California Energy Commission
October 08, 2025 Business Meeting
Backup Materials for AirMyne, Inc.

The following backup materials for the above-referenced agenda item are available in this PDF packet as listed below:

1. Proposed Resolution
2. Grant Request Form
3. Scope of Work
4. CEQA Materials

[PROPOSED]

RESOLUTION NO: YY-MMDD-

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: DeltaDAC

WHEREAS, The Stockton Port District is the Lead Agency for the Pelican Renewables LLC ethanol production facility. The Stockton Port District prepared an Environmental Impact Report (EIR) (SCH #2006062102), for the Pacific Ethanol Production and Transshipment Facility at the Port of Stockton ("Ethanol Facility") on January 16, 2007, under the California Environmental Quality Act (CEQA). In June 2008, the Port of Stockton issued an Addendum to the EIR regarding adding a 60 kV electric transmission line to serve the facility. The Ethanol Facility is owned by Pelican Renewables LLC as of 2021. The Port approved the Ethanol Facility, and it has been constructed; and

WHEREAS, the Energy Commission is considering approval of agreement CRI-25-001 with AirMyne, Inc. for a $4,000,000 grant to test, pilot, and demonstrate AirMyne's direct air capture (DAC) system near Stockton at a capacity of 1,000 metric tons of carbon dioxide per year by the end of the agreement. The DeltaDAC project technology is based on liquid capture and low-temperature thermal regeneration using off-the-shelf materials and inputs. This project, including active community engagement, benefits planning, and community education, intends to advance the technical, economic, and environmental viability of direct air capturethe proposed agreement; and

WHEREAS, the proposed industrial-type AirMyne DeltaDAC project would be located within the EIR's geographic project study area for the Ethanol Facility, and this area along with the industrial-type Ethanol Facility were studied in the 2006 Draft and Final Environmental Impact Report. The DeltaDAC would operate independently of the Ethanol Facility; and

WHEREAS, in February 2025, the Stockton Port District's Director of Environmental Affairs provided a letter indicating the AirMyne DeltaDAC activities are a minor modification aiming to reduce carbon emissions and environmental impact for the Ethanol Facility, which requires only ministerial approvals by the Stockton Port District; and

WHEREAS, CEC staff prepared a Staff CEQA Memorandum regarding the AirMyne project describing substantial evidence collected by CEC staff about the potential environmental impacts of the proposed DeltaDAC project, concluding that the proposed DeltaDAC project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated by the Lead Agency. Implementation of applicable mitigation measures in the Stockton Port District's

CEQA documents to the DeltaDAC project and proposed CEC Tribal Cultural Resource mitigation measures detailed in the CEC staff CEQA memo will fully mitigate the potential environmental impacts of the proposed DeltaDAC project to a less than significant level; and

WHEREAS, Tribal Cultural Resources is a resource category under CEQA established by Assembly Bill 52 in 2014, after the existing EIR was prepared. While the 2006 EIR and 2008 Addendum did evaluate the Cultural Resources CEQA topic and did include mitigation measures, the newer Tribal Cultural Resources has additional nuances. CEC's evaluation considers the new guidance of AB 52 including tribal consultation on identifying appropriate mitigation measures for tribal cultural resources. Pursuant to the CEC Tribal Consultation Policy, the CEC initiated tribal consultation and developed additional mitigation measures. The tribal cultural resources mitigation measures are contained in Exhibit F of the proposed grant agreement, and are also detailed in the Staff CEQA Memorandum; and

WHEREAS, The Energy Commission has reviewed and considered the 2006 EIR, Stockton Port District Board of Commissioners' Resolutions certifying the FEIR, the 2008 Addendum, and CEQA Findings; the Notices of Determination for the FEIR and 2008 Addendum and the findings contained therein, and the Energy Commission Staff's Findings, which are contained in the Staff CEQA Memorandum regarding of CRI-25-001, which is included in the backup materials; and

WHEREAS, Prior to acting on the Agreement CRI-25-001, the Energy Commission desires to make certain findings pursuant to CEQA and the State CEQA Guidelines;

THEREFORE, BE IT RESOLVED,

1. The Energy Commission has reviewed the information contained in the 2006 EIR, 2008 Addendum, and additional documents described above, which are adopted to the extent that they are relevant to the Energy Commission's decision to approve CRI-25-001, and has reviewed the Staff CEQA Memorandum identified above.
2. The Stockton Port District has already adopted the mitigation measures recommended in the EIR and Addendum applicable to the AirMyne project area, and has authority to implement the mitigation measures.
3. The Energy Commission has reviewed and considered the EIR, Addendum, and the Staff CEQA Memorandum, and finds that these documents are adequate for its use as the decision-making body for its consideration of CRI-25-001.
4. None of the circumstances within CCR, title 14, section 15162 are present and there have been no substantial project changes and no substantial changes in the project circumstances that would require major revisions to the EIR, either due to the involvement of new significant environmental effects, or to an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the EIR.

FURTHER BE IT RESOLVED, that the Energy Commission finds, on the basis of the entire record before it, that the mitigation measures incorporated in the EIR, along with the CEC's tribal cultural resources mitigation measures will prevent CRI-25-001 from having any significant environmental impacts; and

FURTHER BE IT RESOLVED, that the Energy Commission approves CRI-25-001 with AirMyne, Inc. for $4,000,000.00.

FURTHER BE IT RESOLVED, that the Executive Director or their designee shall execute the same on behalf of the CEC.

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the CEC held on October 8, 2025.

AYE:
NAY:
ABSENT:
ABSTAIN:

Dated:

_____
Kim Todd
Secretariat

STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

CEC-270 (Revised 01/2024)

GRANT REQUEST FORM (GRF)

A. New Agreement Number

IMPORTANT: New Agreement # to be completed by Contracts, Grants, and Loans Office.

New Agreement Number: CRI-25-001

B. Division Information

1. Division Name: ERDD
2. Agreement Manager: Paty De La Torre
3. MS-:51
4. Phone Number: 707-396-9187

C. Recipient's Information

1. Recipient's Legal Name: AirMyne, Inc.
2. Federal ID Number: 87-4814384

D. Title of Project

Title of project: DeltaDAC

E. Term and Amount

1. Start Date: 10/15/2025
2. End Date: 3/30/2030
3. Amount: $4,000,000.00

F. Business Meeting Information

1. Are the ARFVTP agreements $75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 10/8/2025
3. Consent or Discussion? Consent
4. Business Meeting Presenter Name: Maryam Haddad
5. Time Needed for Business Meeting: 0 minutes.
6. The email subscription topic is: Carbon Removal Innovation Support Program (CRISP).

Agenda Item Subject and Description:

AirMyne, Inc. Proposed resolution adopting CEQA findings for AirMyne, Inc.'s DeltaDAC project, and approving grant agreement CRI-25-001 with AirMyne, Inc. (Carbon Removal Innovation Support Program (CRISP) Funding) Contact: Patricia De La Torre

i. CEQA Findings. Findings that, based on the lead agency Stockton Port District's 2006 Draft and Final Environmental Impact Report for the Pelican Renewables LLC ethanol production facility, a 2008 Addendum to the Final EIR, and a February 2025 letter from the Stockton Port District's Director of Environmental Affairs indicating the AirMyne DeltaDAC activities are a minor modification aiming to reduce carbon emissions and environmental impact for the ethanol production facility which requires only ministerial approvals by the Stockton Port District, and substantial evidence collected by CEC staff about the potential environmental impacts of the proposed DeltaDAC project, the proposed DeltaDAC project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated by the lead agency. Implementation of mitigation measures in the Stockton Port District's CEQA documents and proposed Tribal Cultural Resource mitigation

measures detailed in the CEC staff CEQA memo will fully mitigate the potential environmental impacts of the proposed DeltaDAC project to a less than significant level.

ii. AirMyne, Inc. Proposed approval of agreement CRI-25-001 with AirMyne, Inc. for a $4,000,000 grant to test, pilot, and demonstrate AirMyne's direct air capture system near Stockton at a capacity of 1,000 metric tons of carbon dioxide per year by the end of the agreement. The DeltaDAC project technology is based on liquid capture and low-temperature thermal regeneration using off-the-shelf materials and inputs. This project, including active community engagement, benefits planning, and community education intends to advance the technical, economic, and environmental viability of direct air capture.

G. California Environmental Quality Act (CEQA) Compliance

1. **Is Agreement considered a "Project" under CEQA?**
   Yes

   If yes, skip to question 2.

   If no, complete the following (PRC 21065 and 14 CCR 15378) and explain why Agreement is not considered a "Project":

   Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because:

2. **If Agreement is considered a "Project" under CEQA answer the following questions.**
   a) Agreement **IS** exempt?

   No

   Statutory Exemption?
   Yes or No

   If yes, list PRC and/or CCR section number(s) and separate each with a comma. If no, enter "None" and go to the next question.

   PRC section number:

   CCR section number: CCR section number 1, CCR section number 2. Or, None

   Categorical Exemption?
   Yes or No

   If yes, list CCR section number(s) and separate each with a comma. If no, enter "None" and go to the next question.

   CCR section number:

   Common Sense Exemption? 14 CCR 15061 (b) (3)
   No

   If yes, explain reason why Agreement is exempt under the above section. If no, enter "Not applicable" and go to the next section.

   b) Agreement **IS NOT** exempt.
   IMPORTANT: consult with the legal office to determine next steps.

   No

If yes, answer yes or no to all that applies. If no, list all as "no" and "None" as "yes".

Additional Documents	Applies
Initial Study	Yes
Negative Declaration	No
Mitigated Negative Declaration	No
Environmental Impact Report	Yes
Statement of Overriding Considerations	No
None	No

H. Is this project considered "Infrastructure"?

No

I. Subcontractors

List all Subcontractors listed in the Budget (s) (major and minor). Insert additional rows if needed. If no subcontractors to report, enter "No subcontractors to report" and "0" to funds. **Delete** any unused rows from the table.

Subcontractor Legal Company Name	CEC Funds	Match Funds
DOE- Lawrence Berkeley National Laboratory	$ 440,000	$0

J. Vendors and Sellers for Equipment and Materials/Miscellaneous

List all Vendors and Sellers listed in Budget(s) for Equipment and Materials/Miscellaneous. Insert additional rows if needed. If no vendors or sellers to report, enter "No vendors or sellers to report" and "0" to funds. **Delete** any unused rows from the table.

Vendor/Seller Legal Company Name	CEC Funds	Match Funds
TBD- Custom Equipment	$2,297,952	$0
TBD- Chemicals	$100,000	$0
Pelican Renewables, LLC	$250,000	$0

K. Key Partners

List all key partner(s). Insert additional rows if needed. If no key partners to report, enter "No key partners to report." **Delete** any unused rows from the table.

Key Partner Legal Company Name
Pelican Renewables, LLC

L. Budget Information

Include all budget information. Insert additional rows if needed. If no budget information to report, enter "N/A" for "Not Applicable" and "0" to Amount. **Delete** any unused rows from the table.

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
GGRF	23-24	303.307	$ 4,000,000

TOTAL Amount: $ 4,000,000

R&D Program Area: ICMB: IAW

Explanation for "Other" selection Not applicable

Reimbursement Contract #: Not applicable

Federal Agreement #: 103

M. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Valerie Wilson

Address: 1501 Mitch Daniels Blvd Apt 109

City, State, Zip: West Lafayette, IN 47906-4551

Phone: 281-543-5464

E-Mail: valerie@airmyne.com

3. Recipient's Project Manager

Name: Valerie Wilson

Address: 1501 Mitch Daniels Blvd Apt 109

City, State, Zip: West Lafayette, IN 47906-4551

Phone: 281-543-5464

E-Mail: valerie@airmyne.com

N. Selection Process Used

There are three types of selection process. List the one used for this GRF.

Selection Process	Additional Information
Competitive Solicitation #	GFO-24-303
First Come First Served Solicitation #	Not applicable
Other	Not applicable

O. Attached Items

1. List all items that should be attached to this GRF by entering “Yes” or “No”.

Item Number	Item Name	Attached
1	Exhibit A, Scope of Work/Schedule	Yes
2	Exhibit B, Budget Detail	Yes
3	CEC 105, Questionnaire for Identifying Conflicts	Yes
4	Recipient Resolution	No
5	Awardee CEQA Documentation	Yes

Approved By

Individuals who approve this form must enter their full name and approval date in the MS Word version.

Agreement Manager: Paty De La Torre

Approval Date: 3/26/2025

Branch Manager: Cody Taylor

Approval Date: 3/28/2025

Director: Cody Taylor for Jonah Steinbuck

Approval Date: 3/28/2025

Exhibit A
Scope of Work
AirMyne, Inc.

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR [1]	Task Name
1		General Project Tasks
2		Community Engagement and Benefits Planning
3	X	Engineering Design and MRV
4		Construction and Transportation of the Pilot DAC System (To be conducted in phases)
5		Commission the DAC Pilot System
6	X	Evaluation of DAC System Data and Operations to Inform Future Project Planning and Actions
7		Life Cycle Assessment and Technoeconomic Analysis
8		Evaluation of Project Benefits
9		Technology/Knowledge Transfer Activities

B. Acronym/Term List

Acronym/Term	Meaning
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CARB	California Air Resources Board
CBP	Community Benefits Plan
CCCA	California Climate Crisis Act
CDR	Carbon dioxide removal
CEC	California Energy Commission
CO_2	Carbon dioxide
CPR	Critical Project Review
CRISP	Carbon Removal Innovation Support Program
DAC	Direct Air Capture
DSO	Data and Systems Operations
GHG	Greenhouse gas
LCA	Life Cycle Analysis
MRV	Measurement, Reporting, and Verification
TAC	Technical Advisory Committee
TEA	Technoeconomic Analysis
TRL	Technology Readiness Level

[1] Please see subtask 1.3 in Part III of the Scope of Work (General Project Tasks) for a description of Critical Project Review (CPR) Meetings.

Exhibit A
Scope of Work
AirMyne, Inc.

II. PURPOSE OF AGREEMENT, PROBLEM/SOLUTION STATEMENT, AND GOALS AND OBJECTIVES

A. Purpose of Agreement

The purpose of this Agreement is to fund the testing, piloting, and demonstration of the Recipient's liquid-based low-energy regeneration DAC technology, coupled with active community engagement, benefits planning, and community education. The project intends to advance the technical, economic, and environmental viability of the Recipient's DAC technology to meet the state's carbon neutrality goals.

B. Problem/ Solution Statement

Problem

In 2022, the CCCA[2] was established to lower anthropogenic GHG emissions by 85% below 1990 levels and attain carbon neutrality by 2045. To support this legislation, CARB prepared the 2022 Scoping Plan, outlining the importance of implementing new strategies, such as CDR, to address residual carbon emissions to achieve carbon neutrality[3]. The Scoping Plan concluded that mechanical CDR solutions such as DAC will be needed to achieve carbon neutrality.

Despite the identified need, DAC is a nascent technology and faces many obstacles to deployment. Incumbent DAC technologies have high cost and resource requirements, and proposed alternatives, especially those using advanced sorbents or membranes, have unproven field durability and lack the supply chains needed to deploy a low-cost solution. New approaches are needed, especially those having robust mechanisms and readily available economical inputs. Furthermore, pilot-scale deployments of new DAC approaches are needed to demonstrate their viability and create opportunities for community engagement, benefits planning, and education.

Solution

The Recipient has developed and patented a DAC technology which advances the state-of-the-art and addresses many of the challenges faced by competing approaches. The technology uses a liquid capture step, a low-temperature thermal regeneration step, and off-the-shelf materials and inputs.

In the "upstream" portion of the process, fans pull air through air-liquid contactors. These contactors, analogous to conventional cooling towers, bring air into contact with an aqueous, alkaline capture solution consisting of water, commodity inorganic salts, and trace quantities of other additives. In the "downstream" portion of the process, the CO_2-rich solution is heated and pumped into a stripping column, where heat at approximately 120 degrees Celsius supplied to the reboiler regenerates the capture agent and releases CO_2 gas.

[2] AB 1279, Muratsuchi, Chapter 337, Statutes of 2022

[3] California Air Resources Board (CARB) 2022 Scoping Plan

Exhibit A
Scope of Work
AirMyne, Inc.

Deploying the Recipient's DAC technology at pilot scale can help California meet its statutory energy and climate goals, while demonstrating the technical, economic, and environmental viability of the Recipient's solution to key stakeholders. Moreover, deploying the Recipient's DAC technology at pilot scale can help create opportunities for community engagement, benefits planning, and education.

The Recipient currently intends to deploy its technology according to the project plan described herein.

Goals and Objectives of the Agreement

Agreement Goals
The goals of this Agreement are to:

- Reduce energy consumption/intensity of the capture process by more than 30% over the project period. The Recipient intends to meet this goal, going from 8,000-15,000 kWh / MT CO_2 (baseline range reflecting typical weather fluctuations) to 2,000-8,500 kWh / MT CO_2 (final range reflecting expected weather fluctuations).
- Reduce costs of the capture process by more than 30% over the project period. The Recipient intends to exceed the goal, by dropping from $5,901-$7,316 / MT CO_2 to $1,544-3,411 / MT CO_2 or lower at the conclusion of the project period.
- Develop and implement an MRV Plan which establishes detailed monitoring methods and technologies, reporting requirements, verification and audit procedures, data management practices, and compliance assurance procedures.
- Develop and implement a CBP which incorporates community engagement, education and risk/benefits analysis.

Technological Advancement and Breakthroughs:[4] This Agreement intends to lead to technological advancement and breakthroughs to overcome barriers to the achievement of the State of California's statutory energy goals by providing funding for innovative research and development. The project is poised to demonstrate the feasibility of a low-cost, scalable DAC solution combining liquid-phase CO_2 capture and low-temperature thermal desorption in a process using widely available materials and equipment.

The Recipient's DAC approach advances the state-of-the-art by demonstrating the only DAC solution with the following combination of attributes:

- Aqueous, inorganic capture agent
- Low-temperature heat as the primary energy input at scale
- Desorption step uses conventional, drop-in process equipment
- Semi-continuous or continuous process (vs. batch)
- All chemicals available from existing global supply chains at bulk scale

According to the Recipient, this combination of attributes gives the Recipient's solution several advantages over competing solutions. Unlike solid sorbent-based DAC approaches which undergo batch-style adsorption/desorption cycles, the Recipient's liquid process allows for

[4] California Public Resources Code, Section 25711.5(a) also requires EPIC-funded projects to lead to technological advancement and breakthroughs to overcome barriers that prevent the achievement of the state's statutory and energy goals.

continuous operations. Moreover, unlike solid sorbent-based DAC approaches or those utilizing a calcium looping process, the Recipient's DAC process allows for materials to be transported through the plant with conventional, low-cost pumps and pipes. Unlike electrochemical or calcium-looping DAC approaches, the Recipient's low-temperature thermal DAC process is compatible with a much wider selection of low-carbon energy inputs. Finally, unlike DAC technologies which use niche materials lacking existing supply chains, the Recipient's choice to design using only widely available materials and equipment allows for faster paths to scale.

Agreement Objectives

The objectives of this Agreement are to:

- Use a Phase approach to test and optimize CO_2 removal of at least 1,000 MT of CO_2/year by the end of the agreement with a plan to achieve the ultimate goal of $100/MT of CO_2 equivalents by 2032 in a larger scale commercial facility. The Recipient intends to meet this objective but do not anticipate exceeding it.
    - In Phase 1, conduct all necessary planning, permitting, procurement, and contracting for construction of the TRL 7 system in Phase 2. In parallel to these efforts, continue optimizing the existing DAC system with nominal nameplate capture capacity of <10 MT CO_2/yr system at The Recipient's headquarters
    - In Phase 2, target installation of a DAC system with nominal nameplate capture capacity of 10-50 MT CO_2/yr.
    - In Phase 3, target installation of a nominal nameplate capture capacity of 100-200 MT CO_2/yr.
    - In Phase 4, target installation of a nominal nameplate capture capacity of 1,000 MT CO_2/yr by the end of the project period.
    - In Phase 5, the project will be evaluated for its commercial readiness.

III. TASK 1: GENERAL PROJECT TASKS

PRODUCTS

Subtask 1.1 Products

The goal of this subtask is to establish the requirements for submitting project products (e.g., reports, summaries, plans, and presentation materials). Unless otherwise specified by the Commission Agreement Manager (CAM), the Recipient must deliver products as required below by the dates listed in the **Project Schedule (Part V).** All products submitted which will be viewed by the public, must comply with the accessibility requirements of Section 508 of the federal Rehabilitation Act of 1973, as amended (29 U.S.C. Sec. 794d), and regulations implementing that act as set forth in Part 1194 of Title 36 of the Federal Code of Regulations**.** All technical tasks should include product(s). Products that require a draft version are indicated by marking **"(draft and final)"** after the product name in the "Products" section of the task/subtask. If "(draft and final)" does not appear after the product name, only a final version of the product is required. With respect to due dates within this Scope of Work, **"days"** means working days.

The Recipient shall:

For products that require a draft version, including the Final Report Outline and Final Report

- Submit all draft products to the CAM for review and comment in accordance with the Project Schedule (Part V). The CAM will provide written comments to the Recipient on

the draft product within 15 days of receipt, unless otherwise specified in the task/subtask for which the product is required.

- Consider incorporating all CAM comments into the final product. If the Recipient disagrees with any comment, provide a written response explaining why the comment was not incorporated into the final product.
- Submit the revised product and responses to comments within 10 days of notice by the CAM, unless the CAM specifies a longer time period, or approves a request for additional time.

For products that require a final version only

- Submit the product to the CAM for acceptance. The CAM may request minor revisions or explanations prior to acceptance.

For all products

- Submit all data and documents required as products in accordance with the following:

Instructions for Submitting Electronic Files and Developing Software:

- **Electronic File Format**
  - Submit all data and documents required as products under this Agreement in an electronic file format that is fully editable and compatible with the California Energy Commission's (CEC) software and Microsoft (MS)-operating computing platforms, or with any other format approved by the CAM. Deliver an electronic copy of the full text of any Agreement data and documents in a format specified by the CAM, such as memory stick.

  The following describes the accepted formats for electronic data and documents provided to the CEC as products under this Agreement, and establishes the software versions that will be required to review and approve all software products:
  - Data sets will be in MS Access or MS Excel file format (version 2007 or later), or any other format approved by the CAM.
  - Text documents will be in MS Word file format, version 2007 or later.
  - Project management documents will be in Microsoft Project file format, version 2007 or later.

- **Software Application Development**
  Use the following standard Application Architecture components in compatible versions for any software application development required by this Agreement (e.g., databases, models, modeling tools), unless the CAM approves other software applications such as open-source programs:
  - Microsoft ASP.NET framework (version 3.5 and up). Recommend 4.0.
  - Microsoft Internet Information Services (IIS), (version 6 and up)
  - Recommend 7.5.
  - Visual Studio.NET (version 2008 and up). Recommend 2010.
  - C# Programming Language with Presentation (UI), Business Object and Data Layers.
  - SQL (Structured Query Language).
  - Microsoft SQL Server 2008, Stored Procedures. Recommend 2008 R2.
  - Microsoft SQL Reporting Services. Recommend 2008 R2.

- XML (external interfaces).

Any exceptions to the Electronic File Format requirements above must be approved in writing by the CAM. The CAM will consult with the CEC's Information Technology Services Branch to determine whether the exceptions are allowable.

MEETINGS

Subtask 1.2 Kick-off Meeting

The goal of this subtask is to establish the lines of communication and procedures for implementing this Agreement.

The Recipient shall:

- Attend a "Kick-off" meeting with the CAM, and other CEC staff relevant to the Agreement. The Recipient's Project Manager and any other individuals deemed necessary by the CAM or the Project Manager shall participate in this meeting. The administrative and technical aspects of the Agreement will be discussed at the meeting. Prior to the meeting, the CAM will provide an agenda to all potential meeting participants. The meeting may take place in person or by electronic conferencing (e.g., Teams, Zoom), with approval of the CAM.
  The Kick-off meeting will include discussion of the following:
  - The CAM's expectations for accomplishing tasks described in the Scope of Work;
  - An updated Project Schedule;
  - Terms and conditions of the Agreement;
  - Invoicing and auditing procedures;
  - Travel;
  - Equipment purchases;
  - Administrative and Technical products (subtask 1.1);
  - CPR meetings (subtask 1.3);
  - Monthly Calls (subtask 1.5)
  - Quarterly Progress reports (subtask 1.6)
  - Final Report (subtask 1.7)
  - Match funds (subtask 1.8);
  - Permit documentation (subtask 1.9);
  - Subawards(subtask 1.10);
  - Technical Advisory Committee meetings (subtasks 1.11 and 1.12);
  - Agreement changes;
  - Performance Evaluations; and
  - Any other relevant topics.

- Provide *Kick-off Meeting Presentation* to include but not limited to:
  - Project overview (i.e. project description, goals and objectives, technical tasks, expected benefits, etc.)
  - Project schedule that identifies milestones
  - List of potential risk factors and hurdles, and mitigation strategy

- Provide an *Updated Project Schedule, Match Funds Status Letter,* and *Permit Status Letter*, as needed to reflect any changes in the documents.

The CAM shall:

- Designate the date and location of the meeting.
- Send the Recipient a *Kick-off Meeting Agenda*.

Recipient Products:

- Kick-off Meeting Presentation
- Updated Project Schedule *(if applicable)*
- Match Funds Status Letter (subtask 1.7) *(if applicable)*
- Permit Status Letter (subtask 1.8) *(if applicable)*

CAM Product:

- Kick-off Meeting Agenda

Subtask 1.3 Critical Project Review (CPR) Meetings

The goal of this subtask is to determine if the project should continue to receive CEC funding, and if so whether any modifications must be made to the tasks, products, schedule, or budget. CPR meetings provide the opportunity for frank discussions between the CEC and the Recipient. As determined by the CAM, discussions may include project status, challenges, successes, advisory group findings and recommendations, final report preparation, and progress on technical transfer and production readiness activities (if applicable). Participants will include the CAM and the Recipient and may include the CAO and any other individuals selected by the CAM to provide support to the CEC.

CPR meetings generally take place at key, predetermined points in the Agreement, as determined by the CAM and as shown in the Task List on page 1 of this Exhibit. However, the CAM may schedule additional CPR meetings as necessary. The budget may be reallocated to cover the additional costs borne by the Recipient, but the overall Agreement amount will not increase. CPR meetings generally take place at the CEC, but they may take place at another location, or may be conducted via electronic conferencing (e.g., WebEx) as determined by the CAM.

The Recipient shall:

- Prepare and submit a *CPR Report* for each CPR meeting that: (1) discusses the progress of the Agreement toward achieving its goals and objectives; and (2) includes recommendations and conclusions regarding continued work on the project.
- Attend the CPR meeting.
- Present the CPR Report and any other required information at each CPR meeting.

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient's input.
- Send the Recipient a *CPR Agenda* with a list of expected CPR participants in advance of the CPR meeting. If applicable, the agenda may include a discussion of match funding and permits.
- Conduct and make a record of each CPR meeting. Provide the Recipient with a schedule for providing a Progress Determination on continuation of the project.
- Determine whether to continue the project, and if so whether modifications are needed to the tasks, schedule, products, or budget for the remainder of the Agreement. A determination of unsatisfactory progress This may result in project delays, including a

potential Stop Work Order, while the CEC determines whether the project should continue.
- Provide the Recipient with a *Progress Determination* on continuation of the project, in accordance with the schedule. The Progress Determination may include a requirement that the Recipient revise one or more products.

Recipient Products:
- CPR Report(s)

CAM Products:
- CPR Agenda(s)
- Progress Determination

Subtask 1.4 Final Meeting
The goal of this subtask is to complete the closeout of this Agreement.

The Recipient shall:
- Meet with CEC staff to present project findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement. This meeting will be attended by the Recipient and CAM, at a minimum. The meeting may occur in person or by electronic conferencing (e.g., WebEx), with approval of the CAM.
  The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be divided into two separate meetings at the CAM's discretion.
  - The technical portion of the meeting will involve the presentation of findings, conclusions, and recommended next steps (if any) for the Agreement. The CAM will determine the appropriate meeting participants.
  - The administrative portion of the meeting will involve a discussion with the CAM of the following Agreement closeout items:
    - Disposition of any procured equipment.
    - The CEC's request for specific "generated" data (not already provided in Agreement products).
    - Need to document the Recipient's disclosure of "subject inventions" developed under the Agreement.
    - "Surviving" Agreement provisions such as repayment provisions and confidential products.
    - Final invoicing and release of retention.
- Prepare a *Final Meeting Agreement Summary* that documents any agreement made between the Recipient and Commission staff during the meeting.
- Prepare a *Schedule for Completing Agreement Closeout Activities*.
- Provide copies of *All Final Products* organized by the tasks in the Agreement.

Products:
- Final Meeting Agreement Summary *(if applicable)*
- Schedule for Completing Agreement Closeout Activities
- All Final Products

MONTHLY CALLS, REPORTS AND INVOICES

Subtask 1.5 Monthly Calls

The goal of this task is to have calls at least monthly between the CAM and Recipient to verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

The objectives of this task are to verbally summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, to verify match funds are being proportionally spent concurrently or in advance of CEC funds or are being spent in accordance with an approved Match Funding Spending Plan, to form the basis for determining whether invoices are consistent with work performed, and to answer any other questions from the CAM. Monthly calls might not be held on those months when a quarterly progress report is submitted or the CAM determines that a monthly call is unnecessary.

The CAM shall:

- Schedule monthly calls.
- Provide questions to the Recipient prior to the monthly call.
- Provide call summary notes to the Recipient of items discussed during the call.

The Recipient shall:

- Review the questions provided by CAM prior to the monthly call
- Provide verbal answers to the CAM during the call.

Product:

- Email to CAM concurring with call summary notes.

Subtask 1.6 Quarterly Progress Reports and Invoices

The goals of this subtask are to: (1) periodically verify that satisfactory and continued progress is made towards achieving the project objectives of this Agreement; and (2) ensure that invoices contain all required information and are submitted in the appropriate format.

The Recipient shall:

- Submit a *Quarterly Progress Report* to the CAM. Each progress report must:
  - Summarize progress made on all Agreement activities as specified in the scope of work for the reporting period, including accomplishments, problems, milestones, products, schedule, fiscal status, and an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 10th day of each January, April, July, and October. The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at: https://www.energy.ca.gov/media/4691
- Submit a monthly or quarterly *Invoice* on the invoice template(s) provided by the CAM.

Recipient Products:

- Quarterly Progress Reports
- Invoices

CAM Product:
- Invoice template

Subtask 1.7 Final Report
The goal of this subtask is to prepare a comprehensive Final Report that describes the original purpose, approach, results, and conclusions of the work performed under this Agreement. When creating the Final Report Outline and the Final Report, the Recipient must use the CEC Style Manual provided by the CAM.

Subtask 1.7.1 Final Report Outline

The Recipient shall:
- Prepare a *Final Report Outline* in accordance with the *Energy Commission Style Manual* provided by the CAM.

Recipient Products:
- Final Report Outline (draft and final)

CAM Products:
- Energy Commission Style Manual
- Comments on Draft Final Report Outline
- Acceptance of Final Report Outline

Subtask 1.7.2 Final Report
The Recipient shall:
- Prepare a *Final Report* for this Agreement in accordance with the approved Final Report Outline, Energy Commission Style Manual, and Final Report Template provided by the CAM with the following considerations:
  - Ensure that the report includes the following items, in the following order:
    - Cover page (required)
    - Credits page on the reverse side of cover with legal disclaimer (required)
    - Acknowledgements page (optional)
    - Preface (required)
    - Abstract, keywords, and citation page (required)
    - Table of Contents (required, followed by List of Figures and List of Tables, if needed)
    - Executive summary (required)
    - Body of the report (required)
    - References (if applicable)
    - Glossary/Acronyms (If more than 10 acronyms or abbreviations are used, it is required.)
    - Bibliography (if applicable)
    - Appendices (if applicable) (Create a separate volume if very large.)
    - Attachments (if applicable)
- Submit a draft of the Executive Summary to the TAC for review and comment.
- Develop and submit a *Summary of TAC Comments on Draft Final Report* received on the Executive Summary. For each comment received, the Recipient will identify in the summary the following:
  - Comments the Recipient proposes to incorporate.

  - Comments the Recipient does propose to incorporate and an explanation for why.
- Submit a draft of the report to the CAM for review and comment. The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt.
- Incorporate all CAM comments into the *Final Report*. If the Recipient disagrees with any comment, provide a *Written Responses to Comments* explaining why the comments were not incorporated into the final product.
- Submit the revised Final Report electronically with any Written Responses to Comments within 10 days of receipt of CAM's Written Comments on the Draft Final Report, unless the CAM specifies a longer time period or approves a request for additional time.

Products:
- Summary of TAC Comments on Draft Final Report
- Draft Final Report
- Written Responses to Comments *(if applicable)*
- Final Report

CAM Product:
- Written Comments on the Draft Final Report

MATCH FUNDS, PERMITS, AND SUBAWARDS

Subtask 1.8 Match Funds

The goal of this subtask is to ensure that the Recipient obtains any match funds planned for this Agreement and applies them to the Agreement during the Agreement term.

While the costs to obtain and document match funds are not reimbursable under this Agreement, the Recipient may spend match funds for this task. Match funds must be identified in writing, and the Recipient must obtain any associated commitments before incurring any costs for which the Recipient will request reimbursement.

The Recipient shall:
- Prepare a *Match Funds Status Letter* that documents the match funds committed to this Agreement. If no match funds were part of the application that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state this in the letter.

  If match funds were a part of the application that led to the CEC awarding this Agreement, then provide in the letter:
  - A list of the match funds that identifies:
    - The amount of cash match funds, their source(s) (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied.
    - The amount of each in-kind contribution, a description of the contribution type (e.g., property, services), the documented market or book value, the source (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient must identify its owner and provide a contact name, address, telephone number, and the address where the property is located.

    - If different from the solicitation application, provide a letter of commitment from an authorized representative of each source of match funding that the funds or contributions have been secured.
- At the Kick-off meeting, discuss match funds and the impact on the project if they are significantly reduced or not obtained as committed. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide a *Supplemental Match Funds Notification Letter* to the CAM of receipt of additional match funds.
- Provide a *Match Funds Reduction Notification Letter* to the CAM if existing match funds are reduced during the course of the Agreement. Reduction of match funds may trigger a CPR meeting.

Products:
- Match Funds Status Letter
- Supplemental Match Funds Notification Letter *(if applicable)*
- Match Funds Reduction Notification Letter *(if applicable)*

Subtask 1.9 Permits
The goal of this subtask is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track. Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement, with the exception of costs incurred by University of California recipients. Permits must be identified and obtained before the Recipient may incur any costs related to the use of the permit(s) for which the Recipient will request reimbursement.

The Recipient shall:
- Prepare a *Permit Status Letter* that documents the permits required to conduct this Agreement. If no permits are required at the start of this Agreement, then state this in the letter. If permits will be required during the course of the Agreement, provide in the letter:
    - A list of the permits that identifies: (1) the type of permit; and (2) the name, address, and telephone number of the permitting jurisdictions or lead agencies.
    - The schedule the Recipient will follow in applying for and obtaining the permits.

  The list of permits and the schedule for obtaining them will be discussed at the Kick-off meeting (subtask 1.2), and a timetable for submitting the updated list, schedule, and copies of the permits will be developed. The impact on the project if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in progress reports and will be a topic at CPR meetings.

- If during the course of the Agreement additional permits become necessary, then provide the CAM with an *Updated List of Permits* (including the appropriate information on each permit) and an *Updated Schedule for Acquiring Permits*.
- Send the CAM a *Copy of Each Approved Permit*.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 days. Either of these events may trigger a CPR meeting.

Products:
- Permit Status Letter
- Updated List of Permits *(if applicable)*

- Updated Schedule for Acquiring Permits *(if applicable)*
- Copy of Each Approved Permit *(if applicable)*

Subtask 1.10 Obtain and Execute Subawards and Agreements with Site Hosts
The goals of this subtask are to: (1) procure and execute subrecipients and site host agreements, as applicable, required to carry out the tasks under this Agreement; and (2) ensure that the subrecipients and site host agreements are consistent with the Agreement terms and conditions and the Recipient's own contracting policies and procedures.

The Recipient shall:

- Execute and manage subawards and coordinate subrecipients activities in accordance with the requirements of this Agreement.
- Execute and manage site host agreements and ensure the right to use the project site throughout the term of the Agreement, as applicable. A site host agreement is not required if the Recipient is the site host.
- Notify the CEC in writing immediately, but no later than five calendar days, if there is a reasonable likelihood the project site cannot be acquired or can no longer be used for the project.
- Incorporate this Agreement by reference into each subaward.
- Include any required Energy Commission flow-down provisions in each subaward, in addition to a statement that the terms of this Agreement will prevail if they conflict with the subaward terms.
- Submit a *Subaward and Site Letter* to the CAM describing the subawards and any site host agreement needed or stating that no subawards or site host agreements are required.
- If requested by the CAM, submit a draft of each *Subaward* and any *Site Host Agreement* required to conduct the work under this Agreement.
- If requested by the CAM, submit a final copy of each executed *Subaward* and any *Site Host Agreement*.
- Notify and receive written approval from the CAM prior to adding any new subrecipient (see the terms regarding subrecipient additions in the terms and conditions).

Products:

- Subaward and Site Letter
- Draft Subawards *(if requested by the CAM)*
- Draft Site Host Agreement *(if requested by the CAM)*
- Final Subawards *(if requested by the CAM)*
- Final Site Host Agreement *(if requested by the CAM)*

TECHNICAL ADVISORY COMMITTEE

Subtask 1.11 Technical Advisory Committee (TAC)
The goal of this subtask is to create an advisory committee for this Agreement. The TAC should be composed of diverse professionals. The composition will vary depending on interest, availability, and need. TAC members will serve at the CAM's discretion. The purpose of the TAC is to:

- Provide guidance in project direction. The guidance may include scope and methodologies, timing, and coordination with other projects. The guidance may be based on:

  - Technical area expertise;
  - Knowledge of market applications; or
  - Linkages between the Agreement work and other past, present, or future projects (both public and private sectors) that TAC members are aware of in a particular area.
- Review products and provide recommendations for needed product adjustments, refinements, or enhancements.
- Evaluate the tangible benefits of the project to the state of California, and provide recommendations as needed to enhance the benefits.
- Provide recommendations regarding information dissemination, market pathways, or commercialization strategies relevant to the project products.
- Help set the project team's goals and contribute to the development and evaluation of its statement of proposed objectives as the project evolves.
- Provide a credible and objective sounding board on the wide range of technical and financial barriers and opportunities.
- Help identify key areas where the project has a competitive advantage, value proposition, or strength upon which to build.
- Advocate, to the extent the TAC members feel is appropriate, on behalf of the project in its effort to build partnerships, governmental support, and relationships with a national spectrum of influential leaders.
- Ask probing questions that ensure a long-term perspective on decision-making and progress toward the project's strategic goals.

The TAC may be composed of qualified professionals spanning the following types of disciplines:

- Researchers knowledgeable about the project subject matter;
- Members of trades that will apply the results of the project (e.g., designers, engineers, architects, contractors, and trade representatives);
- Public interest market transformation implementers;
- Product developers relevant to the project;
- U.S. Department of Energy research managers, or experts from other federal or state agencies relevant to the project;
- Public interest environmental groups;
- Utility representatives;
- Air district staff; and
- Members of relevant technical society committees.

The Recipient shall:

- Prepare a *List of Potential TAC Members* that includes the names, companies, physical and electronic addresses, and phone numbers of potential members. The list will be discussed at the Kick-off meeting, and a schedule for recruiting members and holding the first TAC meeting will be developed.
- Recruit TAC members. Ensure that each individual understands member obligations and the TAC meeting schedule developed in subtask 1.12.
- Prepare a *List of TAC Members* once all TAC members have committed to serving on the TAC.
- Submit *Documentation of TAC Member Commitment* (such as Letters of Acceptance) from each TAC member.

Products:
- List of Potential TAC Members
- List of TAC Members
- Documentation of TAC Member Commitment

Subtask 1.12 TAC Meetings
The goal of this subtask is for the TAC to provide strategic guidance for the project by participating in regular meetings, which may be held via teleconference.

The Recipient shall:
- Discuss the TAC meeting schedule with the CAM at the Kick-off meeting. Determine the number and location of meetings (in-person and via teleconference) in consultation with the CAM.
- Prepare a *TAC Meeting Schedule* that will be presented to the TAC members during recruiting. Revise the schedule after the first TAC meeting to incorporate meeting comments.
- Prepare a *TAC Meeting Agenda* and *TAC Meeting Back-up Materials* for each TAC meeting.
- Organize and lead TAC meetings in accordance with the TAC Meeting Schedule. Changes to the schedule must be pre-approved in writing by the CAM.
- Prepare *TAC Meeting Summaries* that include any recommended resolutions of major TAC issues.

The TAC shall:
- Help set the project team's goals and contribute to the development and evaluation of its statement of proposed objectives as the project evolves.
- Provide a credible and objective sounding board on the wide range of technical and financial barriers and opportunities.
- Help identify key areas where the project has a competitive advantage, value proposition, or strength upon which to build.
- Advocate on behalf of the project in its effort to build partnerships, governmental support and relationships with a national spectrum of influential leaders.
- Ask probing questions that ensure a long-term perspective on decision-making and progress toward the project's strategic goals.
- Review and provide comments to proposed project performance metrics.
- Review and provide comments to proposed project Draft Technology Transfer Plan.

Products:
- TAC Meeting Schedule (draft and final)
- TAC Meeting Agendas (draft and final)
- TAC Meeting Back-up Materials
- TAC Meeting Summaries

Subtask 1.13 Project Performance Metrics
The goal of this subtask is to finalize key performance targets for the project based on feedback from the TAC and report on final results in achieving those targets. The performance targets should be a combination of scientific, engineering, techno-economic, and/or programmatic metrics that provide the most significant indicator of the research or technology's potential success.

The Recipient shall:

- Complete and submit the project performance metrics section of the *Initial Project Benefits Questionnaire*, developed in the Evaluation of Project Benefits task, to the CAM.
- Present the draft project performance metrics at the first TAC meeting to solicit input and comments from the TAC members.
- Develop and submit a *TAC Performance Metrics Summary* that summarizes comments received from the TAC members on the proposed project performance metrics. The *TAC Performance Metrics Summary* will identify:
  - TAC comments the Recipient proposes to incorporate into the *Initial Project Benefits Questionnaire*, developed in the Evaluation of Project Benefits task.
  - TAC comments the Recipient does not propose to incorporate with and explanation why.
- Develop and submit a *Project Performance Metrics Results* document describing the extent to which the Recipient met each of the performance metrics in the *Final Project Benefits Questionnaire*, developed in the Evaluation of Project Benefits task.
- Discuss the *Project Performance Metrics Results* at the Final Meeting.

Products:

- TAC Performance Metrics Summary
- Project Performance Metrics Results

IV. TECHNICAL TASKS

TASK 2: COMMUNITY ENGAGEMENT AND BENEFITS PLANNING

The goal of this task is to educate the community about the Recipients project and allow for open and transparent communication and questions. The Recipient intends to address community concerns and mitigate risk, fostering collaboration and project acceptance.

The Recipient shall:

- On a bi-annual basis, host or participate in at least two Workshops with relevant communities intended to share updates on the project, the technology, and the effects and benefits to the community, and facilitate discussion related to community interests and concerns.
  - Prior to each workshop, develop Workshop Materials including but not limited to agenda, attendee list, and slides.
  - During each workshop, provide and collect an Attendee Sign-In List with an option to opt in to email updates and summaries of Workshops.
  - Within six weeks of each workshop, prepare and distribute via email a Workshop Summary to community members who have opted to receive updates.
- If and when local staffing is needed, consider sourcing labor from the local community and explore potential mechanisms to provide workforce training programs.
- Create a *Community Benefits Plan (CBP)* as a part of the project's final deliverables at the completion of the project. CBP to include but not limited to:
  - Project’s plan for outreach and engagement, including community partners.
  - Project’s potential impact on criteria pollutants, water, and other resources.
  - Project’s potential benefits to local communities.

- Approaches for negotiating future Community Benefits Agreements and integrating stakeholder and community feedback to develop and improve ongoing engagement.

Products:

- Workshop Materials
- Workshop Summaries
- Community Benefits Plan

TASK 3: ENGINEERING DESIGN, TESTING PLAN, AND MRV PLAN

The goal of this task is to develop designs and plans to ensure the system is technically feasible, energy-efficient, cost-effective, safe, and scalable.

The Recipient shall:

- Beginning with Phase 2, develop the *Engineering Design Plan* for the DAC technology to be piloted at the project site. The design will focus on:
  - Articulating an overall DAC concept for each Phase, including nonconfidential, generalized descriptions and visual representations of the planned systems designed to maximize system output, efficiency, uptime, and safety and minimize energy use, land use, water use, carbon footprint, and sorbent losses/degradation.
  - A generalized list of major subsystems and equipment needed for the system.
  - Generalized description of planned resource requirements, e.g. energy, water, land, and any other utilities.
  - A nonconfidential, generalized risk assessment exercise to identify risks inherent to system operation and develop mitigation strategies
  - Description of project regulatory and environmental risk management and compliance, including but not limited to:
    - preparation of a Hazardous Materials Business Plan in accordance with local regulatory requirements
    - addressing onsite storage of chemicals, compressed CO2, and access to materials safety data sheets for onsite employees; the Recipient will be subject to all the mitigation measures identified in Table 2-2 Mitigation Number 3.7.1.1 of the of the Final Environmental Impact Report for the Pelican Renewables Ethanol Facility[5] (FEIR, pp. 2-22 to 2-23; PDF pp. 28-29).
    - Regarding potential air quality impacts due to short-term construction emissions, the Recipient will be subject to all mitigation measures identified in FEIR Table 2-2, 3.3.1 and 3.3.2. These measures include mitigation for various criteria pollutants: carbon monoxide (CO), Reactive Organic Gases (ROG), oxides of nitrogen (NOx), particulate matter (PM10), and fine particulate matter (PM2.5). (FEIR, pp. 2-9 to 2-12; PDF pp. 15-18)
    - Due to the buried nature of potential cultural materials at the Host Site designated as tribal cultural resources, there is a possibility that undocumented remains may be encountered, and the Recipient will be subject to the mitigation measures identified in Exhibit F of this Agreement. Additionally, at least one pre-designated location must be identified near the project site for potential cultural materials subject to reburial per the terms of Exhibit F.

[5] SCH #2006062102. 2006 Draft and Final Environmental Impact Report, and 2008 Addendum to the Final Environmental Impact Report for the Pacific Ethanol Production and Transshipment Facility, owned by Pelican Renewables LLC as of 2021

    - Note: Exhibit F also requires AirMyne, Inc. to follow all Port of Stockton requirements regarding development and/or site modification activities pertaining to the Pelican site, as applicable to the DeltaDAC project and its site.

- Beginning with Phase 2, develop a *Testing Plan* outlining
  - Proposed generalized, nonconfidential test goals and schedules as needed to achieve the research goals.
- Beginning with Phase 3, develop and implement an *MRV Plan* for the Recipient's systems which addresses
  - Generalized description of methods and technologies to monitor CO2 throughout the DAC process.
  - Generalized description of procedures for documenting and reporting data from the DAC process.
  - Generalized Description of verification procedures to validate the accuracy and reliability of DAC process data.
  - Generalized description of data management procedures for collecting, storing, and analyzing CO2 capture and storage data.
  - Procedures for ensuring compliance with regulatory requirements.
- Prepare *CPR Report #1* and participate in a CPR meeting in accordance with subtask 1.3 (CPR Meetings).

Products:
- Engineering Design Plan
- Testing Plan
- MRV Plan
- CPR Report #1

TASK 4: CONSTRUCTION AND TRANSPORTATION OF THE PILOT DAC SYSTEM
The goals for this task are to construct the pilot DAC System for Phase 2 onwards and, if needed, transport the system or subsystems for installation at the Host Site.

The Recipient shall:
- Construct or procure the subsystems and equipment needed. Subsystems and equipment may include air-liquid contactor or contactors, desorption apparatus (e.g. stripping column, desorption kettle, or other system), separation apparatus, storage tanks, pumps, compressors, and any other subsystems or equipment deemed necessary).
- Transport all necessary subsystems, either partially or fully assembled, to the Host Site.
- Ensure the scheduling of Delivered DAC Systems/Subsystems allow the project to adhere to the proposed project phases
- Develop a *Pilot Status Update Reports* at the completion of each Phase which will include but is not limited to:
  - Summary of construction activities
  - Photograph depicting the system

Products:
- Pilot Status Update Reports
  - Phase 2 Pilot Status Report

- Phase 3 Pilot Status Report
- Phase 4 Pilot Status Report
- Phase 5 Pilot Status Report

TASK 5: COMMISSION THE DAC PILOT SYSTEM
The goal of this task is to commission the Recipient's DAC Pilot System from Phase 2 onwards. This includes hook ups, electricity connections, integration of upstream and downstream DAC units, and initial commissioning and testing.

The Recipient shall:
- Develop a *Commissioning Plan(s)* prior to initiating commissioning activities at each project phase; Plan to include description of proposed activities and proposed project schedule.
- Complete all required site work to access water, power, and other utilities
- Assemble and integrate all DAC subsystems into a functioning DAC System.
- Hook up the DAC System to all necessary utilities.
- Perform initial test runs to test system operations and performance.
- Make any necessary modifications or adjustments.
- Run system tests as needed to prepare to commence system operations.
- Ensure the commissioning schedule allows for the project to adhere to the proposed phases:
  - For Phase 1, targeting a DAC System having a nominal capacity of <10 MT CO2/year.
  - For Phase 2, targeting a DAC System having a nominal capacity of 10-50 MT CO2/year at the Host Site.
  - For Phase 3, targeting a DAC System having a nominal capacity of 100-200 MT CO2/year at the Host Site.
  - For Phase 4, a DAC System targeting a nominal capacity of 1,000 MT CO2/yr at the Host Site by end of project period.
- Following the commissioning of each phase, prepare a *Commissioning Notification* to include a summary of all commissioning activities and initial system performance at the commissioning data.

Products:
- Commissioning Plans
- Commissioning Notifications

TASK 6: EVALUATION OF DAC SYSTEM DATA AND OPERATIONS TO INFORM FUTURE PROJECT PLANNING AND ACTIONS
The goals for this task are to operate the DAC system from Phase 2 onwards, monitor system operations to determine if any modifications or adjustments are needed, and collect data for review and evaluations of future phase project actions.

The Recipient shall:
- Monitor system operations to determine if any modifications or adjustments are required.
- Once the system is running in steady state, start collecting data for review and evaluation.
- Ongoing monitor sensor data remotely and make regular site visits.

- *Prepare Data and System Operations (DSO) Report* outlining the status of the project at the end of each project phase to determine future project actions/planning. The DSO Reports shall include generalized, nonconfidential summaries and/or visual representations of key data/findings.
- Prepare *CPR Report #2* and participate in a CPR meeting in accordance with subtask 1.3 (CPR Meetings).

Products:
- Data and System Operations Reports
  - Phase 2 DSO Report
  - Phase 3 DSO Report
  - Phase 4 DSO Report
  - Phase 5 DSO Report
- CPR Report #2

TASK 7: LIFE CYCLE ASSESSMENT AND TECHNOECONOMIC ANALYSIS
The goal of this task is to evaluate the impact of the proposed project on technoeconomic and the environment by conducting a Life Cycle Analysis (LCA) and Technoeconomic Analysis (TEA). The outcomes of these analyses will then be broadly disseminated to demonstrate the efficacy of deploying this technology within the California DAC sector.

The Recipient shall:
- Use published protocols to develop TEA and LCA models.
- Incorporate performance and manufacturing data into TEA and LCA models.
- Assess the technoeconomic and environmental impacts of this project on the Recipient's technology platform.
- Prepare draft and final TEA and LCA documents.
- Develop *Mitigation Plans Memo* that address any risks or no-go issues uncovered through LCA and TEA

Products
- TEA Report (draft and final)
- LCA Report (draft and final)
- Mitigation Plans Memo

TASK 8: EVALUATION OF PROJECT BENEFITS
The goal of this task is to report the benefits resulting from this project.

The Recipient shall:
- Complete *the Initial Project Benefits Questionnaire*. The Initial Project Benefits Questionnaire shall be initially completed by the Recipient with 'Kick-off' selected for the 'Relevant data collection period' and submitted to the CAM for review and approval.
- Complete the *Annual Survey* by January 31st of each year. The Annual Survey includes but is not limited to the following information:
  - Technology commercialization progress
  - New media and publications
  - Company growth
  - Follow-on funding and awards received

- Complete the *Final Project Benefits Questionnaire*. The Final Project Benefits Questionnaire shall be completed by the Recipient with 'Final' selected for the 'Relevant data collection period' and submitted to the CAM for review and approval.
- Respond to CAM questions regarding the questionnaire drafts.
- Complete and update the project profile on the CEC's public online project and recipient directory on the Energize Innovation website (www.energizeinnovation.fund), and provide *Documentation of Project Profile on EnergizeInnovation.fund*, including the profile link.
- If the Prime Recipient is an Innovation Partner on the project, complete and update the organizational profile on the CEC's public online project and recipient directory on the Energize Innovation website (www.energizeinnovation.fund), and provide *Documentation of Organization Profile on EnergizeInnovation.fund*, including the profile link.

Products:
- Initial Project Benefits Questionnaire
- Annual Survey(s)
- Final Project Benefits Questionnaire
- Documentation of Project Profile on EnergizeInnovation.fund
- Documentation of Organization Profile on EnergizeInnovation.fund

TASK 9: TECHNOLOGY/KNOWLEDGE TRANSFER ACTIVITIES
The goal of this task is to ensure the technological learning that resulted from the demonstration(s) is captured and disseminated to the range of professions that will be responsible for future deployments of this technology or similar technologies.

The Recipient Shall:
- Develop and submit a *Project Case Study Plan* that outlines how the Recipient will document the planning, construction, commissioning, and operation of the technology or system being demonstrated. The Project Case Study Plan should include:
  - An outline of the objectives, goals, and activities of the case study.
  - The organization that will be conducting the case study and the plan for conducting it.
  - A list of professions and practitioners involved in the technology's deployment.
  - Specific activities the recipient will take to ensure the learning that results from the project is disseminated to those professions and practitioners.
  - Presentations/webinars/training events to disseminate the results of the case study.
- Present the draft *Project Case Study Plan* to the TAC for review and comment.
- Develop and submit a *Summary of TAC Comments* that summarizes comments received from the TAC members on the draft *Project Case Study Plan*. This document will identify:
  - TAC comments the Recipient proposes to incorporate into the final Technology Transfer Plan.
  - TAC comments the Recipient does not propose to incorporate with an explanation why.
- Submit the final *Project Case Study Plan* to the CAM for approval.

- Execute the final Project Case Study Plan and develop and submit a Project Case Study.
- When directed by the CAM, develop presentation materials for a CEC sponsored conference/workshop(s) on the project.
- When directed by the CAM, participate in the annual EPIC symposium(s) sponsored by the California CEC.
- Provide at least (6) six High Quality Digital Photographs (minimum resolution of 1300x500 pixels in landscape ratio) of pre and post technology installation at the project sites or related project photographs.

Products:

- Project Case Study Plan (draft and final)
- Summary of TAC Comments
- Project Case Study (draft and final)
- High Quality Digital Photographs

V. PROJECT SCHEDULE

Please see the attached Excel spreadsheet.

MEMORANDUM

TO: Chair David Hochschild
Vice Chair Siva Gunda
Commissioner Andrew McAllister
Commissioner Noemí Gallardo
Commissioner Nancy Skinner

FROM: Patricia De La Torre, Ph.D.
Carbon Management Specialist, Energy Research and Development Division

SUBJECT: California Environmental Quality Act Analysis for CRI-25-001, AirMyne, Inc. DeltaDAC Project

DATE: October 8, 2025

I am a Carbon Management Specialist in the Research and Development Division, California Energy Commission (CEC), and the CEC's Agreement Manager for proposed Agreement, CRI-25-001. I have reviewed the Port of Stockton's CEQA documents for the Pacific Ethanol Production and Transshipment Facility, where the Agreement with AirMyne, Inc. DeltaDAC project will be constructed and operated. It is my opinion that the work to be performed under the Agreement is consistent with the Port's CEQA documents. It is also my opinion that implementation of mitigation measures in the Port's CEQA documents and the proposed Tribal Cultural Resource mitigation measures detailed in this staff memo would fully mitigate the potential environmental impacts of the proposed project to a less than significant level.

I have been informed by CEC's in-house counsel that because the CEC is not preparing an EIR, Negative Declaration, or Mitigated Negative Declaration, the CEC is not required to prepare a Mitigation Monitoring and Reporting Program (MMRP) pursuant to California Public Resources Code § 21081.6 or Calif. Code of Regulations, tit. 14, § 15097. Nevertheless, the CEC is making its mitigation requirements enforceable on AirMyne, Inc. through special terms and conditions in the grant agreement, in the spirit of § 21081.6(b). The Port of Stockton already has an MMRP for the entire Ethanol Facility as part of its EIR.

This memo analyzes the potential for environmental effects of the proposed grant CRI-25-001 Agreement project ("DeltaDAC"). The CEC-funded grant project will be located at an existing ethanol facility but will operate independently of its current activities. The ethanol facility was considered and approved by the CEQA Lead Agency, the Stockton Port District (the Port of Stockton). The Port of Stockton approved an Environmental Impact Report (SCH #2006062102), for the Pacific Ethanol Production and Transshipment Facility at the Port of Stockton ("Ethanol Facility") on January 16, 2007, under the California Environmental Quality Act (CEQA).

In June 2008, the Port of Stockton issued an Addendum to the EIR regarding adding a 60 kV electric transmission line to serve the facility. The Ethanol Facility is owned by Pelican Renewables LLC as of 2021.

The Ethanol Facility involved construction and operation of a corn-to-ethanol plant designed to produce approximately 60 million gallons of ethanol annually using standard distillation and fermentation technology, and a transshipment facility, including off-site rail improvements to transport ethanol and other byproducts. The ethanol is used off-site as an additive in motor vehicle fuel.

The proposed Agreement will partially fund the grantee, AirMyne, Inc., to design, construct, and demonstrate a pilot-scale direct air capture facility, DeltaDAC, which will be located within the existing site boundaries of the Ethanol Facility. In a February 20, 2025, letter, the Port's Director of Environmental Affairs, Jason Cashman, determined the DeltaDAC to be a minor modification to the Ethanol Facility that aims to reduce carbon emissions and environmental impact for that facility. From the Port of Stockton's perspective as CEQA Lead Agency for the Ethanol Facility, the Port determined DeltaDAC is not a "project" as defined in California Code of Regulations Title 14 Section 15378. This is because only building permits from the City of Stockton are required, and the Port has no discretionary approval to make regarding DeltaDAC. Consequently, the Port indicated environmental review under CEQA by the Port is not required. Pelican Renewables LLC and AirMyne, Inc. will follow all Port of Stockton requirements regarding development and/or site modification activities pertaining to the Pelican site, as applicable to the DeltaDAC project. Because the CEC will be making a discretionary decision regarding approving the grant agreement, the CEC will act as the responsible agency and consider the grant activities are a "project" under CEQA.

Pursuant to my work on the Agreement, including the scope of work for the Agreement, I have reviewed the Port's CEQA documents relevant to the Agreement. These CEQA documents include: (1) the 2006 Draft and Final Environmental Impact Report (DEIR, FEIR) for the Pacific Ethanol Production and Transshipment Facility at the Port of Stockton Project; (2) the June 2008 Addendum to the FEIR; (3) Stockton Port District Board of Commissioners' Resolutions certifying the FEIR, the 2008 Addendum, and CEQA Findings; (4) the Notices of Determination for the FEIR and 2008 Addendum; (5) a February 20, 2025 letter from the Port of Stockton's Director of Environmental Affairs; (6) the DeltaDAC project preliminary site plans.

The Port's Statement of Overriding Considerations states that the Port finds that the Ethanol Facility's economic, public policy, social, technological, and other considerations and benefits override and outweigh the Ethanol Production facility's significant and unavoidable impacts (e.g., air quality) that cannot be substantially lessened or avoided even with the adoption of mitigation measures or feasible project alternatives.

Based on my review and consideration of the above documents, it is my independent and professional opinion that, there have been no new changes since the above CEQA documents have been finalized, and no new, additional, or increased significant environmental impacts have occurred. There are no substantial changes by implementing the proposed DeltaDAC Agreement project, or with respect to the circumstances under which the project will be undertaken, which would require a subsequent or supplemental EIR. Furthermore, I have not identified any new information which would change the conclusions of the Port's CEQA documents or render those conclusions inadequate.

It is also my independent and professional opinion that the work to be performed under the proposed DeltaDAC project falls within the scope of the Port's CEQA documents, and that DeltaDAC will not result in any new significant environmental impacts beyond those already considered. It is also my opinion that implementation of mitigation measures in the Port's CEQA documents and the proposed Tribal Cultural Resource mitigation measures detailed in this staff memo would fully mitigate the potential environmental impacts of the proposed project to a less than significant level. The reasons for my conclusions are as follows:

The proposed DeltaDAC project will be sited on already-disturbed land within the site boundary of the Ethanol Facility previously studied by the FEIR and addendum. The site is surrounded by industrial uses, railroad tracks, roads, and the San Joaquin River. The nearest residential or commercial uses are located a half mile away, across the San Joaquin River and separated by industrial uses. The proposed Agreement includes developing and demonstrating a direct air capture facility, DeltaDAC, capable of removing carbon dioxide (CO_2) from the atmosphere at a capacity of 1,000 metric tons (MT) of CO_2 per year by the end of the agreement. At the largest scale, DeltaDAC will occupy an area between 15,000 – 30,000 square feet, including space for the air-liquid contactors[1], pumps, a solvent storage tank, and stripping column. In AirMyne's direct air capture technology, fans pull atmospheric air into an air-liquid contactor. This air mixes with a water-based CO_2 capture solvent, which traps CO_2 by dissolving it and forming stable inorganic salts. The CO_2 rich solvent is further concentrated before being heated to 120°C to release CO_2 gas from the solvent components, and regenerate the solvent for reuse. The pure CO_2 can be compressed for downstream utilization and storage.

The DeltaDAC project aims to produce a pure stream of CO_2 to be sold into local CO_2 utilization applications ranging from beverage carbonation to building materials. If local transportation and geological sequestration of CO_2 becomes economically and legally viable during the project period, AirMyne will evaluate all options related to the suitability of the Pelican Carbon Sequestration Project[2] as it relates to their work on the DeltaDAC project.

The construction of the proposed pilot facility will include site grading, gravel pads, concrete pads, and trenching. The proposed activities will require new air quality permits from the San Joaquin Valley Air Pollution Control District (SJVAPCD), new building permits from the City of Stockton, and a large generator waste permit from the San Joaquin Valley Environmental Health District. While initial DeltaDAC deployments will be powered by the grid, the site offers the possibility for AirMyne to recover and use waste heat from ethanol production as a low-carbon thermal energy input for DeltaDAC.

All the construction, operation, and other activities described in the scope of work of the proposed DeltaDAC project fall within the nature of the activities evaluated by the Port's CEQA documents identified above.

Aesthetics

The EIR and Addendum found the Ethanol Facility's impact on Aesthetics would be less than significant. The proposed DeltaDAC project would also be industrial in character and surrounded by industrial land uses and the San Joaquin River. The DeltaDAC facility will be smaller and lower in height than the maximum height of existing equipment at the Ethanol Facility. The proposed DeltaDAC project will not have additional impacts on aesthetics and will not change the impacts identified in the Port's CEQA documents.

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[1] Air-liquid contactors are structures similar in appearance and function to cooling towers as commonly used in industrial and commercial applications. Their maximum height will be 18-24 feet, while the tallest structure would be the stripping column at approximately 20-40 feet, which is lower than some of the other existing equipment at the Ethanol Facility. According to the DEIR, the grain milling structure is 80 feet tall, and the grain elevators are 120 feet (DEIR Appendix C, "Detailed Project Description," p. 2; PDF p. 70 of 1,119 pp.).

[2] U.S. Environmental Protection Agency (EPA) Class VI Well Applications, including that by Pelican Renewables LLC, are listed at this web page: https://www.epa.gov/uic/r9-uic-permits#class-vi

Agricultural Resources

The EIR and Addendum found that the Ethanol Facility would have no impact on Agricultural resources. The proposed DeltaDAC project will not have any impact on agricultural resources, the project site is designated for industrial use and will not convert farmland to a non-agricultural use and will not change the impacts identified in the Port's CEQA documents.

Air Quality

Regarding construction-related emissions, the EIR and Addendum found that with the implementation of mitigation measures, the Ethanol Facility's temporary construction air quality impacts would be less than significant. The proposed DeltaDAC project will have minor, short-term construction emissions from construction vehicles, primarily PM_{10} and CO_2 from diesel exhaust, grading, etc. Under the Agreement's Scope of Work, these grant activities will be subject to all mitigation measures identified in FEIR Table 2-2, "Summary of Potential Impacts, Mitigation Measures, and Mitigation Monitoring Program" as MMP Mitigation Numbers 3.3.1 and 3.3.2. These measures include mitigation for various criteria pollutants: carbon monoxide (CO), Reactive Organic Gases (ROG), oxides of nitrogen (NOx), particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). (FEIR, pp. 2-9 to 2-12; PDF pp. 15-18, which reproduce the mitigation measures in Table 3.3-4 from the DEIR). These emissions would not exceed the air quality thresholds presented in the DEIR. The impact of construction and operational activities and emissions under the Agreement will be well below the scale and duration evaluated in the EIR and Addendum and will not change the impacts on air quality identified in the Port's CEQA documents.

The EIR and Addendum found that even with the implementation of operational mitigation measures, the Ethanol Facility's operational impacts to air quality would be significant and unavoidable due to processing equipment at the ethanol plant emitting oxides of nitrogen, carbon monoxide, reactive organic gases, and particulate matter. Similarly, cumulative impacts due to reactive organic compounds emissions would be significant and unavoidable even with mitigation.

In contrast, the DeltaDAC facility is not an ethanol production facility, and does not rely on the same processes. DeltaDAC will remove carbon dioxide from the atmosphere by filtering air through a water-based solvent, processing that solvent by removing solid inorganic salts, and recovering the CO_2 through low temperature heating processes. The only expected operational source of criteria air pollution would be from the use of grid energy to power the system. DeltaDAC's operation is not expected to meaningfully contribute to criteria air pollutant emissions, or exacerbate the cumulative impacts noted for the Ethanol Facility. According to AirMyne, the SJVAPCD has informed them that stationary equipment that either produces or controls emissions is subject to district permits. AirMyne plans to request a project specific determination of exemption through the Authority to Construct application. SJVAPCD will review AirMyne's application and determine if the project is exempt or inform them of what types of emissions they will be asked to report and monitor. Additionally, the grant Agreement's Scope of Work requires AirMyne to perform life cycle analysis of their technology, quantifying greenhouse gas and criteria air pollutants, among other operational metrics.

Biological Resources

The EIR and Addendum found that with the implementation of the mitigation measures, the Ethanol Facility's impacts to biological resources would be reduced to a less than significant level. The DeltaDAC pilot facility will be sited on already disturbed land within the site boundary of the Ethanol Facility, will not have any impact on biological resources and will not change the impacts identified in the Port's CEQA documents.

Cultural Resources

The EIR and Addendum conducted a Cultural Resources Records search for the Ethanol Facility site, and found no evidence of any historical, archaeological, paleontological, unique geological features or any known human remains within the project area.

Appendix F, Cultural Resources, in the 2006 EIR on the Ethanol Facility, states, "Based on existing data in our files the project area has a low sensitivity for the possible discovery of historical resources, prehistoric or historic, because of (1) repeated seasonal inundation prior to historic reclamation; and (2) long-time use of the area as borrow and disposal site. No further study appears to be indicated at this time."[3]

The proposed DeltaDAC pilot facility will be sited on already disturbed land within the site boundary of the Ethanol Facility, will not have any impact on cultural resources and will not change the impacts identified in the Port's CEQA documents. Due to the buried nature of potential finds designated as cultural resources, there is a possibility that undocumented remains may be encountered, and the DeltaDAC Agreement will be subject to all mitigation measures identified in Table 2-2 Mitigation Number 3.5.1 of the FEIR (FEIR, pp. 2-18 to 2-21; PDF pp. 24-28).

Tribal Cultural Resources

Tribal Cultural Resources is a resource category under CEQA established by Assembly Bill 52 in 2014, after the existing EIR was prepared. While the 2006 EIR and 2008 Addendum did evaluate the Cultural Resources CEQA topic and did include mitigation measures, the newer Tribal Cultural Resources has additional nuances, For example, the Cultural Resources category studied in the 2006 EIR and 2008 Addendum included mitigation measures for potential discovery of undocumented remains, and CEC's evaluation considers the new guidance of AB 52 including tribal consultation on identifying appropriate mitigation measures for tribal cultural resources.

I have been informed by CEC's in-house counsel that because the CEC is not preparing an EIR, Negative Declaration, or Mitigated Negative Declaration, no tribal consultation is necessary pursuant to California Public Resources Code § 21080.3.1(b) or other CEQA statutes or regulations.

Nevertheless, pursuant the CEC Tribal Consultation Policy, the CEC initiated tribal consultation by submitting a Sacred Lands File and Native American Contacts List request to the Native American Heritage Commission (NAHC) on May 29, 2025, which gave positive results indicating that the NAHC does have record of Native American cultural resources in the search area.

On June 19, 2025, The CEC sent a tribal consultation request letter, via email and paper mail, to the tribes listed as relevant contacts on the NAHC list in the proposed DeltaDAC project site: Amah Mutsun Tribal Band, Confederated Villages of Lisjan Nation, Muwekma Ohlone Tribe of the SF Bay Area, Northern Valley Yokut/Ohlone Tribe, Tule River Indian Tribe, Wilton Rancheria, and Wukasachi Tibe/Eshom Valley Band. As of July 25, 2025, the CEC received requests for consultation from the Confederated Villages of Lisjan Nation and Wilton Rancheria on July 14, 2025, and July 16, 2025, respectively. On July 22, 2025, the CEC compiled and shared relevant project documents such as the Ethanol Facility CEQA files and a project description for both tribes to review ahead of consultation meetings.

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[3] Letter from Robin Hards, Assistant Research Technician, Central California Information Center, California Historical Resource Information System; Department of Anthropology - California State University, Stanislaus, to Jackie Neuffer, Associate Planner, of Quad Knopf, Inc. (environmental consulting firm that prepared EIR), page 3; dated May 2, 2006; PDF p. 196 of 1,119 pages of the DEIR Appendices.

Wilton Rancheria. On August 7, 2025, the CEC Tribal Liaisons and program staff held a consultation meeting with Wilton Rancheria Department of Cultural Preservation staff and representatives. CEC staff presented a description of the proposed technology and footprint of the DeltaDAC project, as well as a discussion of historical aerial images showing that the proposed DeltaDAC project site has been previously disturbed. Wilton Rancheria identified the land along the San Joaquin River as a traditional use area, and raised concerns that ground disturbance activities such as trenching may result in unintended discovery of tribal cultural resources, including human remains. Upon request from Wilton Rancheria, the CEC gathered preliminary information from AirMyne, Inc. on planned ground disturbance, although the final design of the DeltaDAC project will be developed over the course of the CEC grant agreement. AirMyne, Inc. identified that the project construction preparation will include utility identification and marking, excavation procedures, environmental protection, and tribal cultural resource considerations.

Confederated Villages of Lisjan Nation. On September 19, 2025, the CEC Tribal Liaisons and program staff held a consultation meeting with Lisjan Nation staff and representatives. CEC staff presented a description of the proposed technology and footprint of the DeltaDAC project, as well as a discussion of historical aerial images showing that the proposed DeltaDAC project site has been previously disturbed. Lisjan Nation expressed interest in learning more about the depth of ground disturbance activities, speed and safety of direct air capture fans, and understanding the potential of direct air capture technology to be carbon neutral. The CEC provided the requested information in addition to what was provided previously to Wilton Rancheria regarding ground disturbance plans.

The CEC and AirMyne, Inc. agree that consultation with Wilton Rancheria and Lisjan Nation will include considerations for potential, unintended discovery of tribal cultural resources once the construction plan is finalized and during ground disturbance activities. The grant Agreement's Terms and Conditions will include the following considerations to mitigate potential impacts to tribal cultural resources in the project area:

(1) AirMyne will notify the CEC, Wilton Rancheria, and Lisjan Nation, once DeltaDAC construction plans are finalized for consultation to determine whether a tribal monitor is required at the initial ground disturbance activities. If previously unidentified cultural resources are encountered during trenching or grading of the project site, all activity within a 100-foot radius of the inadvertent discovery shall be stopped, and the CEC and the Port of Stockton shall be notified. A Secretary of Interior-qualified archaeologist and relevant contacts identified by the Native American Heritage Commission (NAHC) shall also be contacted and will examine the resource, following CEQA guidelines to determine its significance. The archeologist will stake the area of discovery, placing stakes no more than 10 feet apart, forming a circle having a radius of no less than 100 feet from the point of discovery. If any discovery is determined to be a tribal cultural resource, culturally appropriate treatment that preserves or restores the cultural qualities and integrity of the tribal cultural resource will be identified by the relevant NAHC contacts and presented to the CEC for consideration. The subsequent steps would include but are not limited to: preparing materials for reburial, minimizing handling of cultural materials, preservation in place, protecting the confidentiality of the resource, no pictures or testing without tribal consent, cultural resource monitoring of soil disturbing construction activities by a qualified archaeologist and Native American monitor and or onsite reburial of cultural materials to a location within the project area where they will not be subject to foreseeable future impacts. The consulting tribes have identified preservation in place as a preferred method for treatment of tribal cultural resources and do not consider curation as an appropriate impact mitigation measure for tribal cultural resources.

(2) If human remains are discovered during trenching or grading of the project site, all activity within a 100-foot radius of the find shall be stopped, and, per California Health and Safety Code Section 7050.5, the San Joaquin County Coroner shall be notified to determine that no investigation of the cause of death is required, and if the coroner determines the remains to be Native American:

   a. The coroner shall contact the Native American Heritage Commission within 24 hours.
   b. The Native American Heritage Commission shall identify the person or persons it believes to be most likely descended from the deceased Native American.
   c. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98, or

(3) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further subsurface disturbance as part of the project.
   a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the Commission.
   b. The descendant identified fails to make a recommendation; or
   c. The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

(4) Additionally, if reburial is required under the conditions listed above in 3 (a-c), the location determined for reburial shall be communicated with the relevant contacts identified by the NAHC before proceeding. The discovery and reburial of Native American human remains is to be kept confidential and secure to prevent any further disturbance. Tribes are encouraged to request access to reburial sites from the landowners.

Geology and Soils

The EIR and Addendum found that the Ethanol Facility would have no impact on seismic effects, expansive soil hazards, and no substantial cumulative impact related to geology and soils at the Facility site. The proposed DeltaDAC facility will be sited on already disturbed land within the site boundary of the Ethanol Facility, will not have any significant impact on geology and soils and will not change the impacts identified in the Port's CEQA documents.

Greenhouse Gases

The legislature first acknowledged that greenhouse gas emissions and the effects of those emissions (including the Energy and Wildfire resource categories) are appropriate subjects of CEQA analysis through SB 97 in 2007.[4] CEQA guidelines were adopted in 2010 and revised in 2018 (CCR, Title 14, Section 15064.4), after the existing EIR was prepared. The EIR and Addendum did not evaluate greenhouse gases for the Ethanol Facility.

[4] CEQA and Climate Change Advisory.
https://lci.ca.gov/ceqa/ceqa-climate-change.html

As part of the Ethanol Facility operations, corn fermentation produces ethanol as a primary product and large amounts of CO_2, a greenhouse gas, as a byproduct which is vented into the atmosphere by the facility. The proposed DeltaDAC project is intended to reduce CO_2 in the atmosphere near the ethanol facility and is an improvement to the greenhouse gas impact of the Ethanol Facility. DeltaDAC will not generate significant greenhouse gas emissions and will not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The DeltaDAC project will deploy direct air capture, a carbon removal technology that, per state level plan and policy,[5] is required to achieve California's greenhouse gas reduction goals. Additionally, the grant Agreement's Scope of Work requires AirMyne to perform life cycle analysis of their technology, which includes quantifying net greenhouse gas emissions.

Energy

The EIR and Addendum did not evaluate the Ethanol Facility's impacts related to energy usage, which is a resource category considered by the CEQA Climate Change Advisory and Section 15064.4 in 2010 and 2018, due to its potential effect on greenhouse gas emissions.[5]

The DEIR states that the Ethanol Facility is equipped with steam production using three natural gas burners, each with a rating of 56,000 MMBTU/hr and uses 3,222 kW/day average electricity per day (DEIR Appendix C, Detailed Project Description, p. 3-6, PDF p.71-74 of 1119).

At the 1,000 MT CO_2/year scale, the proposed DeltaDAC project will use 0.8-2 MMBTU/hr of heat and an electrical capacity of 205-350 kW of electricity, which includes a 50% safety buffer. There is sufficient capacity at the Ethanol Facility site to accommodate this thermal and electrical load without the addition of new transmission lines. The DeltaDAC project would not have a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation, nor will the energy usage conflict or obstruct state and local plans for renewable energy or energy efficiency.

Wildfire

The EIR and Addendum did not evaluate the Ethanol Facility's impacts related to wildfire risk, which is a resource category considered by the CEQA Climate Change Advisory and Section 15064.4 in 2010 and 2018, as a potential outcome of greenhouse gas emissions.[5] The geographic center of the site is located in an area that the State Fire Marshal has identified as having no Fire Hazard Severity Zone in Local Responsibility Area, per Government Code section 51178. In the proposed DeltaDAC project, AirMyne's DAC technology uses an aqueous alkaline solution as the capture agent. Water-based solutions are inherently non-flammable. The sorbents used in AirMyne's chemistry are primarily inorganic salts, which do not release flammable vapors and are thermally stable under the expected operating conditions.

Hazards and Hazardous Materials

The EIR and Addendum found that with the implementation of mitigation measures, the Ethanol Facility's impacts related to hazards and hazardous materials would be less than significant. The proposed DeltaDAC project will use chemical CO_2 capture agents that include aqueous alkaline solutions consisting of water, commodity inorganic salts, and trace quantities of other additives of which formulation is proprietary. AirMyne's DAC technology uses commercially-available chemicals with low toxicity profiles and many decades of use in agriculture, household, and food/beverage applications. According to AirMyne, the pH of the capture agent throughout its service life is approximately pH 9-12, below the 12.5 limit above which the

[5] California Air Resources Board 2022 Scoping Plan, developed pursuant to AB 1279.

Federal EPA classifies waste as corrosive. According to AirMyne, the capture agent does not fall into any of the other three Characteristic Waste categories – ignitable, reactive, or toxic. According to AirMyne, none of the chemicals used in AirMyne's current operations are subject to a Significant New Use Rule or TSCA export notification requirements.

According to AirMyne's communications with the San Joaquin Valley Environmental Health District (SJVEHD), AirMyne will be required to obtain a large generator permit. According to AirMyne, the representatives at the SJVEHD estimate that the waste generated at the site would be non-RCRA (Resource Conservation and Recovery Act). Additionally, AirMyne will be required to submit a Hazardous Materials Business Plan (HMBP) in accordance with local regulatory requirements. The preparation of an HMBP is a requirement of the grant Agreement's Scope of Work. To streamline operations and maintain consistency with existing site practices at the Ethanol Facility, AirMyne will establish accounts with the waste hauling contractors currently used, ActEnviro and Republic Services.

The proposed Agreement will be subject to all the mitigation measures identified in Table 2-2 Mitigation Number 3.7.1.1 of the FEIR, addressing onsite storage of chemicals, compressed CO_2, and access to materials safety data sheets for onsite employees (FEIR, pp. 2-22 to 2-23; PDF pp. 28-29.). The DeltaDAC project impacts on hazards and hazardous materials will not change the impacts identified in the Port's CEQA documents.

Hydrology and Water Quality

The EIR and Addendum found that with the implementation of mitigation measures, the Ethanol Facility's impacts related to water quality would be less than significant. The proposed DeltaDAC project will use between 2.5 - 5 gallons per minute at the 1,000 MT CO_2/year scale. The Ethanol Facility uses 350 gallons/minute. Similar to the Ethanol Facility, the source of the water will be the Port of Stockton water system, and the additional water usage by DeltaDAC is not significant relative to current usage by the ethanol facility, where there is sufficient water supply to accommodate the change. DeltaDAC will not change the impacts identified in the Port's CEQA documents.

Land Use and Planning

The EIR and Addendum found that the Ethanol Facility has no impacts relating to land use and planning, as it is sited on and surrounded by land designated for mixed industrial use. The DeltaDAC pilot facility will be sited on already disturbed land within the site boundary of the Ethanol Facility, will not have any impact on land use and planning and will not change the impacts identified in the Port's CEQA documents.

Mineral Resources

The EIR and Addendum found the Ethanol Facility would have no impact on mineral resources, as the site is not used for mining or other mineral extraction activities. DeltaDAC will not have any impact on mineral resources and will not change the impacts identified in the Port's CEQA documents.

Noise

The EIR and Addendum found that with the implementation of mitigation measures, the Ethanol Facility impacts would have a less than significant impact on noise due to construction activities located in an industrial use area. DeltaDAC will have temporary construction-related noise but will not have an impact on noise above the level which has been previously evaluated and will not change the impacts identified in the Port's CEQA documents.

Population and Housing

The EIR and Addendum found the Ethanol Facility would have no impact on population and housing. DeltaDAC will not require construction of new homes or displacement of homes or people, nor is it anticipated to cause population growth. The DeltaDAC project will not have an impact on population and housing and will not change the impacts identified in the Port's CEQA documents.

Public Services

The EIR and Addendum found the Ethanol Facility would have no impacts relating to Public Services. Since DeltaDAC will not induce growth or increase in the local population, there will not be a need for additional public services. The DeltaDAC project will not have an impact on public services and will not change the impacts identified in the Port's CEQA documents.

Recreation

The EIR and Addendum found the Ethanol Facility would have no impact on recreation. DeltaDAC will not induce changes in the local population that would result in increasing use of recreational facilities in the area. The DeltaDAC project will not have an impact on recreation and will not change the impacts identified in the Port's CEQA documents.

Transportation

The EIR and Addendum found that with the implementation of mitigation measures, the Ethanol Facility would have a less than significant impact on transportation. The DeltaDAC project may have temporary traffic delays during construction for trucks to access the industrial facilities but will not have any long-term or permanent impact on transportation and will not change the impacts identified in the Port's CEQA documents.

Utilities and Service Systems

The EIR and Addendum found that with the implementation of mitigation measures, the Ethanol Facility's impacts on utilities and service systems would be less than significant. Effluents and waste from the DeltaDAC project will be the spent proprietary aqueous capture solvent, as well as small volumes of non-hazardous municipal waste associated with site operations. This waste is compatible with handling and disposal services currently used at the ethanol plant, provided by ActEnviro and Republic Services. AirMyne will acquire a large generator waste permit from the San Joaquin Valley Environmental Health District. DeltaDAC will not have any impact on utilities and service systems and will not change the impacts identified in the Port's CEQA documents.

REFERENCES

The full California Environmental Quality Act (CEQA) supporting documentation for CRI-24-006 will be provided as linked documents (*.pdf files) on AirMyne's Google Drive:
https://drive.google.com/drive/folders/1Mfdm6qz8PUBSkdHjqxwvyJ4JaswToqyk

1. Draft EIR
2. Draft EIR Appendices
3. Final EIR
4. 2008 Addendum to FEIR
5. Resolution certifying the FEIR and CEQA Findings
6. Resolution certifying the Addendum to the FEIR and CEQA Findings
7. Notice of Determination of FEIR
8. Notice of Determination of Addendum to FEIR
9. February 20, 2025 Letter from the Port of Stockton Director of Environmental Affairs
10. DeltaDAC Preliminary Site Plan

EXHIBIT F

SPECIAL TERMS AND CONDITIONS

1. PRIORITY OF THESE SPECIAL TERMS

In the event of a conflict between these Special Terms and other terms in this Agreement, these Special Terms shall govern.

2. MITIGATION MEASURES

In addition to any requirements listed in other exhibits to this Agreement, AirMyne, Inc. (The Recipient) shall:

Regarding Tribal Cultural Resources under CEQA:

(1) AirMyne, Inc. will notify the CEC, Wilton Rancheria, and Lisjan Nation, once DeltaDAC construction plans are finalized for consultation to determine whether a tribal monitor is required at the initial ground disturbance activities. If previously unidentified cultural resources are encountered during trenching or grading of the project site, all activity within a 100-foot radius of the inadvertent discovery shall be stopped and the CEC and the Port of Stockton shall be notified. A Secretary of Interior-qualified archaeologist and relevant contacts identified by the Native American Heritage Commission (NAHC) shall also be contacted and will examine the resource, following CEQA guidelines to determine its significance. The archeologist will stake the area of discovery, placing stakes no more than 10 feet apart, forming a circle having a radius of no less than 100 feet from the point of discovery. If any discovery is determined to be a tribal cultural resource, culturally appropriate treatment that preserves or restores the cultural qualities and integrity of the tribal cultural resource will be identified by the relevant NAHC contacts and presented to the CEC for consideration. The subsequent steps would include but are not limited to: preparing materials for reburial, minimizing handling of cultural materials, preservation in place, protecting the confidentiality of the resource, no pictures or testing without tribal consent, cultural resource monitoring of soil disturbing construction activities by a qualified archaeologist and Native American monitor and or onsite reburial of cultural materials to a location within the project area where they will not be subject to foreseeable future impacts. The consulting tribes have identified preservation in place as a preferred method for treatment of tribal cultural resources and do not consider curation as an appropriate impact mitigation measure for tribal cultural resources.

(2) If human remains are discovered during trenching or grading of the project site, all activity within a 100-foot radius of the find shall be stopped, and, per California Health and Safety Code Section 7050.5, the San Joaquin County Coroner shall be notified to determine that no investigation of the cause of death is required, and if the coroner determines the remains to be Native American:

   a. The coroner shall contact the Native American Heritage Commission within 24 hours.

   b. The Native American Heritage Commission shall identify the person or persons it believes to be most likely descended from the deceased Native American.

c. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98, or

(3) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further subsurface disturbance as part of the project.

a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the Commission.

b. The descendant identified fails to make a recommendation; or

c. The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

(4) Additionally, if reburial is required under the conditions listed above in (3) a-c, the location determined for reburial shall be communicated with the relevant contacts identified by the NAHC before proceeding. The discovery and reburial of Native American human remains is to be kept confidential and secure to prevent any further disturbance. Tribes are encouraged to request access to reburial sites from the landowners.

Regarding existing CEQA mitigation measures

(5) AirMyne, Inc. shall follow all Port of Stockton requirements regarding development and/or site modification activities pertaining to the Pelican Renewables LLC site, as applicable to the DeltaDAC project and its site.