



**CALIFORNIA  
ENERGY COMMISSION**



**California Energy Commission  
September 11, 2024 Business Meeting  
Backup Materials for Rich Products Corporation**

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

**[PROPOSED]**

**RESOLUTION NO: 24-0911-03fiii**

**STATE OF CALIFORNIA**

**STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION**

**RESOLUTION: Rich Products Corporation**

**RESOLVED**, that the State Energy Resources Conservation and Development Commission (CEC) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

**RESOLVED**, that the CEC approves agreement FPI-24-004 with Rich Products Corporation for a \$1,509,921 grant. This agreement will install an ammonia refrigeration system to replace the existing refrigeration system at a frozen dough, crust, and flatbread processing facility in Los Angeles County. The upgraded system will reduce greenhouse gas emissions, electricity use, and enable on-peak demand reductions; and

**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 September 11, 2024.

AYE:

NAY:

ABSENT:

ABSTAIN:

Dated:

---

Kristine Banaag  
Secretariat



## GRANT REQUEST FORM (GRF)

### A. New Agreement Number

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

**New Agreement Number:** FPI-24-004

### B. Division Information

1. Division Name: ERDD
2. Agreement Manager: Claire Sweeney
3. MS-:None
4. Phone Number: 916-232-8182

### C. Recipient's Information

1. Recipient's Legal Name: Rich Products Corporation
2. Federal ID Number: 16-0903761

### D. Title of Project

Title of project: Ultra-Low-GWP Refrigerant Conversion at the Rich Products Corporation Torrance Facility

### E. Term and Amount

1. Start Date: 9/18/2024
2. End Date: 6/30/2027
3. Amount: \$1,509,921.00

### F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 9/11/2024 .
3. Consent or Discussion? Consent
4. Business Meeting Presenter Name: Matthew Stevens
5. Time Needed for Business Meeting: 5 minutes.
6. The email subscription topic is: Food Production Investment Program

#### **Agenda Item Subject and Description:**

**Rich Products Corporation.** Proposed resolution approving agreement FPI-24-004 with Rich Products Corporation for a \$1,509,921 grant, and adopting staff's recommendation that this action is exempt from CEQA. This agreement will install an ammonia refrigeration system to replace the existing refrigeration system at a frozen dough, crust, and flatbread processing facility in Los Angeles County. The upgraded system will reduce greenhouse gas emissions, electricity use, and enable on-peak demand reductions. (FPIP funding) Contact: Matthew Stevens

### 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?

Yes

Statutory Exemption?

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: None

CCR section number: None

Categorical Exemption?

Yes

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: Cal. Code Regs., tit. 14, § 15302 ;

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.

14 C.C.R. 15302. This project involves the replacement of existing mechanical equipment at an existing food processing facility in Torrance, CA. This project will replace existing inefficient equipment at an existing food processing facility to reduce energy consumption and greenhouse gas emissions. The equipment to be replaced includes compressors, evaporators, ventilation, and associated control systems at the Recipient's food processing facility. The new equipment will be located on the same site as the equipment replaced and have substantially the same purpose and capacity as the equipment replaced. For these reasons, the project falls under categorical exemption listed in 14 C.C.R. 15302.

This project does not involve impacts on any particularly sensitive environment; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project, and this project will not have a significant effect on the environment.



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	No
Negative Declaration	No
Mitigated Negative Declaration	No
Environmental Impact Report	No
Statement of Overriding Considerations	No
None	Yes

**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
DC Energy Services	\$ 99,000	\$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
C&L Refrigeration	\$998,796	\$332,932
IMAS Electric	\$187,125	\$62,375
TBD	\$225,000	\$75,000

**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
No key partners to report



## 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	303.203	\$ 1,509,921

**TOTAL Amount:** \$ 1,509,921

R&D Program Area: ICMB: FPIP

Explanation for "Other" selection Not applicable

Reimbursement Contract #: Not applicable

Federal Agreement #: 101 Local Assistance

## M. Recipient's Contact Information

### 1. Recipient's Administrator/Officer

Name: Jack DiGiacomo

Address: 10000 Stockdale Hwy Ste 105

City, State, Zip: Bakersfield, CA 93311-3602

Phone: 661-412-4637

E-Mail: jack@dcenergyservices.com

### 3. Recipient's Project Manager

Name: Adrian Liu

Address: PO Box 245 1 Robert Rich Way

City, State, Zip: Buffalo, NY 14213-0245

Phone: 905)730-2233

E-Mail: aliu@rich.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-23-305
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".



STATE OF CALIFORNIA  
CALIFORNIA ENERGY COMMISSION

Grant Request Form  
CEC-270 (Revised 01/2024)

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	No

**Approved By**

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

**Agreement Manager:** Claire Sweeney

**Approval Date:** 7/26/2024

**Branch Manager:** Alex Horangic

**Approval Date:** 7/26/2024

**Director:** Delegated to Branch Manager

**Approval Date:** 7/26/2024

**Exhibit A**  
**Scope of Work**  
**Rich Products Corporation**

**I. TASK ACRONYM/TERM LISTS**

**A. Task List**

Task #	CPR <sup>1</sup>	Task Name
1		General Project Tasks
2		Site Preparation and Equipment Procurement
3	X	Equipment Installation
4		Measurement and Verification
5		Technology/Knowledge Transfer Activities

**B. Acronym/Term List**

Acronym/Term	Meaning
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
CPR	Critical Project Review
GHG	Greenhouse Gas
GWP	Global Warming Potential
MTCO <sub>2</sub> e	Metric Tons of Carbon Dioxide Equivalent
M&V	Measurement and Verification
Recipient	Rich Products Corporation
VFD	Variable Frequency Drive

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

**A. Purpose of Agreement**

The purpose of this Agreement is to fund Recipient's project to design and install an energy efficient and ultra-low-global warming potential (GWP) refrigerant refrigeration system to reduce energy consumption and greenhouse gas (GHG) emissions at the Recipient's frozen dough, crust, and flatbread production facility. This project will demonstrate the potential of a high efficiency ammonia refrigeration system to reduce GHG emissions, electricity use, and enable on-peak demand reductions.

**B. Problem/ Solution Statement**

**Problem**

The project addresses two critical issues in the food processing sector: high operational costs and rapidly changing regulations, which are exacerbated by outdated and inefficient refrigeration systems. These systems, often employing older, less efficient technologies, lead to

---

<sup>1</sup> 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**

#### **Rich Products Corporation**

increased electricity usage and higher GHG emissions. Additionally, there exists a knowledge gap among food processors regarding the latest energy-efficient technologies and the potential savings associated with these systems. This gap hinders the adoption of modern solutions that could dramatically reduce both costs and environmental impact.

Despite the availability of more efficient technologies, these problems persist largely due to cost barriers and the reluctance of facilities to interrupt existing operations. Many entities are hesitant to make substantial upfront investments without clear, immediate returns. Furthermore, the specialized nature of refrigeration systems in food processing requires tailored solutions that generic energy efficiency upgrades do not provide. Addressing this issue now is crucial as energy costs continue to rise and regulatory pressures increase concerning environmental sustainability. Prompt action will not only help mitigate operational costs in the long run but also align with broader environmental goals, enhancing competitiveness in a market increasingly driven by sustainability.

#### **Solution**

The project will directly tackle the outlined issues by replacing the outdated R-507 and R-404A refrigeration systems at the recipient's Torrance facility with the more advanced, energy-efficient R-717 system. This change will markedly reduce energy consumption and operational costs. R-717, commonly known as ammonia, is well-regarded for its superior thermodynamic properties and nearly zero global warming potential, making it an environmentally sound choice.

Incorporating cutting-edge technology such as high-efficiency compressors, condensers, and evaporators, and advanced control systems will allow for finer regulation of temperatures and more effective operation of the refrigeration cycle.

This project not only supports the achievement of California's statutory energy goals—which aim for significant reductions in GHG emissions and increased energy efficiency in commercial operations—but also serves as a model for similar facilities considering modernization. By demonstrating the economic and environmental benefits of upgrading to more efficient refrigeration technologies, the recipient's project will encourage broader adoption within the industry, multiplying the positive impact on energy consumption and emission reductions across the state.

### **C. Goals and Objectives of the Agreement**

#### **Agreement Goals**

The goals of this Agreement are to:

- Design and install an energy efficient and ultra-low-GWP refrigerant refrigeration system.
- Reduce GHG emissions and energy consumption at the production facility by implementing energy efficient upgrades and replacing a high-GWP refrigerant.

#### **Agreement Objectives**

The objectives of this Agreement are to:

- Measure the production facility's electricity and consumption and refrigerant leakage in order to establish a baseline for future comparisons.
- Install drop-in, commercially available, energy efficient equipment including but not limited to:
  - Refrigeration Compressor Packages

## Exhibit A Scope of Work Rich Products Corporation

- Refrigeration Evaporators
- Refrigeration Control System
- Refrigeration Engine Room Ventilation
- Specify and procure the necessary equipment and materials for the energy efficient upgrades and high-GWP refrigerant replacement.
- Install and operate the optimized systems at the production facility.
- Reduce electricity consumption by approximately 650 thousand kWh, and GHG emissions by approximately 1,500 metric tons of carbon dioxide equivalent per year.
- Measure and validate the electricity, operating cost, and GHG emission reductions resulting from the energy efficient upgrades.
- Share knowledge about the project with other market segments in California that can use the technologies demonstrated.
- Benefit priority populations by reducing on-site criteria air pollutant or toxic air contaminant emissions through high-GWP refrigerant replacement.

### 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.

# Exhibit A

## Scope of Work

### Rich Products Corporation

#### 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.

## **Exhibit A**

### **Scope of Work**

#### **Rich Products Corporation**

##### **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:

- How Recipient plans to accomplish tasks it has described in the Scope of Work;
  - An updated Project Schedule;
  - Terms and conditions of the Agreement;
  - Invoicing and auditing procedures;
  - 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);
  - 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

## **Exhibit A**

### **Scope of Work**

#### **Rich Products Corporation**

##### **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. CPRs will help the CAM determine, among other things, that the Recipient is on-track to complete its project before CEC funds liquidate. 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

## **Exhibit A**

### **Scope of Work**

#### **Rich Products Corporation**

##### **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**

Monthly Calls, Progress Reports, and Invoices will help the CAM determine that CEC funds to Recipient for its project are spent in accordance with the Agreement terms, and that the Recipient is on-track to complete its project before CEC funds liquidate.

##### **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



## **Exhibit A Scope of Work Rich Products Corporation**

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 Recipient of items discussed during 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 Recipient's satisfactory and continued progress is made towards achieving the project objectives of this Agreement; and (2) ensure that invoices contain all required information for reimbursement.

### **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 Recipient's 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.

# **Exhibit A**

## **Scope of Work**

### **Rich Products Corporation**

#### **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**)
    - Include a summary table that includes the following information, but is not limited to (required):
      - • Recipient name;
      - • Project description;
      - • Project location(s);
      - • Census tract;
      - • Dates: project selected and completed;
      - • GGRF dollars allocated;
      - • Leveraged and/or match funds;
      - • Estimated/actual total project GHG emission reductions;
      - • Estimated/actual energy saved (kWh, therms, or other fuels) for energy efficiency projects;
      - • Estimated/actual energy generated (kWh or therm equivalents) for renewable energy projects;
      - • Other benefits or results;
      - • Other market sectors that can benefit from the project
      - • Benefits to priority populations.



## Exhibit A Scope of Work Rich Products Corporation

- 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)
- Appendices - Include a copy of the Measurement & Verification (M&V) report for each demonstration site funded by the Energy Commission grant. (required)
- 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:

- 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

## Exhibit A Scope of Work Rich Products Corporation

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.

## Exhibit A Scope of Work Rich Products Corporation

- 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 Subawards

The goals of this subtask are to: (1) procure subawards required to carry out the tasks under this Agreement; and (2) ensure that the subawards are consistent with the terms and conditions of this Agreement. The CEC will not participate in negotiation of subawards but may request a copy to monitor project progress.

### The Recipient shall:

- Manage and coordinate subrecipients activities in accordance with the requirements of this Agreement.
- 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.
- If requested by the CAM, submit a draft of each *Subaward* required to conduct the work under this Agreement.
- If requested by the CAM, submit a final copy of each executed subaward.
- Notify and receive written approval from the CAM prior to adding any new subrecipient (see the terms regarding of subrecipient additions in the terms and conditions).

### Products:

- Subawards (*if requested by the CAM*)

## IV. TECHNICAL TASKS

*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. **Subtask 1.1 (Products)** describes the procedure for submitting products to the CAM.*

### TASK 2 SITE PREPARATION AND EQUIPMENT PROCUREMENT (*Mandatory task*)

The goal of this task is to procure the necessary equipment and materials for this project.

### The Recipient shall:

- Prepare the site by determining optimal locations for new equipment while removing existing equipment and any additional materials as necessary. Equipment removal may occur in tandem with equipment installation to reduce facility downtime.

## **Exhibit A**

### **Scope of Work**

#### **Rich Products Corporation**

- Specify equipment and performance specifications, select California-based vendors, and issue purchase orders to the selected vendors.
- Arrange for shipment, receipt, and inspection of the equipment at the facility.
- Secure any building permits determined to be required for equipment installation.
- Procure the equipment for the energy efficiency upgrades such as, without limitation:
  - Refrigeration system components: refrigeration compressors/condensers, refrigeration pumps, refrigeration fan VFD's, insulation, refrigeration system energy controls; and
  - Miscellaneous components such as controls hardware, piping, valves, fittings, fasteners, insulation, conduit, and wiring.
- Provide a *Site Preparation and Equipment Procurement Memo* to help the CEC understand how funds are spent, to support continued reimbursement and describe how the Recipient will overcome barriers of its project. It shall include, but not be limited to:
  - Summary of the steps to prepare the site(s);
  - Copy of the performance specifications for each piece of equipment purchased by the grant;
  - Summary of the bids received and from whom;
  - Copies of all required permits needed for installation at each site;
  - Copies of the final procurement documents and purchase orders; and
  - Status of the planned installation including a preliminary schedule for equipment delivery and installation for each site.

#### **Products:**

- Site Preparation and Equipment Procurement Memo

#### **TASK 3 EQUIPMENT INSTALLATION (*Mandatory task*)**

The goal of this task is to install and commission the equipment for this project.

#### **The Recipient shall:**

- Install energy efficient equipment and associated mechanical and electrical connections.
- Charge the refrigeration system with the selected ultra-low-GWP refrigerants.
- Recover and reclaim existing high-GWP refrigerant.
- Verify the integrity and functionality of the installed equipment.
- Start-up and commission equipment with factory tech support and make adjustments as needed to meet stated performance specifications.
- Adjust the systems until they reach their best efficiency points based on the facility load profile.
- Develop informative materials on best practices, safety protocols and maintenance.
- Provide an *Equipment Installation Memo* to help the CEC understand how funds are spent, support continued reimbursement and describe how the Recipient will overcome barriers of its project. It shall include, but not be limited to:
  - Summary of the equipment installation requirements for each demonstration site;
  - Identification of barriers involved during installation and discuss the steps taken to overcome those barriers;
  - Discuss results of equipment start-up and commissioning at each site with respect to whether the equipment as installed meets the stated performance specifications.
- Prepare a *CPR Report #1* in accordance with subtask 1.3.
- Participate in a CPR Meeting.

# Exhibit A

## Scope of Work

### Rich Products Corporation

#### Products:

- Equipment Installation Memo (*draft and final*)
- CPR Report #1

#### **TASK 4 MEASUREMENT AND VERIFICATION (*Mandatory task*)**

The goal of this task is to report the benefits resulting from this project by performing measurement and verification (M&V) of GHG and energy consumption reduction.

#### **The Recipient shall:**

- Enter into an agreement with M&V subcontractor per Task 1.9 (if using an outside vendor)
- Coordinate site visits with the M&V subcontractor at the demonstration site(s)
- Develop M&V protocol for ***pre-installation*** measurement (and calculation):
  - Electric, natural gas and/or other fossil fuel consumption and GHG emissions (use appropriate emissions factor from Attachment 8 of the grant solicitation) of the equipment/process/system(s)/sub-system(s) that are to be upgraded and/or replaced and/or modified.
  - Ensure installation of sub-metering equipment and data loggers for pre/post data analysis.
- Prepare and provide a detailed *M&V Plan* for each project demonstration site to include but not be limited to:
  - A description of the monitoring equipment and instrumentation which will be used.
  - A description of the key input parameters and output metrics that will be measured.
  - A description of the M&V protocol and analysis methods to be employed.
  - A description of the independent, third-party M&V services to be employed, if applicable.
- Perform three months (or a shorter period as approved in writing by the CAM) of pre-installation measurements (and calculations) based on the M&V protocol for pre-installation.
- Prepare and provide a *Pre-Installation M&V Findings Report* for each demonstration site that includes M&V protocol, pre-install measurements (and calculations), analysis, and results performed in this task.
- Develop M&V protocol for ***post-installation*** measurements (and calculations) of:
  - Electric, natural gas and/or other fossil fuel consumption and GHG emissions (use appropriate emissions factor from Attachment 8 of the grant solicitation) of the equipment/process/system(s)/sub-system(s) that will be upgraded and/or replaced and/or modified
- Perform at least 12 months (or a shorter period as approved in writing by the CAM) of post-installation measurements based on M&V protocol for post-installation.
- Provide a summary of post-installation M&V progress in Progress Report(s) (see subtask 1.5) which shall include but not be limited to:
  - A narrative on operational highlights from the reporting period, including any stoppages in operation and why; and
  - A summary of M&V findings from the reporting period.
- Analyze post-installation electrical, natural gas and/or other fossil fuel consumption and GHG emissions.

## Exhibit A Scope of Work Rich Products Corporation

- Prepare and provide a *Post-Installation M&V Findings Report* for each demonstration site that includes M&V protocol, pre and post-install measurements (and calculations), analysis, and results performed in this task. Results should at a minimum report on the reduction of electricity, natural gas and/or other fossil fuel usage and reductions of GHG emissions that directly result from this project.
- Provide all key assumptions used to estimate and determine energy and GHG reductions (and additions, if applicable).
- Provide all key assumptions used to estimate projected benefits, including targeted market sector (e.g., population and geographic location), projected market penetration, baseline and projected energy use and cost, operating conditions, and emission reduction calculations.

### Products:

- M&V Plan (draft and final)
- Pre-Installation M&V Findings Report (*draft and final*)
- Post-Installation M&V Findings Report(s) (*draft and final*)

### **TASK 5 TECHNOLOGY/KNOWLEDGE TRANSFER ACTIVITIES (*Mandatory task*)**

The goal of this task is to make the knowledge gained, project results, and lessons learned available to the public and key decision-makers.

### **The Recipient shall:**

- Complete and update the project profile on the CEC's public online project and recipient directory on the [Energize Innovation website \(www.energizeinnovation.fund\)](http://www.energizeinnovation.fund), and provide *Documentation of Project Profile on EnergizeInnovation.fund*, including the profile link, as determined by the CAM.
- 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 \(www.energizeinnovation.fund\)](http://www.energizeinnovation.fund), and provide *Documentation of Organization Profile on EnergizeInnovation.fund*, including the profile link, as determined by the CAM.
- When directed by the CAM, develop *Presentation Materials* to be presented at a CEC sponsored conference/workshop(s) on the project.
- When directed by the CAM, participate in annual symposium(s) sponsored by the 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:

- Documentation of Project Profile on EnergizeInnovation.fund
- Documentation of Organization Profile on EnergizeInnovation.fund
- Presentation Materials (*draft and final*)
- High Quality Digital Photographs

## **V. PROJECT SCHEDULE**

Please see the attached Excel spreadsheet.