an enforcement action that it undertakes to enforce a violation of the CARB Oil and Gas Regulation may be retained by the District. When the District issues a NOV/citation for violation of the CARB Oil and Gas Regulation and refers the violation to CARB for litigation or settlement, any civil penalties for the violation, or payments made in settlement as civil penalties or in lieu thereof obtained by CARB shall be shared equally between the Parties.
- 4.7 <u>Term.</u> This MOA shall be effective upon full execution by both Parties and shall continue in full force and effect unless terminated by either Party pursuant to the terms of the MOA.
- 4.8 <u>Termination</u>. Either Party may terminate this MOA for any reason by providing a written notice of termination no later than 60 days before the date of termination. Each Party's rights and obligations specified in this MOA shall remain in effect until the termination date.
- 4.9 <u>Indemnification</u>. Each Party agrees to indemnify, defend and hold harmless the other party, and the officers, employees, agents and contractors of the other, from and against any claims, liabilities, costs or losses of any kind that arise from, or are alleged to arise from the Party's actions under or the performance of this MOA, except for any such loss, damage, injury or death to the extent caused by the active negligence or other wrongful conduct of the other Party.

- 4.10 Entire Agreement. This MOA represents the entire agreement of the Parties, and merges and supersedes any prior written or oral representations, discussions, understandings or agreements by or between the Parties relating to the subject matter of this MOA.
- 4.11 <u>Modification</u>. No addition to or modification of any term or provision of this MOA will be effective unless set forth in writing and signed by an authorized representative of each of the Parties.
- 4.12 <u>Authority</u>. Each Party represents and warrants that it has the right, power, and authority to execute this MOA. Each Party represents and warrants that it has given any and all notices, and obtained any and all consents, powers and authorities, necessary to permit it, and the persons executing this MOA for it, to enter into this MOA.
- 4.13 <u>Limitations</u>. Except as provided in this MOA, this MOA does not create and shall not be construed to create any right, permission, or requirement for the District to implement or enforce any authority of CARB regarding regulations adopted by CARB pursuant to AB 32.
- 4.14 <u>Third Parties</u>. This MOA shall not be construed to bind any Party in any manner with respect to any person or entity that is not a Party to this MOA, or a successor or assign of a Party.
- 4.15 <u>Notices</u>. Any notice or report required or permitted to be given under this MOA shall be in writing and shall be deemed to be given when served personally, or on the third day after mailing if mailed in the United States mail, postage prepaid, addressed to the address for each Party set forth below:

To CARB:

Elizabeth Scheehle 1001 "I" Street P.O. Box 2815 Sagramente CA 05

Sacramento, CA 95812

To District:

Attention: Mat Ehrhardt Air Pollution Control Officer

Yolo-Solano Air Quality Management District

1947 Galileo Court, Suite 103

Davis, CA 95618

4.16 <u>Severability</u>. If any term of this Agreement is to any extent invalid, illegal, or otherwise incapable of continuing in force, such term shall be excluded to the extent of its invalidity, illegality, or unenforceability; all other terms of this Agreement shall continue in full force and effect and to the extent possible, the severed term shall be deemed to be replaced with a valid and enforceable term that comes closest to achieving the purpose of the severed term until the Parties are able to meet and agree on a replacement term.

IN WITNESS WHEREOF, this MOA has been executed by the parties hereto.

CALIFORNIA AIR RESOURCES BOARD	Yolo-Solano Air Quality Management District.
Richard Corey, Executive Officer	Mat Ehrhardt, Air Pollution Control Officer
8/15/2018 Date	6/27/18 Date
Approved as to Form:	Approved as to Form:
Ellen M. Peter, Chief Counsel	Hope P. Welton, District Counsel
Date Date	0/27/18 Date