

GRANT REQUEST FORM (GRF)



New Agreement ARV-16-022 (To be completed by CGL Office)

600 Fuels and Transportation Division		Andrew Hom	27	916-651-3000
Tracy Renewable Energy			27-5349949	
The Tracy Integrated Campus: Renewable Ethanol from Sugar Beets				
	06 / 01 / 2017	12 / 31 / 2019	\$ 5,179,885	

ARFVTP agreements \$75K and under delegated to Executive Director.

Proposed Business Meeting Date	04 / 27 / 2017	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Andrew Hom	Time Needed:	5 minutes

Please select one list serve. Altfuels (AB118- ARFVTP)

Agenda Item Subject and Description

Proposed resolution adopting California Environmental Quality Act Findings for Tracy Renewable Energy's Tracy Integrated Campus: Renewable Ethanol from Sugar Beets Project, and approving Agreement ARV-16-022 with Tracy Renewable Energy.

a. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that, based on the lead agency City of Tracy's December 2011 Initial Study and Mitigated Negative Declaration, and September 2012 Addendum to the Initial Study and Mitigated Negative Declaration for the Tracy Desalination and Green Energy Project, the work under the proposed project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated.

b. TRACY RENEWABLE ENERGY. Proposed resolution approving Agreement ARV-16-022 with Tracy Renewable Energy for a \$5,179,885 grant to design, build, and operate an over 15 million diesel gallon equivalent (DGE) per year ethanol facility, located at a developing integrated renewable energy and water management campus in Tracy, California. The proposed ethanol facility will utilize locally grown sugar beets as a feedstock and will produce an ultra-low carbon fuel with a carbon intensity value of at least 37.73 gCO₂eg/MJ and reduce greenhouse gas emissions by 129,919 MT CO₂e per year.

1. Is Agreement considered a "Project" under CEQA?
 Yes (skip to question 2) No (complete the following (PRC 21065 and 14 CCR 15378)):
 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:
 a) Agreement **IS** exempt. (Attach draft NOE)
 Statutory Exemption. List PRC and/or CCR section number: _____
 Categorical Exemption. List CCR section number: _____
 Common Sense Exemption. 14 CCR 15061 (b) (3)
 Explain reason why Agreement is exempt under the above section:

b) Agreement **IS NOT** exempt. (Consult with the legal office to determine next steps.)
 Check all that apply
 Initial Study Environmental Impact Report
 Negative Declaration Statement of Overriding Considerations
 Mitigated Negative Declaration

GRANT REQUEST FORM (GRF)



Legal Company Name:	Budget
See Attached	\$
	\$
	\$ 0

Legal Company Name:

Funding Source	Funding Year of Appropriation	Budget List No.	Amount
ARFVTP	15/16		\$5,179,885
Funding Source			\$
R&D Program Area:	Select Program Area		\$5,179,885
Explanation for "Other" selection			
Reimbursement Contract #:		Federal Agreement #:	

Name:	Paul Koehler	Name:	Frank Schubert
Address:	400 Capitol Mall, Suite 206	Address:	P.O. Box 583
City, State, Zip:	Sacramento, CA, 95814	City, State, Zip:	Tracy, California 95378
Phone:	916-403-2790	Fax:	- -
E-Mail:	therub9@aol.com	E-Mail:	therub9@aol.com

<input checked="" type="checkbox"/> Competitive Solicitation <input type="checkbox"/> First Come First Served Solicitation	Solicitation #: GFO-15-606
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1. Exhibit A, Scope of Work	<input checked="" type="checkbox"/> Attached
2. Exhibit B, Budget Detail	<input checked="" type="checkbox"/> Attached
3. CEC 105, Questionnaire for Identifying Conflicts	<input checked="" type="checkbox"/> Attached
4. Recipient Resolution	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> Attached
5. CEQA Documentation	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> Attached

Agreement Manager _____ Date _____ Office Manager _____ Date _____ Deputy Director _____ Date _____

Subcontractor

Budget

The Grant Farm	\$95,000
Pacific Ethanol Industries	\$10,359,770 (Match Only)
Barton Malow Company	\$4,000,000 (Match Only)
Bibb Engineering	\$900,000 (Match Only)
Collins Electric	\$2,989,328 (Match Only)

Exhibit A SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2	X	Procurement, Installation, and Integration
3		Commissioning and Startup Operations
4	X	Commercial Operations
5		Data Collection and Analysis

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Frank Schubert – Tracy Renewable Energy	Grant Farm	
2	Paul Koehler – Pacific Ethanol	Pacific Ethanol	
3	Paul Koehler – Pacific Ethanol	Pacific Ethanol	
4	Frank Schubert- Tracy Renewable Energy	Pacific Ethanol Grant Farm	
5	Frank Schubert- Tracy Renewable Energy	Pacific Ethanol	

GLOSSARY

Specific terms and acronyms used throughout this scope of work are defined as follows:

Term/ Acronym	Definition
ARFVTP	Alternative and Renewable Fuel and Vehicle Technology Program
CAM	Commission Agreement Manager
CPR	Critical Project Review
DAC	Disadvantaged Community
DGE	Diesel Gallon Equivalent
FTD	Fuels and Transportation Division
MGY	Million Gallons Per Year
PIIRA	Petroleum Industry Information Reporting Act

Term/ Acronym	Definition
Recipient	Tracy Renewable Energy

Background

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). The statute authorizes the California Energy Commission (Energy Commission) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state’s climate change, clean air, and alternative energy policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the ARFVTP through January 1, 2024. The ARFVTP has an annual budget of approximately \$100 million and provides financial support for projects that:

- Reduce California’s use and dependence on petroleum transportation fuels and increase the use of alternative and renewable fuels and advanced vehicle technologies.
- Produce sustainable alternative and renewable low-carbon fuels in California.
- Expand alternative fueling infrastructure and fueling stations.
- Improve the efficiency, performance and market viability of alternative light-, medium-, and heavy-duty vehicle technologies.
- Retrofit medium- and heavy-duty on-road and non-road vehicle fleets to alternative technologies or fuel use.
- Expand the alternative fueling infrastructure available to existing fleets, public transit, and transportation corridors.
- Establish workforce training programs and conduct public outreach on the benefits of alternative transportation fuels and vehicle technologies.

The Energy Commission issued solicitation GFO-15-606 for low carbon biofuel production facilities to increase production capacities. To be eligible for funding under GFO-15-606, projects must also be consistent with the Energy Commission’s ARFVTP Investment Plan, updated annually. In response to GFO-15-606, Tracy Renewable Energy (Recipient) submitted application 5, which was proposed for funding in the Energy Commission’s Notice of Proposed Awards on February 17, 2017. GFO-15-606 and Recipient’s application are hereby incorporated by reference into this Agreement in their entirety.

In the event of any conflict or inconsistency between the terms of the Solicitation and the terms of the Recipient's Application, the Solicitation shall control. In the event of any conflict or inconsistency between the Recipient's Application and the terms of the Energy Commission's Award, the Energy Commission's Award shall control. Similarly, in the event of any conflict or inconsistency between the terms of this Agreement and the Recipient's Application, the terms of this Agreement shall control.

Problem Statement:

California consumes 36.3 million barrels (1.5 billion gallons) of ethanol fuel annually yet only has the in-state capacity to produce 223 million gallons. In-state renewable ethanol production represents some of the lowest carbon intensity fuels available. The proposed project seeks to increase in-state, low-carbon renewable ethanol production through an innovative bioenergy campus to address the City of Tracy's needs for desalination of a high-salinity wastewater stream, an organic waste outlet through the use of walnut shells to provide heat and power to the integrated campus, and to support local farmers through the development of a high-value sugar beet market.

Goals of the Agreement:

The goals of this Agreement are:

- **Goal 1:** Demonstrate cost-effective in-state renewable ethanol production.
- **Goal 2:** Produce a low carbon renewable transportation fuel to displace the use of fossil gasoline in California.
- **Goal 3:** Support local agriculture by creating demand for high-value dedicated energy crop.
- **Goal 4:** Create new clean energy jobs in the Central Valley, specifically in Tracy, a region identified as a disadvantaged area community (DAC) by CalEnviroScreen.

Objectives of the Agreement:

The objectives of this Agreement are:

- **Objective 1:** Produce 26,000,000 gallons (15,570,611 diesel gallon equivalents (DGE)) per year of low-carbon renewable ethanol meeting ASTM D4806 specifications.
- **Objective 2:** Reach a conversion efficiency of approximately 29 gallons of ethanol per ton of sugar beets.
- **Objective 3:** Support 20,000 acres per year of local farming of high-value sugar beets.
- **Objective 4:** Produce a product with a ultra-low carbon intensity (CI) score, with a target of at least 37.73 gCO₂e/MJ (carbon dioxide equivalent (gCO₂e) per megajoule (MJ)).

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement. The CAM shall designate the date and location of this meeting and provide an agenda to the Recipient prior to the meeting.

The Recipient shall:

- Attend a “Kick-Off” meeting with the Commission Agreement Manager, the Grants Officer, and a representative of the Accounting Office. The Recipient shall bring its Project Manager, Agreement Administrator, Accounting Officer, and others designated by the Commission Agreement Manager to this meeting.
- Discuss the following administrative and technical aspects of this Agreement:
 - Agreement Terms and Conditions
 - Critical Project Review (Task 1.2)
 - Match fund documentation (Task 1.6) No reimbursable work may be done until this documentation is in place.
 - Permit documentation (Task 1.7)
 - Subcontracts needed to carry out project (Task 1.8)
 - The CAM’s expectations for accomplishing tasks described in the Scope of Work
 - An updated Schedule of Products and Due Dates
 - Monthly Progress Reports (Task 1.4)
 - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
 - Final Report (Task 1.5)

Recipient Products:

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

CPRs provide the opportunity for frank discussions between the Energy Commission and the Recipient. The goal of this task is to determine if the project should continue to receive Energy Commission funding to complete this Agreement and to identify any needed modifications to the tasks, products, schedule or budget.

The Commission Agreement Manager may schedule CPR meetings as necessary, and meeting costs will be borne by the Recipient.

Meeting participants include the CAM and the Recipient and may include the Commission Grants Officer, the Fuels and Transportation Division (FTD) biofuel lead, other Energy Commission staff and Management as well as other individuals selected by the CAM to provide support to the Energy Commission.

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the Energy Commission, but they may take place at another location.
- Send the Recipient the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on both match funding and permits.
- Conduct and make a record of each CPR meeting. Prepare a schedule for providing the written determination described below.
- Determine whether to continue the project, and if continuing, whether or not modifications are needed to the tasks, schedule, products, and/or budget for the remainder of the Agreement. Modifications to the Agreement may require a formal amendment (please see section 8 of the Terms and Conditions). If the CAM concludes that satisfactory progress is not being made, this conclusion will be referred to the Lead Commissioner for Transportation for his or her concurrence.
- Provide the Recipient with a written determination in accordance with the schedule. The written response may include a requirement for the Recipient to revise one or more product(s) that were included in the CPR.

The Recipient shall:

- Prepare a CPR Report for each CPR that discusses the progress of the Agreement toward achieving its goals and objectives. This report shall include recommendations and conclusions regarding continued work of the projects. This report shall be submitted along with any other products identified in this scope of work. The Recipient shall submit these documents to the CAM and any other designated reviewers at least 15 working days in advance of each CPR meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

CAM Products:

- Agenda and a list of expected participants
- Schedule for written determination
- Written determination

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

- Meet with Energy Commission staff to present the findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement.

This meeting will be attended by, at a minimum, the Recipient, the Commission Grants Office Officer, and the Commission Agreement Manager. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be two separate meetings at the discretion of the Commission Agreement Manager.

The technical portion of the meeting shall present an assessment of the degree to which project and task goals and objectives were achieved, findings, conclusions, recommended next steps (if any) for the Agreement, and recommendations for improvements. The Commission Agreement Manager will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the Commission Agreement Manager and the Grants Officer about the following Agreement closeout items:

- What to do with any equipment purchased with Energy Commission funds (Options)
- Energy Commission's request for specific "generated" data (not already provided in Agreement products)
- Need to document Recipient's disclosure of "subject inventions" developed under the Agreement
- "Surviving" Agreement provisions
- Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Agreement.

Products:

- Written documentation of meeting agreements
- Schedule for completing closeout activities

Task 1.4 Monthly Progress Reports

The goal of this task is to periodically 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 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, and to form the basis for determining whether invoices are consistent with work performed.

The Recipient shall:

- Prepare a Monthly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Each progress report is due to the Commission Agreement Manager within 10 days of the end of the reporting period. The recommended specifications for each progress report are contained in Section 6 of the Terms and Conditions of this Agreement.

- In the first Monthly Progress Report and first invoice, document and verify match expenditures and provide a synopsis of project progress, if match funds have been expended or if work funded with match share has occurred after the notice of proposed award but before execution of the grant agreement. If no match funds have been expended or if no work funded with match share has occurred before execution, then state this in the report. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.

Product:

- Monthly Progress Reports

Task 1.5 Final Report

The goal of the Final Report is to assess the project's success in achieving the Agreement's goals and objectives, advancing science and technology, and providing energy-related and other benefits to California.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, results, and advancements in science and technology; to present a public assessment of the success of the project as measured by the degree to which goals and objectives were achieved; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations for further projects and improvements to the FTD project management processes.

The Final Report shall be a public document. If the Recipient has obtained confidential status from the Energy Commission and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

The Recipient shall:

- Prepare an Outline of the Final Report, if requested by the CAM.
- Prepare a Final Report following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit one bound copy of the Final Report with the final invoice.

Products:

- Outline of the Final Report, if requested
- Draft Final Report
- Final Report

Task 1.6 Identify and Obtain Matching Funds

The goal of this task is to ensure that the match funds planned for this Agreement are obtained for and applied to this Agreement during the term of this Agreement.

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. Although the Energy Commission budget for this task will be zero dollars, the Recipient may utilize match funds for this task. Match funds shall be spent concurrently or in advance of Energy Commission funds for each task during the term of this Agreement. Match funds must be identified in writing and the associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the Commission Agreement Manager at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the Energy Commission awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the Energy Commission awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
 - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
 - Amount of each in-kind contribution, a description, documented market or book value, and its 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 shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the Commission Agreement Manager if during the course of the Agreement additional match funds are received.
- Notify the Commission Agreement Manager within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

Products:

- A letter regarding match funds or stating that no match funds are provided
- Copy(ies) of each match fund commitment letter(s) (if applicable)
- Letter(s) for new match funds (if applicable)
- Letter that match funds were reduced (if applicable)

Task 1.7 Identify and Obtain Required Permits

The goal of this task 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. Although the Energy Commission budget for this task will be zero dollars, the Recipient shall budget match funds for any expected expenditures associated with obtaining permits. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the Commission Agreement Manager at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies the:
 - Type of permit
 - Name, address and telephone number of the permitting jurisdictions or lead agencies
 - The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule and the copies of the permits. The implications to the Agreement 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 the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the Commission Agreement Manager.
- As permits are obtained, send a copy of each approved permit to the Commission Agreement Manager.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the Commission Agreement Manager within 5 working days. Either of these events may trigger an additional CPR.

Products:

- Letter documenting the permits or stating that no permits are required
- A copy of each approved permit (if applicable)
- Updated list of permits as they change during the term of the Agreement (if applicable)
- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable)
- A copy of each final approved permit (if applicable)

Task 1.8 Obtain and Execute Subcontracts

The goal of this task is to ensure quality products and to procure subcontractors required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement policies and procedures. It will also provide the Energy Commission an opportunity to review the subcontracts to ensure that the tasks are consistent with this Agreement, and that the budgeted expenditures are reasonable and consistent with applicable cost principles.

The Recipient shall:

- Manage and coordinate subcontractor activities.
- Submit a draft of each subcontract required to conduct the work under this Agreement to the Commission Agreement Manager for review.
- Submit a final copy of the executed subcontract.
- If Recipient decides to add new subcontractors, then the Recipient shall notify the CAM.

Products:

- Draft subcontracts
- Final subcontracts

TECHNICAL TASKS**TASK 2 PROCUREMENT, INSTALLATION, AND INTEGRATION**

The goal of this task is to complete the construction activities related to the renewable ethanol facility. This task will have detailed subtasks and milestones consistent with traditional construction best-management practices, including equipment and material acquisition and installation timelines. The task will culminate with the completion of the facility construction.

The Recipient shall:

- Prepare and provide to the CAM a *Procurement Plan* for the renewable ethanol facility that will detail the process for procurement of equipment, materials, and services in a manner that provides transparency into the selection process and the rationale for optimizing the quality of services provided with price. The *Procurement Plan* will include, but is not limited to:

- A description of the bid packages to be assembled.
- A methodology for receiving and evaluating responses.
- Execute the *Procurement Plan*.
- Prepare and provide to the CAM a *Procurement Report* for the renewable ethanol facility that will detail the selection process and justification for the service providers selected. The *Procurement Report* will include, but is not limited to:
 - A list of respondents to bid packages.
 - A rationale for the selected service providers.
- Prepare and provide to the CAM a *Construction Plan* for the renewable ethanol facility that will outline the budget and schedule for the completion of all construction and installation activities. The *Construction Plan* will include, but is not limited to:
 - A list of construction and installation milestones.
 - A Gantt chart and detailed project schedule.
 - A description of best management practices to be utilized.
 - A risk mitigation strategy.
 - A plan for quality control and quality assurance.
- Prepare and provide to the CAM a *Written Notification of Site Preparation* for the renewable ethanol facility that will notify the CAM that the site has been prepared to initiate construction related activities.
- Implement the *Construction Plan*.
- Prepare and provide to the CAM a *Major Project Change List* for the renewable ethanol facility that will identify any major project changes that occur after the *Construction Plan* is implemented. The *Major Project Change List* will be updated on an as needed basis and will include, but is not limited to:
 - A description of the scope of the challenge necessitating a material change in the *Construction Plan*.
 - A solution to address the challenge and rationale for the proposed solution.
 - An update, as necessary, to the milestones and Gantt chart to reflect the new approach.
- Prepare and provide to the CAM a *Construction Report* for the renewable ethanol facility that will evaluate the actual construction activities compared to the *Construction Plan*. The *Construction Report* will include, but is not limited to:
 - A final schedule of completed milestones.
 - A description of lessons learned.
 - A summary of major project changes.

- Prepare and provide to the CAM a *Written Notification of Completion of Construction and Installation* for the renewable ethanol facility that will notify the CAM that construction and installation activities have been completed.

Products:

- Procurement Plan
- Procurement Report
- Construction Plan
- Written Notification of Site Preparation
- Major Project Change List
- Construction Report
- Written Notification of Completion of Construction and Installation

[CPR WILL OCCUR DURING THIS TASK. See Task 1.2 for details.]

TASK 3 COMMISSIONING AND STARTUP OPERATIONS

The goal of this task is to complete the commissioning of the renewable ethanol facility in preparation for the commencement of commercial operations. Equipment commissioning is an important step to validate the successful performance and integration of the facility's components. The commissioning process will include a detailed list of components to be tested and validated, a detailed checklist of activities, and a comprehensive results and response document.

The Recipient shall:

- Prepare and provide to the CAM a *Cold Testing Plan* for the renewable ethanol facility that will detail the process, deliverables, and milestones associated with the cold testing of the renewable ethanol facility. The *Cold Test Plan* will include, but is not limited to:
 - A description of the equipment to be tested.
 - A description of the methodology to test the identified equipment.
 - A list of goals and objectives for the test.
 - A description of the quality control and quality assurance practices for the test methodology.
- Implement *Cold Testing Plan*.
- Prepare and provide to the CAM a *Cold Testing Report* for the renewable ethanol facility that will evaluate the cold test results. The *Cold Testing Report* will include, but is not limited to:
 - A description of the results of the cold test for the identified equipment.
 - A description of any major changes that were made based on findings during the cold testing.

- Prepare and provide to the CAM a *Hot Testing Plan* for the renewable ethanol facility that will detail the process, deliverables, and milestones associated with the hot testing of the renewable ethanol facility. The *Hot Testing Plan* will include, but is not limited to:
 - A description of the equipment to be tested.
 - A description of the methodology to test the identified equipment.
 - A list of goals and objectives for the test.
 - A description of the quality control and quality assurance practices for the test methodology.
- Implement *Hot Testing Plan*.
- Prepare and provide to the CAM a *Hot Testing Report* for the renewable ethanol facility that will evaluate the hot test results. The *Hot Testing Report* will include, but is not limited to:
 - A description of the results of the hot test for the identified equipment.
 - A description of any major changes that were made based on findings during the hot testing.
- Prepare and provide to the CAM a *Written Notification of Completion of Commissioning* for the renewable ethanol facility that will notify the CAM that commissioning activities have been completed and that the plant is ready to commence commercial operations.

Products:

- Cold Testing Plan
- Cold Testing Report
- Hot Testing Plan
- Hot Testing Report
- Written Notification of Completion of Commissioning

Task 4 COMMERCIAL OPERATIONS

The goal of this task is to commercially operate the ethanol facility.

The Recipient shall:

- Initiate commercial operation of the upgraded facility. Prepare a signed letter *Notification of Commercial Operation*, in which Recipient will notify the CAM the date of the initiation of commercial operation of the project.
- Operate for a minimum of 6 months.
- Collect operation data, including feedstock inputs, ethanol production rate, and other parameters as discussed under Task 5.

- Present operation data monthly, numerically and graphically but without written analysis, in an *Ethanol Performance Report*.
- Document Recipient's strategy for achieving and maintaining full production at the facility over a 5-year operation period in the *Full Commercial Production Strategy Report*.

Products:

- Notification of Commercial Operation
- Ethanol Performance Report
- Full Commercial Production Strategy Report

[CPR WILL OCCUR DURING THIS TASK. See Task 1.2 for details.]

Task 5 DATA COLLECTION AND ANALYSIS

The goal of this task is to collect operational data from the project, to analyze that data for economic and environmental impacts, and to include the data and analysis in the Final Report.

The Recipient shall:

- Develop a data collection plan.
- Troubleshoot any issues identified.
- Collect at least six months of data, including:
 - Throughput, usage, and operations data
 - Normal operating hours, up time, down time, and explanations of variations
 - Feedstock supply summary
 - Maximum capacity of the new fuel production system in diesel gallon equivalents (DGE) and ordinary units
 - Gallons of gasoline and/or diesel fuel displaced (with associated mileage information), along with value converted into DGE
 - Record of wastes from production processes (waste water, solid waste, criteria emissions, etc.)
 - Expected air emissions reduction, for example:
 - Non-methane hydrocarbons
 - Oxides of nitrogen
 - Non-methane hydrocarbons plus oxides of nitrogen
 - Particulate Matter
 - Formaldehyde

- Duty cycle of the current fleet and the expected duty cycle of future vehicle acquisitions
- Specific jobs and economic development resulting from this project
- Finished fuel price
- Analysis of total facility costs, operation and maintenance costs, marginal abatement costs
- Comply with the Petroleum Industry Information Reporting Act (PIIRA) and complete CEC Form M810E and CEC Form M13 on a monthly basis for submission to the California Energy Commission's PIIRA Data Collection Unit.
- Provide a written record of registering with the Low Carbon Fuel Standard and Renewable Fuel Standard programs.
- Identify any current and planned use of renewable energy at the facility.
- Describe any energy efficiency measures used in the facility that may exceed Title 24 standards in Part 6 of the California Code Regulations.
- Provide data on potential job creation, economic development, and increased state revenue as a result of expected future expansion.
- Provide a quantified estimate of the project's carbon intensity values or provide an Air Resources Board approved pathway carbon intensity.
- Estimate annual life-cycle greenhouse gas emission reduction.
- Compare any project performance and expectations provided in the proposal to Energy Commission with actual project performance and accomplishments.
- Collect data, information, and analysis described above and include in the Final Report.

Products:

- Data collection information and analysis will be included in the Final Report.

Memorandum

To: **Robert B. Weisenmiller**
Karen Douglas
David Hochschild
Andrew McAllister
Janea A. Scott

Date : **April 26, 2017**
Telephone: **916-651-3000**

From : **Andrew Hom**

Subject: **California Environmental Quality Act (CEQA) Analysis for ARV-16-022 – Tracy Renewable Energy Ethanol from Sugar Beets Project**

I am an Air Resources Engineer in the Fuels and Transportation Division of the California Energy Commission. I have reviewed lead agency City of Tracy's December 2011 Initial Study and Mitigated Negative Declaration (IS/MND), and September 2012 Addendum to the Initial Study and Mitigated Negative Declaration (Addendum IS/MND) for the Tracy Desalination and Green Energy Project, which was adopted by the Tracy City Council on September 4, 2012, and proposed agreement ARV-16-022 (Agreement) including the scope of work for the Agreement. I am not aware of any evidence which suggests that the Initial Study, Mitigated Negative Declaration, and Addendum to the Initial Study and Mitigated Negative Declaration are inadequate. Based on my review, it is my opinion that the work to be performed under the Agreement along with the mitigation measures to be implemented in the IS/MND and Addendum IS/MND will mitigate the environmental impacts to less than significant levels. Based on my review and consideration the IS/MND and Addendum IS/MND, it is my independent and professional opinion that, since the CEQA documents have been finalized, there have been no new project changes, and no new, additional, or increased significant environmental impacts have occurred. Furthermore, I have not identified any new information which would change the conclusions of City of Tracy's IS/MND and Addendum IS/MND, or render those conclusions inadequate. It is also my independent and professional opinion that the work to be performed under the proposed Agreement falls within the scope of the IS/MND or Addendum IS/MND, and that the Agreement will not result in any new significant environmental impacts. Finally, I have not identified any new mitigation measures, within the Commission's authority, that would lessen or further mitigate the impacts of the Tracy Desalination and Green Energy Project. The reasons for my conclusions are as follows:

The proposed project will design, build, and operate an over 15 million diesel gallon equivalent per year ethanol facility, located at a developing integrated renewable energy and water management campus in Tracy, California. The larger integrated campus will consist of three independent but interrelated facilities: a desalination plant that will process up to 1.2 million gallons per day of high-salinity wastewater from a local cheese processing plant, a renewable electricity facility that utilizes local walnut shells, and the proposed ethanol facility, using locally grown sugar beets as a feedstock. The synergistic and integrated facilities will efficiently produce low-carbon

fuel, renewable steam and electricity and clean water, and address three important management issues across the greater Tracy area: wastewater treatment, organic waste management, and high-value farming. The proposed ethanol facility will produce an ultra-low carbon fuel with a carbon intensity value of at least 37.73 gCO₂e/MJ. The scope of work of the proposed agreement has no omissions from or conflicts of information with the IS/MND or Addendum IS/MND. Further discussion of environmental factors with environmental impacts listed as “less than significant with mitigation incorporated” continues below.

Air Quality

Construction-related emissions are subject to the Mitigation Measures 3 and 4 from the December 2011 IS/MND, requiring the use of best management practices for construction and grading activities, as required by the San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule VIII. Implementation of these mitigations shall occur during all grading or site clearing activities. The SJVAPCD shall be responsible for monitoring. After mitigation measures, there will be less than significant impacts on air quality.

Biological Resources

The IS/MND requires the project to implement Mitigation Measures 5 and 6, which require the project to obtain coverage under the San Joaquin Multi Species Conservation Plan, and to ensure that construction activities do not adversely impact burrowing owls. Implementation of these mitigation measures shall occur prior to grading or site clearing activities. The City of Tracy shall be responsible for monitoring and a qualified biologist shall conduct surveys and relocate owls as required. After mitigation measures, impacts on biological resources would be reduced to a less than significant level.

Cultural Resources

The IS/MND requires the project to implement Mitigation Measure 7, which includes standard measures that must be implemented if a previously unknown cultural or historical resource is encountered during site grading and construction activities. This mitigation would reduce potential impacts on cultural resources to a less than significant level.

Geology and Soils

The IS/MND requires the project to implement Mitigation Measures 8, 9, and 11. Mitigation Measure 8 requires the preparation of a design-level geotechnical engineering study to identify and address potential soil hazards prior to construction. Mitigation Measure 9 includes the requirement for soil treatments and possibly replacements during subsurface construction activities, prior to the placement of building foundations. Mitigation Measure 11 requires the implementation of various best management practices that would reduce the potential for disturbed soils and ground surfaces to result in erosion and sediment discharge into adjacent surface waters during construction activities. Implementation of these mitigation measures would reduce potential impacts on geology and soils to a less than significant level.

Hazards and Hazardous Materials

The IS/MND requires the project to implement Mitigation Measure 10, which includes the preparation of a Risk Management Plan (RMP) and/or Hazardous Materials Business Plan. The RMP summarizes the facility’s accidental release prevention program implementation activities, including: Maintenance, Hazard Review, Operating

Procedures, Training, Offsite Consequence Analysis, Incident Investigation, Emergency Response Program, and Compliance Audit. Implementation of Mitigation Measure 10 requires that the project applicant to prepare and submit an RMP to the San Joaquin County Environmental Compliance Division for review and approval prior to operation of the selective catalytic reducer system. Compliance with Mitigation Measure 10 would reduce risks associated with hazards and hazardous materials to a less than significant level.

Hydrology and Water Quality

The IS/MND requires the project to implement Mitigation Measure 11, which requires the preparation of a Storm Water Pollution Prevention Plan prior to site grading activities in order to protect surface water quality in the project area. The Storm Water Prevention Plan shall comply with the most current standards established by the Central Valley Regional Water Quality Control Board. Additionally, the project is subject to the requirements of Chapter 11.34 of the Tracy Municipal Code – Storm Water Management and Discharge Control. Implementation of Mitigation Measure 11 would reduce potential impacts on hydrology and water quality to a less than significant level.

In addition to the above described environmental factors, I agree with the City of Tracy's findings that the proposed project would have no impacts or less-than-significant environmental impacts for all other environmental factors listed in the IS/MND and Addendum IS/MND.



INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR THE

TRACY DESALINATION AND GREEN ENERGY PROJECT

SCH# _____

DECEMBER 2011

Prepared for:

City of Tracy
Department of Development and Engineering Services
333 Civic Center Plaza
Tracy, CA 95676

Prepared by:

De Novo Planning Group
4630 Brand Way
Sacramento, CA 95819
(916) 949-3231

D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



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INITIAL STUDY CHECKLIST

PROJECT TITLE

Tracy Desalination and Green Energy Project

LEAD AGENCY NAME AND ADDRESS

City of Tracy
333 Civic Center Plaza
Tracy, CA 95376

CONTACT PERSON AND PHONE NUMBER

Scott Claar, Associate Planner
Development and Engineering Services Department
City of Tracy
(209) 831-6400

PROJECT SPONSOR'S NAME AND ADDRESS

Tracy Renewable Energy LLC
860 Kennedy Place
Tracy, CA 95377

PURPOSE OF THE INITIAL STUDY

An Initial Study (IS) is a preliminary analysis which is prepared to determine the relative environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine if a project will have a significant adverse effect on the environment, thereby triggering the need to prepare a full environmental Impact Report (EIR). It also functions as an evidentiary document containing information which supports conclusions that the project will not have a significant environmental impact or that the impacts can be mitigated to a "Less Than Significant" or "No Impact" level. If there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, the lead agency shall prepare a Negative Declaration (ND). If the IS identifies potentially significant effects, but: (1) revisions in the project plans or proposals would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment, then a Mitigated Negative Declaration (MND) shall be prepared.

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the proposed Tracy Desalination and Green Energy Project (project) may have a significant effect upon the environment. This Initial Study also includes an analysis of the project's consistency with the Tracy General Plan and General Plan EIR to determine if the project would result in environmental impacts that were not addressed in the Tracy General Plan and General Plan EIR. Based upon the findings and mitigation measures contained within this report, a Mitigated Negative Declaration (MND) will be prepared.

PROJECT LOCATION AND SETTING

PROJECT LOCATION

The project site consists of approximately 237 acres located within the City's Sphere of Influence, immediately north of the Tracy City limits. The project site includes APN 212-160-05 (197 acres), APN 212-160-09 (27 acres), and a 13-acre area of APN 212-160-11.

The project site is bounded by Tracy Boulevard to the west, Arbor Avenue and industrial uses to the south, and agricultural lands to the north. Agra Trading, a biomass fuel recycling and trading company, is located on a portion of the project site. The site is bisected by West Sugar Road, which runs in an east-west direction. The project's regional location is shown in Figure 1 and the project area and site boundary are shown in Figure 2.

EXISTING SITE USES

The southwestern portion of the project site is currently in active agricultural production. The northern half of the project site consists of asphalt paved drying beds that were historically used for drying sugar beets. These drying beds are currently used for storage of biomass, silage and for drying agricultural byproducts. The project site was previously used by the Holly Sugar Company as a syrup production facility, and all that remains of the previous structures are the building foundations. An irrigation canal, used to convey non-potable water, is located between the drying beds and an agricultural drainage ditch is located along the northern boundary of the project site. The project site is within an area of land owned by the City of Tracy, locally known as the Holly Sugar property.

SURROUNDING LAND USES

The northern and western boundaries of the project site are adjacent to agricultural lands in active agricultural production. The southern boundary of the project site is adjacent to primarily industrial uses with some commercial uses. These uses include, but are not limited to a mini-storage facility, an equipment rental facility, and automotive repair facilities. The City of Tracy Wastewater Treatment Plant (WWTP) is located immediately southeast of the project site. Lands to the east of the project site are currently used for industrial operations. An existing rail spur is located immediately east of the project site and terminates on the project site.

GENERAL PLAN AND ZONING DESIGNATIONS

The majority of the project site is designated as Agricultural (AG) by both the City of Tracy General Plan Land Use Designations Map and the San Joaquin County General Plan Land Use Designations Map. A portion of APN 212-160-11, located on 13 acres in the southeast portion of the site is designated Industrial by the City and General Industrial by the County General Plan Land Use Maps.

The County zoning designation for the majority of the project site is Agriculture (AG-40), and General Industrial for the 13 acres southeast portion of the site. The project site does not have

an assigned zoning designation from the City of Tracy, as the project site is currently located outside of the City limits.

PROJECT DESCRIPTION

OVERVIEW

The following discussion provides an overview of the various components of the proposed project. Each project component and action is described in greater detail below.

The primary purpose of the proposed project is to construct and operate an approximately 1,200,000 gallon per day (gpd) desalination plant (Plant) in the City of Tracy. The desalination plant would process treated effluent currently generated by the Tracy WWTP to a quality that is suitable for discharge into the Sacramento San Joaquin Delta (Delta) and meets State standards for water quality discharge. The Tracy WWTP currently processes approximately 9,000,000 gpd of effluent. The WWTP discharges this treated effluent directly into the Delta. The WWTP's discharge currently contains salt in amounts that exceed the Delta salinity standards. Salinity in water is generally measured in Total Dissolved Solids (TDS). Project implementation would effectively remove salt from approximately 13 percent of the WWTP's effluent. The treated desalination water would then be blended back into the remaining WWTP effluent prior to discharge into the Delta. The newly blended and treated effluent will have lower salinity and will assist the City in compliance with all applicable Delta salinity standards.

The operation of the desalination plant will require a heat energy supply. The proposed project includes a biomass cogeneration energy production component. The biomass energy component would utilize available sources of biomass, primarily agricultural residuals and urban wood waste, within a 50-mile radius of the site. The biomass energy component would generate approximately 16.4 megawatt-hours (MW/hr) of electricity, 15 MW/hr of which would be distributed and sold to the local energy grid. The Plant will have one 250 MMBTU/hr igniter that will operate approximately 60 hours per year. The burner will operate for approximately 14 hours per start-up with an expected start-up occurring every 2.5-3 months.

The proposed project also includes actions to annex the entire project site into the City of Tracy, a General Plan Amendment to designate the entire project site Industrial, and pre-zoning of the site to Light Industrial (M1). The project would also involve three agreements between the City of Tracy and Tracy Renewable Energy LLC (TRE) related to the project. These agreements include a land lease/purchase agreement, a power purchase agreement and a water treatment agreement. These three agreements are described in greater detail below.

Land Lease/Purchase Agreement

The land lease/purchase agreement is an agreement to lease or sell up to 237 acres of City property to TRE. Approximately 13 acres would be leased or sold for construction of the biomass plant and water treatment facilities. This site is the property on the corner of Holly Drive and Arbor Drive, APN 212-160-11. This site is currently zoned Industrial and is vacant industrial land.

Approximately 80 acres would be leased or sold for fuel storage. This site is the property on the corner of Tracy Boulevard and Sugar Road, and includes portions of APNs 212-160-09 and 212-160-05. This site is currently zoned Agriculture and is currently used for biomass storage. The current tenants, Agra Trading and the Arnaudo Brothers, lease this property from the City. Agra Trading is interested in leasing this property for a longer term, either directly or as a sub-lease to TRE.

Approximately 144 acres would be leased or sold for a solar thermal project. This site is located between Holly Drive and Tracy Boulevard, and south of Sugar Road. This site includes a portion of APN 212-160-05. This site is currently zoned Agriculture and is currently an alfalfa field. The timing of the need for the solar thermal component of the project will be determined at a later date, after the biomass plant is in operation. The solar thermal component would provide an additional heat source for the project.

Power Purchase Agreement

The agreement will provide for the City to purchase up to 1 megawatt of electrical power generated by TRE. This power would be transmitted to the City's wastewater treatment plant (WWTP) by direct connection and would not utilize any PG&E facilities. The power would meet the electrical demand of the Tracy WWTP. It is anticipated that this power would be purchased at less than market rates to provide a benefit to City ratepayers.

Water Treatment Agreement

TRE will process up to 1.2 million gallons per day of City wastewater and return approximately 80% of this amount as distilled water. The distilled water would be used to dilute the City WWTP effluent in order to reduce salinity.

SYSTEM DESCRIPTION

The City of Tracy has recognized a technology developed by CST as an economically viable and commercially available solution to the salinity problem at the City's WWTP. The CST SteamBoy® process will intercept the effluent from the WWTP before it reaches the Delta and process it to near potable standards. The cleaned water will be returned to the WWTP to be blended with remaining WWTP effluent thereby reducing the TDS concentration.

In addition to purifying water from the WWTP, the project will also generate approximately 16.4 MW/hr of electricity, of which 15 MW/hr will be distributed to the grid where it will be purchased by the City of Tracy and a joint powers authority (JPA), which would include the Banta Carbona Irrigation District (BCID) and/or other entities. Power Purchase Agreements are currently being negotiated with both the City and JPA for the electrical output as well as an off-take agreement with the City for processing the WWTP effluent.

The Plant will deliver the electricity from a substation on the property to a 115 kva power line that crosses the project site. As of the date of this document preparation, the application to deliver the power to the line has been submitted to the California Independent System Operators (CAISO). CAISO is a non-profit public benefit corporation charged with operating the

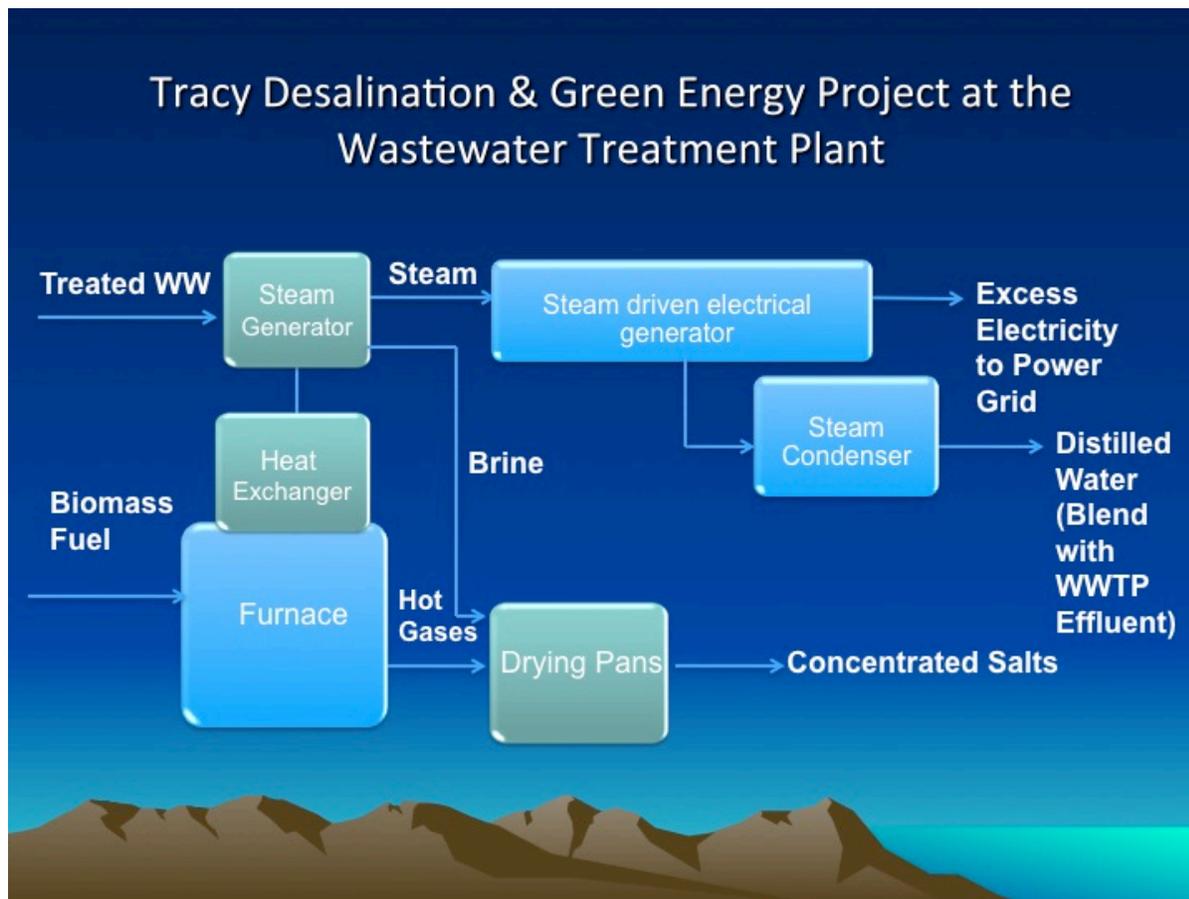
majority of California's high-voltage wholesale power grid. The project applicant will contract with Pacific Gas and Electric (PG&E) to deliver the electricity needs of the Plant, both during construction and initial operation as well as the delivery of the electricity generated by the Plant to the City and JPA.

The Plant will be designed using the latest commercially available components and equipment. The Plant will be very much like a modern biomass facility with the exception of the SteamBoy® steam generator system that allows for the use of the WWTP effluent as feed water. This advantage brings a new element to the production of electricity whereas conventional biomass plants consume large amounts of water for the production of electricity, the proposed Plant will produce large amounts of clean water in the process of making electricity.

A byproduct of the desalination process will be salt extracted from the treated effluent. It is anticipated that up to 1,400 tons per year of solid salt would be generated during project operations. This solid salt would be stored on-site in salt storage units, and would be removed from the project site via truck or rail on a monthly basis and delivered to commercial users and/or producers of salt and salt products.

THE CST PROCESS

The CST Plant will produce clean water and on-demand electricity by processing biomass fuel. The biomass is fed into the combustion unit where it gives up its heat to the heat exchanger. The heat exchanger transfers the combustion heat to a heat transfer oil that is continually circulated through the SteamBoy® steam generators. The SteamBoy® steam generators will produce the pressurized steam that is then directed to the electric generation units which produce electricity. The exhaust steam is then directed to either the cooling towers for condensation or to the drying pans where its heat is used to dry the solids that are extracted from the treated wastewater. This process is depicted in Exhibit 2-1 below.

EXHIBIT 2-1

The heart of the CST system is the SteamBoy® steam generators. The patent pending design of the SteamBoy® steam generators allow for the use of wastewater as a feed water source without the normal fouling associated with standard boilers. The SteamBoy® steam generators have the ability to separate the water from the solids in a way that allows for the solids to be removed easily from the boilers. The resulting distilled water is allowed to leave the top of the boilers as clean pressurized steam that is directed to electrical generation units before it is condensed back into distilled water. The distilled water will be returned to the WWTP. The process is continuous and can process the treated water to near potable clean water standards. CST SteamBoy steam generators are built for CST by Victory Energy, Inc of Collinsville, Oklahoma. All SteamBoy® products are inspected and ASME (American Society of Mechanical Engineers) certified. The CST biomass burner system is ultra clean firing. Recent source testing of the CST system at the Musco Olive Plant showed that the emissions from the CST system are the lowest of any bio-mass fired system in California.

FUEL SUPPLY

The Plant would burn woody biomass material as a heat source for project operations. It is anticipated that up to 200,000 bone-dry tons (BDT) of woody biomass fuel would be consumed

by the project on an annual basis. Biomass fuel used by the proposed project would come from four distinct biomass fuel sources:

- Agricultural byproducts, primarily almond and walnut shells;
- Urban/industrial wood waste;
- Tree service debris; and
- Orchard removals and prunings.

The project applicant estimates that the fuel mix will consist of approximately 30% almond shells, 30% walnut shells, and 40% wood (urban/industrial, tree service debris, and orchard removals/prunings).

Agricultural byproducts include nutshells (primarily almond and walnut), fruit pits and grape pomace generated during the processing of agricultural products.

Urban/Industrial wood waste consists of used lumber, trim, shipping pallets and other wood debris from construction and demolition activities and commercial and industrial wood recycling activities.

Tree service debris includes pruned branches, stumps and whole trees from municipal street and park maintenance activities, and well as materials from private sector tree removal and pruning services.

Orchard removals and prunings are generated on an annual or semi-annual basis throughout the project region. Mature orchards are regularly removed as crop yields decrease, and are replaced with young orchard stock or alternative orchard species.

All of the biomass fuel materials described above would be generated within a 50-mile radius of the project site. The project applicant has commissioned the preparation of a Biomass Fuel Survey, which indicates that there is a supply of 1.6 million dry tons annually of existing biomass fuel within a 50-mile radius of the proposed project.

The fuel supplies identified above represent existing fuel supplies that are currently generated and/or would continue to be generated regardless of the demand for biomass fuel generated by the proposed project. Project implementation would not result in the generation of additional biomass fuels or result in increased activities such as tree removal, construction/demolition, or increased generation of agricultural byproducts.

Forest materials such as slash, thinnings, or other in-forest biomass materials would not be used as a fuel supply for the proposed project. The proposed project would not burn wastes and residues such as animal wastes, remains or tallow, food wastes, recycled cooking oils, pure vegetable oils, or sludge derived from organic matter. Additionally, the proposed project would not burn tires, railroad ties or plastic, and the use Authority to Construct (ATC) permit for this facility, issued by the San Joaquin Valley Air Pollution Control District (SJVAPCD) will be

conditioned accordingly. Natural gas would be the only non-biogenic fuel used as necessary for starting up and shutting down the Plant and for flame stabilization.

FUEL DELIVERY

As described above, all biomass fuel for the proposed project would be procured from within a 50-mile radius of the project site. Fuel would be delivered to the project site via truck. In the future, there is the potential that rail may also be utilized for fuel deliveries.

It is anticipated that approximately 20 truck trips per day would be generated by fuel deliveries to the project site. Trucks delivering fuel to the project site would utilize eastbound and westbound Interstate 205, and exit on North MacArthur Drive to access the site via Arbor Avenue as shown on Figure 2.

All of the biomass fuel for the proposed project would be delivered by Agra Trading, which is an existing biomass fuel recycler and distributor, located on the project site. Fuel delivered from Agra Trading would either be delivered via truck, or via an on-site electric conveyor belt, which may be installed as a future phase of the proposed project.

FUEL STORAGE

The proposed project includes plans to store up to 200,000 BDT of woody biomass material in the northwestern portion of the project site where the Agra Trading operations currently occur. The biomass fuel would be stored in open piles and would be transported to the boiler on a continuous basis via truck and heavy machinery. Biomass fuel is currently stored on the site by Agra Trading, and project implementation is not anticipated to result in significant changes to the existing onsite biomass fuel storage volumes or practices.

UTILITIES

The project site currently has direct access to a 115 Kva power line that would be used for the distribution of excess electricity back to the local electrical grid. The site also currently has a 6-inch medium pressure natural gas line, which will supply natural gas to be used during startup of the boiler and for flame stabilization during operation. Vehicular access to the site would be provided via Arbor Avenue, located along the southeastern boundary of the site.

PROPOSED STRUCTURES

The site plan for the proposed Plant is shown in Figure 3. Figure 3 shows each proposed structure and component of the project and depicts the location and orientation of each Plant component.

SOLAR THERMAL ARRAYS

The proposed project includes plans for an alternate thermal heat energy supply that may be implemented in the future. While it is not currently known if solar thermal arrays would be used to supply thermal heat and energy for the proposed project, this future alternative is considered reasonably foreseeable, and is therefore addressed in this environmental document.

Approximately 100 acres of land, located immediately west of the Plant and south of the fuel storage area may be used to develop a solar thermal array system to provide heat and energy for the desalination plant. The solar thermal array would be constructed of approximately 4,011 mirrors that would direct sunlight and heat to a receiver that would heat the heat transfer oil, which would then be directed to the steam generators to fuel the desalination process. Each mirror would be approximately 17' wide and 20' long, and would be oriented along 320' rows. The maximum mirror height would be 10'.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The City of Tracy will be the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050.

This document will be used by the City of Tracy to take the following actions:

- Adoption of the Mitigated Negative Declaration (MND)
- Adoption of the Mitigation Monitoring and Reporting Program (MMRP)
- Approval of a General Plan Amendment to the Industrial (I) land use designation
- Approval of site rezoning / zoning to Light Industrial (M-1)
- Site Annexation to the Tracy City Limits
- Development review
- Land sale or lease agreement between the City of Tracy and CST
- Power purchase agreement between the City of Tracy and CST
- Water treatment agreement between the City of Tracy and CST
- Other related agreements

The following agencies may be required to issue permits or approve certain aspects of the proposed project:

- San Joaquin Local Agency Formation Commission (LAFCO) - Approval of annexation request.
- Central Valley Regional Water Quality Control Board (CVRWQCB) - Storm Water Pollution Prevention Plan (SWPPP) approval prior to construction activities.
- San Joaquin Valley Air Pollution Control District (SJVAPCD) - Approval of construction-related air quality permits and the Authority to Construct (ATC) permit.

- San Joaquin Council of Governments (SJCOG)- Approval of project application to include project within the boundaries of the San Joaquin County Multi-Species Habitat, Conservation, and Open Space Plan (SJMSCP).

PROJECT GOALS AND OBJECTIVES

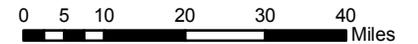
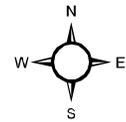
The City of Tracy has identified the following goals and objectives for the proposed project:

1. Develop and operate a desalination plant that will effectively remove salt from treated effluent generated by the Tracy WWTP to a level that will facilitate compliance with Delta salinity standards.
2. Develop a supply of renewable energy that is consistent with California's AB 32 Scoping Plan and California's Renewables Portfolio Standard.
3. Effectively utilize existing sources of biomass waste generated within 50 miles of the City of Tracy as fuel for the generation of a renewable energy supply.



Tracy Desalination and Green Energy Project

Fig. 1: Regional Map

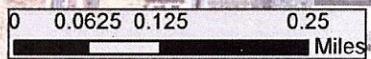
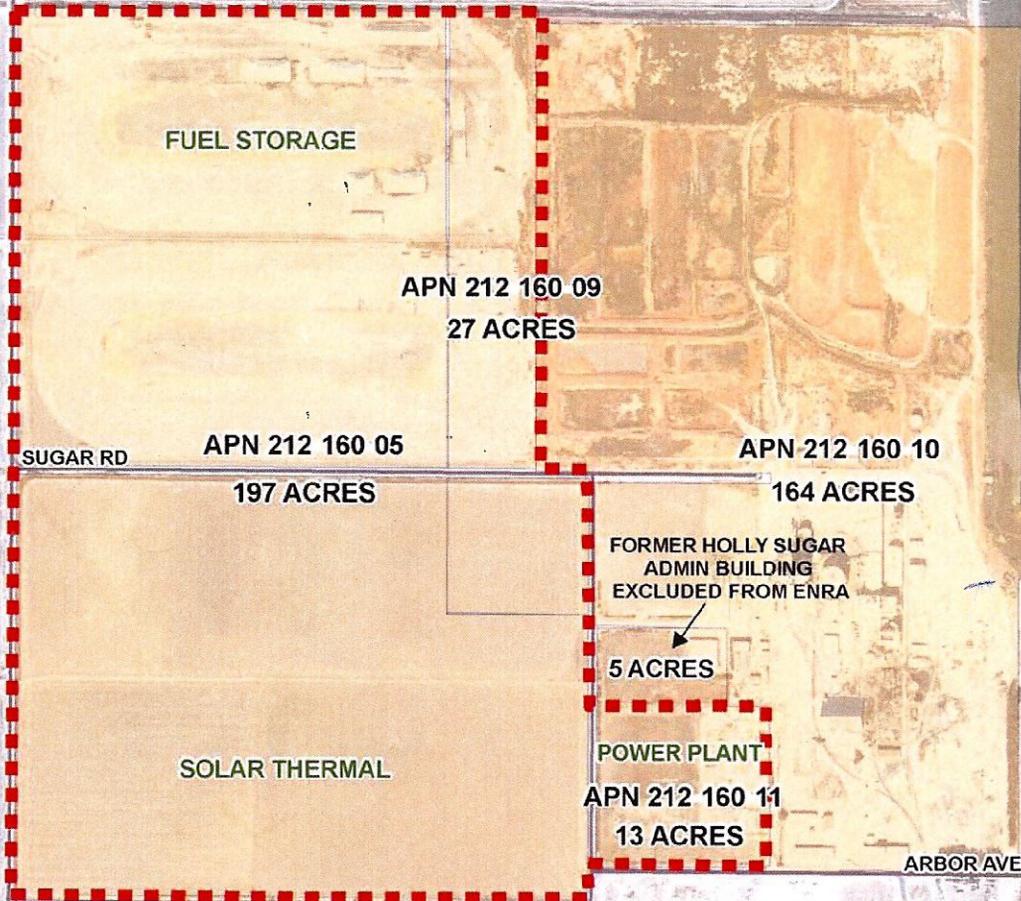


1:1,500,000

Data source: California Spatial Information Library
 Map date: October 26, 2011.

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City of Tracy Green Energy & Thermal Desalination Project Location Map/ Exhibit A



 Proposed Green Energy Project

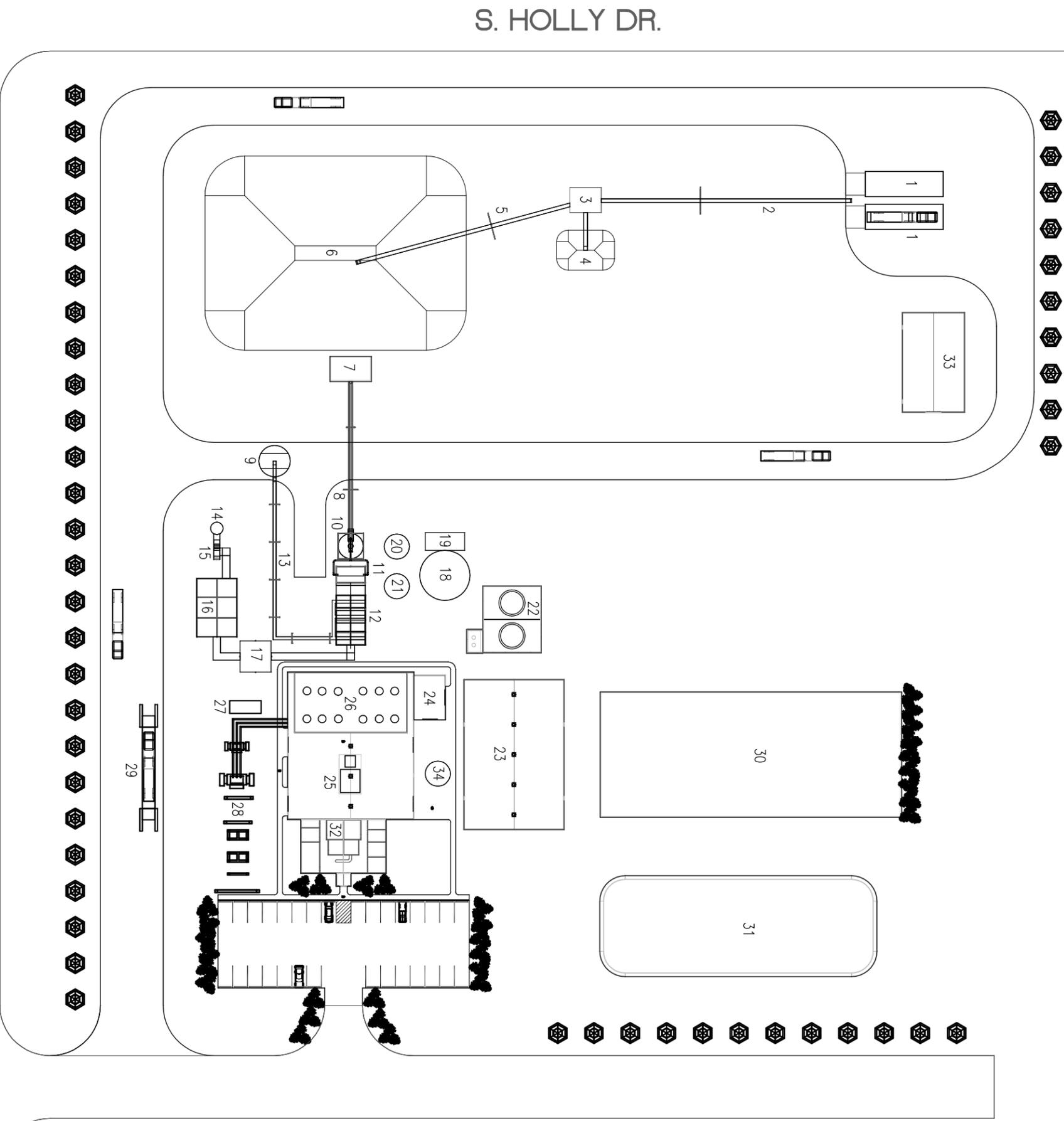
 APN Parcels

Vanessa Carrera 2.2011



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FIGURE 3



LEGEND

1. TRUCK UNLOADING STATION
2. RECEIVING CONVEYOR
3. TRANSFER HOUSE
4. OVERS PILE
5. STACKOUT CONVEYOR
6. FUEL STORAGE PILE
7. FUEL CONVEYOR LOADING PIT
8. MAIN FUEL CONVEYOR
9. ASH SILO
10. FUEL FEED SILO
11. FLUIDIZED BED HOT OIL HEATER #1
12. FLUIDIZED BED HOT OIL HEATER #2
13. FLYASH CONVEYOR
14. STACK
15. ID FAN
16. BAGHOUSE
17. SCR
18. FIRE/SERVICE WATER STORAGE TANK
19. FIRE PUMP HOUSE
20. HIF STORAGE TANK
21. FEEDWATER STORAGE TANK
22. COOLING TOWER
23. DRYING PANS
24. WORK SHOP
25. STEAM TURBINE GENERATOR
26. BOILERS #1-#12
27. DIESEL GENERATOR
28. SWITCHYARD
29. TRUCK SCALE
30. DRYING BEDS
31. RETENTION POND
32. OFFICE/ADMIN AREA
33. MAINTENANCE SHOP
34. PRODUCT WATER STORAGE TANK

**PRELIMINARY
NOT FOR CONSTRUCTION**

REV.	DESCRIPTION	BY	CHK	APP'D	DATE
B	ISSUED FOR REVIEW	JLS	LEB	JES	09/09/11
A	ISSUED FOR REVIEW	JLS	LEB	JES	08/26/11

COMBINED SOLAR TECHNOLOGIES, INC.

TRACY DESALINATION PLANT

DRAWN BY: APP DESIGNED BY: DW

CHECKED BY: JLS LEAD ENGR: JLS



PROJECT NO. 1101001

DWG. TITLE
SITE GENERAL ARRANGEMENT
SINGLE COMBUSTOR/TURBINE

DWG. NO. GA101B

ARBOR AVE

S. HOLLY DR.

1 SITE PLAN
SCALE 1"=50'-0"

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forest Resources		Air Quality
	Biological Resources		Cultural Resources		Geology/Soils
	Greenhouse Gasses		Hazards and Hazardous Materials		Hydrology/Water Quality
	Land Use/Planning		Mineral Resources		Noise
	Population/Housing		Public Services		Recreation
	Transportation/Traffic		Utilities/Service Systems		Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

EVALUATION INSTRUCTIONS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances).

- Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
 - 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
 - 9) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance

EVALUATION OF ENVIRONMENTAL IMPACTS:

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the Project.

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ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 18 environmental topic areas.

I. AESTHETICS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less Than Significant. The southern half of the project site is currently in active agricultural production. The northern half of the project site is occupied by Agra Trading, and contains open storage piles of biomass fuel and other industrial uses to support the existing biomass storage and distribution operations. An irrigation canal, used to convey non-potable water, is located along the northern boundary of the project site. The project site is within an area of land owned by the City of Tracy, known as the Holly Sugar property.

The project site is bounded by Tracy Boulevard to the west, Arbor Avenue and industrial uses to the south, and agricultural lands to the north. The site is bisected by West Sugar Road, which runs in an east-west direction.

The northern and western boundaries of the project site are adjacent to agricultural lands in active agricultural production. The southern boundary of the project site is adjacent to primarily industrial uses with some commercial uses. These uses include, but are not limited to a mini-storage facility, an equipment rental facility, and automotive repair facilities. The City of Tracy Wastewater Treatment Plan (WWTP) is located immediately southeast of the project site. Lands to the east of the project site are currently used for industrial operations, including biomass fuel storage and distribution. An existing rail spur is located immediately east of the project site and terminates on the project site.

The project site is not designated as a scenic vista by the City of Tracy General Plan or the San Joaquin County General Plan, nor does it contain any unique or distinguishing features that would qualify the site for designation as a scenic vista.

Implementation of the proposed project would not significantly change the existing visual character of the site, as much of the project site and the areas immediately adjacent to the site are used for agricultural and industrial purposes. Impacts related to a change in visual character are largely subjective and very difficult to quantify. People have different reactions to the visual quality of a project or a project feature, and what is considered “attractive” to one viewer may be considered “unattractive” to other viewers. The areas surrounding the City of Tracy to the north consist primarily of agricultural lands and industrial lands. Agricultural lands provide visual relief from urban and suburban developments, and help to define the character of a region. The loss of agricultural lands can have a cumulative impact on the overall visual character and quality of a region.

While the project would result in the removal of some agricultural lands in the project region, and the construction of the biomass power desalination facility, there are numerous industrial developments and activities located in the immediate vicinity of the project site, including the City’s Wastewater Treatment Plant and the Agra Trading biomass fuel recycling and trading company. Implementation of the proposed project would introduce additional industrial development to the project area, and would be generally consistent with the surrounding industrial development. Therefore, this impact is considered **less than significant**.

Response b): Less Than Significant. As described in the Tracy General Plan EIR, there are two Officially Dedicated California Scenic Highway segments in the Tracy Planning Area, which extend a total length of 16 miles. The first designated scenic highway is the portion of I-580 between I-205 and I-5, which offers views of the Coast Range to the west and the Central Valley’s urban and agricultural lands to the east. Part of this scenic highway passes through the existing City limits. The second scenic highway is the portion of I-5 that starts at I-205 and continues south to Stanislaus County, which allows for views of the surrounding agricultural lands and the Delta-Mendota Canal and California Aqueduct.

In addition to State-designated scenic highways, the Scenic Highway Element of the 1978 San Joaquin County General Plan designated the seven-mile portion of Corral Hollow Road that runs southwest from I-580 to the County line as a scenic road.

The project site is not visible from any of the above-referenced scenic highways. Development of the proposed project would not result in the removal of any trees, rock outcroppings, or buildings of historical significance, and would not result in changes to any of the viewsheds from the designated scenic highways in the vicinity of the City of Tracy. There is **no impact**.

Response c): Less than Significant. As described under Response a), above, the proposed project would add additional industrial uses to an area that currently contains numerous industrial uses. The proposed project would be visually compatible with the surrounding land

uses and would not significantly degrade the existing visual quality of the site or the surrounding area. This is a **less than significant** impact.

Response d): Less than Significant with Mitigation. Daytime glare can occur when the sunlight strikes reflective surfaces such as windows, vehicle windshields and shiny reflective building materials. The proposed Plant would introduce new structures into the project site, however, reflective building materials are not proposed for use in the project, and as such, the Plant would not result in increases in daytime glare.

However, as described in the project description, the proposed project may involve the installation of a solar array in the western portion of the site in the future, in order to provide an alternate source of thermal heat. The parabolic mirrors would focus the sun's rays on the heat collection element of the solar array system, which is a pipe located at the focal point of the parabola. The parabolic shape of the mirrors would cause the rays to be reflected directly onto the side of the heat collection element facing the mirrors. Thus, the potential for glare at offsite locations would be limited to stray reflections that were not focused on the heat collection element of the solar array.

Secondary reflections that could occur between the sun-reflecting mirrors and off-site locations would be reduced to a thin line, due to the mirrors' extruded parabolic shape. The solar array field would be oriented in a north-south direction, and the mirrors would rotate in an east-west direction to track the sun as it moves across the sky during the day. As a result there is no potential for reflection or glare off of the solar mirrors to the north or south of the project site. Glare-producing reflections from the solar array mirrors would only be possible when the sun's position in the sky is behind the viewer. The sun's position in the sky is a function of both the time of day and the time of year. The proposed solar mirrors would not exceed 10 feet in height, and would be specifically designed and engineered to direct sunlight directly to the heat collection element. There exists the limited potential for glare from the mirror arrays to stray onto parcels located immediately east and west of the project site. Lands to the east and west of the project site are primarily agricultural and industrial, and there are no residences or other sensitive receptors located to the east or west of the project site. Due to the limited potential for stray glare to leave the project site, and the lack of sensitive receptors in the project vicinity, this is considered a **less than significant** impact.

The project would not result in significant increases in the number of vehicles traveling to the project site at any given time. It is estimated that a maximum of 20 additional truck trips per day may be generated by the proposed project, and that the project would result in the need to add up to 28 employees split between rotating shifts. The small increase in the number of vehicles accessing the project site as a result of project approval would not result in a significant increase in daytime glare from vehicle windshields.

The newly proposed structures for the Plant would include exterior lighting to allow for nighttime operations, worker safety and security. The installation and use of exterior lights may increase light spillage onto adjacent land uses and may increase ambient nighttime lighting in the project vicinity, which is considered to be a **potentially significant** impact.

The City of Tracy Standard Plan #154 establishes minimum requirements for light illumination. The City addresses light and glare issues on a case-by-case basis during project approval and typically adds requirements as a condition of project approval to shield and protect against light spillover from one property to the next. Title 10.08.4000 of the Tracy Municipal Code requires that the site plan and architectural package include the exterior lighting standards and devices, and be reviewed by the Development and Engineering Services Department.

The implementation of Mitigation Measure 1 requires the preparation of a lighting plan, which must demonstrate that exterior project lighting has been designed to minimize light spillage onto adjacent properties to the greatest extent feasible. The implementation of Mitigation Measure 1 would reduce this impact to a **less than significant** level.

Mitigation Measures

Mitigation Measure 1: *A lighting plan shall be prepared prior to the issuance of a building permit and installation of the project's exterior lighting. The lighting plan shall demonstrate that the exterior lighting systems have been designed to minimize light spillage onto adjacent properties to the greatest extent feasible. The lighting plan shall include the following:*

- *Design of site lighting and exterior building light fixtures to reduce the effects of light pollution and glare off of glass and metal surfaces;*
- *Lighting shall be directed downward and light fixtures shall be shielded to reduce upward and spillover lighting;*
- *Where it is not feasible to fully shield light fixtures from light pollution, the lighting shall be directed downward and of the minimum wattage and height suitable for illuminating the areas to be secured and exterior work areas for worker safety.*

II. AGRICULTURE AND FOREST RESOURCES: WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		X		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. Approximately 93 acres of the project site is designated as Unique Farmland by the California Department of Conservation, and approximately 24 acres are designated as Prime Farmland. The southwestern portion of the project site, where the solar arrays may eventually be located, is currently in active agricultural production. Implementation of the proposed project may permanently remove approximately 117 acres of land from agricultural production if the solar array system is eventually installed. This is considered a **potentially significant** impact.

According to the City of Tracy General Plan, there are a total of 39,781 acres of land identified as Prime Farmland, Unique Farmland, Farmland of Statewide Importance and Farmland of Local Importance within the City's Planning Area, SOI and City limits combined. Of this amount, 4,890 acres are located within the City limits, 10,268 acres are within the SOI outside City limits, and 24,263 acres are located in the Tracy Planning Area outside the SOI. Farmland on the project site represents less than 0.3% of the important farmland within the City's Planning Area.

The City of Tracy General Plan identifies the project area as being within the City's 10-year planning horizon for the Sphere of Influence. Future development and urbanization of the project area was analyzed and considered in the City's General Plan EIR. Additionally, Chapter 13.28 of the Tracy Municipal Code requires the payment of Agricultural Mitigation Fees to offset the loss of prime and unique farmland. Fees collected under this program are pooled with other

local and regionally collected agricultural mitigation fees, and used to purchase agricultural conservation easements that protect prime and unique farmland within San Joaquin County in perpetuity. Mitigation Measure 2 requires the City to collect Agricultural Mitigation Fees, as required by Chapter 13.28 of the Tracy Municipal Code. This mitigation would help preserve County-wide agricultural resources, helping to preserve the agricultural economy and lessen long-term, cumulative impacts to Important Farmland. The implementation of the mitigation measure described below would reduce the severity of the agricultural resource impacts associated with implementation of the project to a **less than significant** level.

Mitigation Measures

Mitigation Measure 2: *Prior to site grading activities for the solar array component of the project, or any site grading activities that would disturb Prime Farmland or Unique Farmland, as defined by the California Department of Conservation, the City shall determine and require payment of the appropriate Agricultural Mitigation Fee to offset the loss of Prime and Unique Farmland, as specified in Chapter 13.28 of the Tracy Municipal Code.*

Response b): Less than Significant. The project site is not under a Williamson Act Contract, nor are any of the parcels immediately adjacent to the project site under a Williamson Act Contract. Therefore, implementation of the proposed project would not conflict with a Williamson Act Contract. The proposed project includes annexation of the site into the City of Tracy, designating the site Industrial (I) on the City's General Plan Land Use Map, and zoning/pre-zoning the site Light Industrial (M-1). Project approval would remove existing agricultural zoning designations from the project site. As such, the proposed project would not conflict with any agricultural zoning. This is a **less than significant** impact.

Response c) and d): No Impact. The project site is located in an area predominantly consisting of industrial development and limited agricultural operations. There are no forest resources on the project site or in the vicinity of the project site. Therefore, there is **no impact**.

Response e): Less than Significant. As described under Response (a) above, the proposed project is required to pay Agricultural Mitigation Fees, which would reduce potential impacts to agricultural resources and important farmlands to a less than significant level. Additionally, the project site contains existing industrial uses, and is adjacent to existing industrial uses. Project approval would not result in impacts to agricultural lands, beyond what has been described above under Response (a). This is a **less than significant** impact.

III. AIR QUALITY -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?		X		
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

EXISTING SETTING

The project site is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Joaquin Valley Air Basin (SJVAB) and has jurisdiction over most air quality matters within its borders. Prior to project implementation, the project is required to receive an Authority to Construct (ATC) from the SJVAPCD. The project is subject to the requirements of SJVAPD Rule 2201.

As stated under Section 1.0 of Rule 2201:

1.0 Purpose

The purpose of this rule is to provide for the following:

1.1 The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards; and

1.2 No net increase in emissions above specified thresholds from new and modified Stationary Sources of all nonattainment pollutants and their precursors.

2.0 Applicability

This rule shall apply to all new stationary sources and all modifications to existing stationary sources which are subject to the District permit requirements and after construction emit or may emit one or more affected pollutant. The requirements of this rule in effect on the date the application is determined to be complete by the Air Pollution Control Officer (APCO) shall apply to such application except as provided in Section 2.1.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), c): Less than Significant with Mitigation. Air quality emissions would be generated during construction of the proposed project and during operation of the proposed project. Construction-related air quality impacts and operational air quality impacts are addressed separately below.

Construction-Related Emissions

The SJVAPCD's approach to analysis of construction impacts is to require implementation of effective and comprehensive control measures, rather than to require detailed quantification of emission concentrations for modeling of direct impacts. PM10 emitted during construction can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors, making quantification difficult. Despite this variability in emissions, experience has shown that there are a number of feasible control measures that can be reasonably implemented to significantly reduce PM10 emissions from construction activities. The SJVAPCD has determined that compliance with Regulation VIII for all sites and implementation of all other control measures indicated in Tables 6-2 and 6-3 of the Guide for Assessing and Mitigating Air Quality Impacts (as appropriate) would constitute sufficient mitigation to reduce PM10 impacts to a level considered less than significant.

Construction would result in numerous activities that would generate dust. The fine, silty soils in the project area and often strong afternoon winds exacerbate the potential for dust, particularly in the summer months. Grading, leveling, earthmoving and excavation are the activities that generate the most particulate emissions. Impacts would be localized and variable. Construction impacts would last for a period of several months. The initial phase of project construction would involve the installation of the Plant and associated improvements such as parking area improvements and supporting infrastructure.

For the purposes of this analysis, it is assumed that the entire 13-acre Plant site would be constructed by 2012, and the future solar array fields of approximately 144 acres would be completed by 2015.

Construction activities that could generate dust and vehicle emissions are primarily related to grading and other ground-preparation activities in order to prepare the project site for the installation of the various structures and improvements proposed.

Control measures are required and enforced by the SJVAPCD under Regulation VIII. The SJVAPCD considers construction-related emissions from all projects in this region to be mitigated to a less than significant level if SJVAPCD-recommended PM10 fugitive dust rules and equipment exhaust emissions controls are implemented.

Implementation of Mitigation Measures 3 and 4, in addition to compliance with all applicable measures from SJVAPCD Rule VIII would reduce construction-related impacts associated with dust and construction vehicle emissions to a **less than significant** level.

Mitigation Measures

Mitigation Measure 3: *Prior to the commencement of grading activities, the City shall require the contractor hired to complete the grading activities to prepare a construction emissions reduction plan that meets the requirements of SJVAPCD Rule VIII. The construction emissions reductions plan shall be submitted to the SJVAPCD for review and approval. The City of Tracy shall ensure that all required permits from the SJVAPCD have been issued prior to commencement of grading activities. The construction emissions reduction plan should include the following requirements and measures:*

- *Properly and routinely maintain all construction equipment, as recommended by manufacturer's manuals, to control exhaust emissions.*
- *Shut down equipment when not in use for extended periods of time, to reduce exhaust emissions associated with idling engines.*
- *Encourage ride-sharing and use transit transportation for construction employees commuting to the project site.*
- *Use electric equipment for construction whenever possible in lieu of fossil fuel-powered equipment.*
- *Curtail construction during period of high ambient pollutant concentrations.*
- *Construction equipment shall operate no longer than eight cumulative hours per day.*
- *All construction vehicles shall be equipped with proper emission control equipment and kept in good and proper running order to reduce NOx emissions.*
- *On-road and off-road diesel equipment shall use aqueous diesel fuel if permitted under manufacturer's guidelines.*
- *On-road and off-road diesel equipment shall use diesel particulate filters if permitted under manufacturer's guidelines.*
- *On-road and off-road diesel equipment shall use cooled exhaust gas recirculation (EGR) if permitted under manufacturer's guidelines.*
- *Use of Caterpillar pre-chamber diesel engines or equivalent shall be utilized if economic and available to reduce NOx emissions.*
- *All construction activities within the project site shall be discontinued during the first stage smog alerts.*
- *Construction and grading activities shall not be allowed during first stage ozone alerts. (First stage ozone alerts are declared when ozone levels exceed 0.20 ppm for the 1-hour average.)*

Implementation of this mitigation shall occur during all grading or site clearing activities. The SJVAPCD shall be responsible for monitoring.

Mitigation Measure 4: *The following mitigation measures, in addition to those required under Regulation VIII of the SJVAPCD, shall be implemented by the Project's contractor during all phases of project grading and construction to reduce fugitive dust emissions:*

- *Water previously disturbed exposed surfaces (soil) a minimum of three-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*
- *Water all haul roads (unpaved) a minimum of three-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*
- *All access roads and parking areas shall be covered with asphalt-concrete paving or water sprayed regularly.*
- *Dust from all on-site and off-site unpaved access roads shall be effectively stabilized by applying water or using a chemical stabilizer or suppressant.*
- *Reduce speed on unpaved roads to less than 15 miles per hour.*
- *Install and maintain a trackout control device that meets the specifications of SJVAPCD Rule 8041 if the site exceeds 150 vehicle trips per day or more than 20 vehicle trips per day by vehicles with three or more axles.*
- *Stabilize all disturbed areas, including storage piles, which are not being actively utilized for construction purposes using water, chemical stabilizers or by covering with a tarp, other suitable cover or vegetative ground cover.*
- *Control fugitive dust emissions during land clearing, grubbing, scraping, excavation, leveling, grading or cut and fill operations with application of water or by presoaking.*
- *When transporting materials offsite, maintain a freeboard limit of at least six inches and over or effectively wet to limit visible dust emissions.*
- *Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday. (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and the use of blowers is expressly forbidden.)*
- *Remove visible track-out from the site at the end of each workday.*
- *Cease grading activities during periods of high winds (greater than 20 mph over a one-hour period).*
- *Asphalt-concrete paving shall comply with SJVAPCD Rule 4641 and restrict use of cutback, slow-sure, and emulsified asphalt paving materials.*

Implementation of this mitigation shall occur during all grading or site clearing activities. The SJVAPCD shall be responsible for monitoring.

Operational Emissions

Emissions generated from operation of the proposed biomass boiler would be the primary source of stationary emissions from the proposed project. The project is subject to the requirements of SJVAPCD Rule 2201. The project would also result in increased vehicle trips to the project site from employees and from trucks transporting biomass materials. As described in the project description, the project would generate up to 28 additional employee trips per day and 20 heavy truck trips per day for biomass fuel deliveries.

Emissions estimates for the proposed Plant were calculated based on actual source testing emissions that were monitored and collected from the Musco Olive Products 3 MW Biomass Fired System, which employs the exact same technology as that proposed for the project. The Musco emissions tests were collected in April 2011, and have been verified by the SJVAPCD. The emissions levels for the Musco Plant were used as the basis for the emissions calculations for this project, and were adjusted upward to reflect the proposed 16.4 MW biomass plant.

Mobile source emissions generated by the project were calculated using the industry standard URBEMIS 2007 Version 9.2.4. Mobile and stationary source emissions generated by the proposed project are shown in Table 1, below.

TABLE 1: BIOMASS COGENERATION PLANT EMISSIONS

Pollutant	Biomass Combustion (Tons/Year)	Mobile Sources (Tons/Year)	Total	Offset Threshold (tons/year)	Offset Required?	Major Source Threshold (tons/year)	Is Source a Major Source?
NOx	6.31	1.6	7.91	10	No	10	No
PM10	7.67	0.53	8.2	14.6	No	70	No
SOx	1.53	NA	1.53	27.38	No	70	No
CO	24.53	1.42	25.95	100	No	100	No
VOC	7.67	NA	7.67	10	No	10	No

Source: BEST Environmental, 2011 and De Novo Planning Group, 2011.

As shown in the table above, the proposed project does not meet the thresholds to be classified as a major emissions source for any of the criteria pollutants that would be generated by the project, as defined by SJVAPCD Rule 2250. Additionally, the proposed project does not meet the SJVAPCD thresholds requiring offsets, as specified in Table 4-1 of SJVAPCD Rule 2201, which governs stationary emissions sources.

As further described in the project description, the proposed CST biomass burner system is ultra clean firing. Recent source testing of the CST system at the Musco Olive Plant, conducted in April 2011, showed that the emissions from the CST system are the lowest of any biomass fired system in California. As shown in the table above, the proposed project would not exceed the applicable SJVAPCD thresholds requiring mitigation for emissions. Additionally, as further described under the greenhouse gas analysis later in this report, the proposed project would provide approximately 15 MW/hr of electricity for distribution back to the local power grid, which is assumed to offset electricity currently generated by sources including coal and natural gas. The project's offsets of emissions from coal and natural gas derived electricity would further reduce the project's net increases in emissions. Regardless of this potential to reduce emissions from other electricity sources, the proposed project's emissions are below the thresholds of significance established by the SJVAPCD. Therefore, this is a **less than significant** impact and no mitigation is required.

Response d): Less than Significant. Sensitive receptors are those parts of the population that can be severely impacted by air pollution. Sensitive receptors include children, the elderly, and

the infirm. The project site is surrounded by agricultural and industrial uses, and is not in the vicinity of any sensitive receptors. The nearest sensitive receptors to the project site are existing residences located approximately 0.5 miles to the south of the site.

As described under Response a) – c) above, the proposed project would not generate significant concentrations of air emissions. Impacts to sensitive receptors would be negligible and this is a **less than significant** impact.

Response e): Less than Significant. Operation of the proposed project would not generate odors directly. No noticeable odors would be emitted from the boiler. The primary purpose of the proposed project is to decrease salinity levels in treated wastewater from the Tracy WWTP. The Tracy WWTP is located immediately south of the project site, and is an existing source of odors in the project vicinity. Given the industrial nature of the project, the project itself would not be impacted by existing odors currently generated by the WWTP.

The only notable potential for the creation of odors associated with the project is the potential for biomass fuel for the project to generate odors if it is left to rot or decay. One hundred percent of the biomass fuel for the project would be provided by Agra Trading, which currently operates a biomass receiving and distribution operation on the project site. Biomass is stored in open piles, and is rotated on a continuous basis to avoid rot and decomposition. The storage and management of biomass materials on the project site is an existing environmental condition, and has not historically been a source of odors in the project area. The increased fuel demands generated by the project may result in increased deliveries of biomass fuel to Agra Trading, and may result in increased volumes of biomass stored on the site by Agra Trading. However, given the lack of historical odor problems associated with this existing operation, as well as the relatively high levels of ambient odors in the project vicinity generated by the Tracy WWTP, the proposed project would result in a **less than significant** impact related to odors, and no mitigation is required.

IV. BIOLOGICAL RESOURCES -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. Special-status invertebrates that occur within the San Joaquin County region include: longhorn fairy shrimp, vernal pool fairy shrimp, and midvalley fairy shrimp, which requires vernal pools and swale areas within grasslands; and the valley elderberry longhorn beetle, which is an insect that is only associated with blue elderberry plants, oftentimes in riparian areas and sometimes on land in the vicinity of riparian areas. The project site does not contain essential habitat for these special status invertebrates. Furthermore, evidence of these species was not encountered during the field survey. Implementation of the proposed project would have a **less than significant** impact on these species. No mitigation is necessary.

Special-status reptiles and amphibians that occur within the region include: the western pond turtle, which requires aquatic environments located along ponds, marshes, rivers, and ditches;

the California tiger salamander, which is found in grassland habitats where there are nearby seasonal wetlands for breeding; the silvery legless lizard, which is found in sandy or loose loamy soils under sparse vegetation with high moisture content; San Joaquin whipsnake, which requires open, dry habitats with little or no tree cover with mammal burrows for refuge; the Alameda whipsnake, which is restricted to valley-foothill hardwood habitat on south-facing slopes; the California horned lizard, which occurs in a variety of habitats including, woodland, forest, riparian, and annual grasslands, usually in open sandy areas; the foothill yellow-legged frog, which occurs in partly shaded and shallow streams with rocky soils; the California red legged frog, which occurs in stream pools and ponds with riparian or emergent marsh vegetation; and the western spadefoot toad, which requires grassland habitats associated with vernal pools.

The project site contains irrigation and drainage ditches along the northern project boundary. At the time of the field survey the ditches contained varying levels of water ranging from a few inches to a few feet. These ditches dry up, or have limited water from irrigation runoff during the hot summer months. Additionally, it should be noted that the irrigation ditches located along the northern boundary of the project site had limited vegetation as a result of ditch maintenance activities.

The project site does not contain appropriate habitat for the silvery legless lizard, Alameda whipsnake, California tiger salamander, foothill yellow-legged frog, western pond turtle, California red legged frog, or western spadefoot toad, nor where these species or evidence of the species found during the site visit. These species and their essential habitats are not present. Implementation of the proposed project would have a **less than significant** impact on these species. No mitigation is necessary.

The southwest portion of the project site is frequently disturbed from active agricultural activities and does not contain high quality habitat for the San Joaquin whipsnake and California horned lizard. Agricultural fields can provide habitat for these species between disturbance activities. There are no documented occurrences of these species within a five-mile radius, nor were they not encountered during the field survey. Implementation of the proposed project would have a **less than significant** impact on these species. No mitigation is necessary.

Numerous special-status plant species are known to occur in the region. Many of these special status plant species require specialized habitats such as serpentine soils, rocky outcrops, slopes, vernal pools, marshes, swamps, riparian habitat, alkali soils, and chaparral, which are not present on the project site. The project site is located in an area that was likely valley grassland prior to human settlement, and there are several plant species that are found in valley and foothills grasslands areas. These species include large-flowered fiddleneck, bent-flowered fiddleneck, big-balsamroot, big tarplant, round-leaved filaree, Lemmon's jewelflower, and showy golden madia. Human settlement has involved a high frequency of ground disturbance associated with the historical farming activities in the region, including the project site.

There is the potential for several special status plants to grow within the irrigation ditches due to the mesic conditions that are present during specific times. These include the Mason's

lilaeopsis, Suisun Marsh aster, and Delta button celery, two of which are documented within a five mile radius of the project site. There are no documented occurrences of special status plants on the project site or within the irrigation ditches on adjacent properties that are interconnected. Special status plants were not observed during site visits and no activities or disturbances within the irrigation ditches are proposed. This is considered a **less than significant** impact.

Special-status birds that occur within the region include: tricolored blackbird, Swainson's hawk, northern harrier, and bald eagle, which are associated with streams, rivers, lakes, wetlands, marshes, and other wet environments; loggerhead shrike, and burrowing owl, which lives in open areas, usually grasslands, with scattered trees and brush; and raptors that are present in varying habitats throughout the region.

Swainson's Hawk. There were a variety of raptors observed flying over the project site including a Swainson's hawk, white-tailed kite, and red-tailed hawk. The Swainson's hawk is threatened in California and is protected by the CDFG and the MBTA. Additionally, Swainson's hawk foraging habitat is protected by the CDFG. Swainson's hawks forage in open grasslands and agricultural fields and commonly nest in solitary trees and riparian areas in close proximity to foraging habitat. The foraging range for Swainson's hawk is ten miles from its nesting location. There are numerous documented occurrences of Swainson's hawk within ten miles of the project site. Although no nesting habitat for this species occur onsite, the cropland habitat on the project site is considered suitable foraging habitat for this species.

Construction on the project site could adversely affect Swainson's hawk foraging habitat. The Swainson's hawk is a species covered by the SJMSCP. The proposed project is considered an Unmapped Land Use Project by the SJMSCP, which includes annexations of land into the incorporated limits of a city. As required by Mitigation Measure 5, below, the City must submit an application to SJCOG to request coverage of the project site under the SJMSCP as an Unmapped Land Use Project. Coverage of a project under the SJMSCP is intended to reduce impacts to biological resources, including Swainson's hawk, resulting from a project. Once the project site has successfully received coverage under the SJMSCP, the City is required to pay the appropriate fee established by the SJMSCP and to incorporate all Incidental Take Minimization Measures identified by SJCOG into the project design. SJCOG will use the mitigation fee to purchase habitat for Swainson's hawk to be protected in perpetuity. No additional mitigation measure is required, and the project's coverage under the SJMSCP ensures that this impact would be **less than significant**.

Burrowing Owls. The southwestern portion of the project site is largely in active agricultural use. The irrigation ditches along the northern project boundary contain suitable habitat for burrowing owls, and burrowing owls have been observed in the immediate project vicinity during recent biological site visits conducted for the adjacent Holly Sugar Sports Park project. Burrowing owls are a California Species of Special Concern and are protected by the CDFG and the MBTA. Burrowing owls forage in open grasslands and shrublands and typically nest in old ground squirrel burrows. Based on the frequency of disking on the majority of the project site, it is unlikely that burrowing owl would nest within the cropland area. However, the presence of

ground squirrel burrows along the banks of the ditches constitutes suitable nesting habitat for burrowing owl and burrowing owls may be present prior to the onset of construction activities, whenever they may occur. It should also be noted that there are documented occurrences of burrowing owl on properties to the east, southeast, southwest, and west of the project site. The proposed project would have a potentially significant impact on burrowing owls. Implementation of the following mitigation measure would reduce the impact to a **less than significant** level.

Mitigation Measures

Mitigation Measure 5: *Prior to ground disturbance, the City of Tracy and/or the project applicant shall arrange for the preparation of a biological resources assessment for the project, and shall seek and obtain coverage under the SJMSCP from SJCOG.*

Mitigation Measure 6: *The City of Tracy shall comply with measures contained within the SJMSCP and shall consult with SJCOG biologists and the TAC prior to any site disturbing activities. The City shall implement the requirements of the SJMSCP to ensure that impacts to burrowing owls are avoided. The details of the avoidance measures shall be dictated by the TAC, and may include the following:*

- *To the extent feasible, construction should be planned to avoid the burrowing owl breeding season.*
- *During the non-breeding season (September 1 through January 31) burrowing owls occupying the project site should be evicted from the project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct., 1995)*
- *During the breeding season (February 1 through August 31) occupied burrows shall not be disturbed and shall be provided with a 75 meter protective buffer until and unless the TAC, with the concurrence of the Permitting Agencies' representatives on the TAC; or unless a qualified biologist approved by the Permitting Agencies verifies through non-invasive means that either: 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed.*

Implementation of this mitigation shall occur prior to grading or site clearing activities. The City of Tracy shall be responsible for monitoring and a qualified biologist shall conduct surveys and relocate owls as required.

Responses b), c): Less than Significant. Riparian natural communities support woody vegetation found along rivers, creeks and streams. Riparian habitat can range from a dense thicket of shrubs to a closed canopy of large mature trees covered by vines. Riparian systems are considered one of the most important natural resources. While small in total area when compared to the state's size, they provide a special value for wildlife habitat.

Over 135 California bird species either completely depend upon riparian habitats or use them preferentially at some stage of their life history. Riparian habitat provides food, nesting habitat, cover, and migration corridors. Another 90 species of mammals, reptiles, invertebrates and amphibians depend on riparian habitat. Riparian habitat also provides riverbank protection, erosion control and improved water quality, as well as numerous recreational and aesthetic values.

A wetland is an area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wetlands are defined by regulatory agencies as having special vegetation, soil, and hydrology characteristics. Hydrology, or water inundation, is a catalyst for the formation of wetlands. Frequent inundation and low oxygen causes chemical changes to the soil properties resulting in what is known as hydric soils. The prevalent vegetation in wetland communities consists of hydrophytic plants, which are adapted to areas that are frequently inundated with water. Hydrophytic plant species have the ability to grow, effectively compete, reproduce, and persist in low oxygen soil conditions.

Below is a list of wetlands that are found in the Tracy planning area:

- **Farmed Wetlands:** This category of wetlands includes areas that are currently in agricultural uses. This type of area occurs in the northern portion of the Tracy Planning Area.
- **Lakes, Ponds and Open Water:** This category of wetlands includes both natural and human-made water bodies such as that associated with working landscapes, municipal water facilities and canals, creeks and rivers.
- **Seasonal Wetlands:** This category of wetlands includes areas that typically fill with water during the wet winter months and then drain enough to become ideal plant habitats throughout the spring and summer. There are numerous seasonal wetlands throughout the Tracy Planning Area.
- **Tidal Salt Ponds and Brackish Marsh:** This category of wetlands includes areas affected by irregular tidal flooding with generally poor drainage and standing water. There are minimal occurrences along some of the larger river channels in the northern portion of the Tracy Planning Area.

The project site contains irrigation/drainage ditches along the northern property boundary that may be subject to USACE and CDFG jurisdiction. Any activities that would require removal, filling, or hydrologic interruption of the irrigation ditches would be subject to the federal Clean Water Act Section 404 and California Fish and Game Code Section 1601 (Streambed Alteration Agreement). Under these regulations, a formal wetland delineation would need to be prepared

and verified by the USACE prior to any activities that would involve the irrigation/drainage ditches.

However, these irrigation/drainage ditches are not planned to be adversely affected; instead they are planned to be retained for drainage purposes and no improvements or construction activities are proposed within or immediately adjacent to the existing irrigation canals. Additionally, there is no riparian habitat present on the project site. For these reasons, this is a **less than significant** impact and no mitigation is required.

Response d): Less than Significant. The CNDDDB record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the project site. Furthermore, the field survey did not reveal any wildlife corridors or wildlife nursery sites on or adjacent to the project site. The irrigation/drainage ditches may serve as a corridor for movement of wildlife in the region; however, the project plans include retention of these ditches for drainage, which provides an ancillary benefit of retaining the ditches for wildlife. Implementation of the proposed project would have a **less than significant** impact. No mitigation is necessary.

Responses e), f): Less than Significant with Mitigation. The project site is located within the jurisdiction of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (“Plan” or “SJMSCP”) and is located within the Central/Southwest Transition Zone of the SJMSCP. The San Joaquin Council of Governments (SJCOG) prepared the Plan pursuant to a Memorandum of Understanding adopted by SJCOG, San Joaquin County, the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), Caltrans, and the cities of Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy in October 1994. On February 27, 2001, the Plan was unanimously adopted in its entirety by SJCOG. The City of Tracy adopted the Plan on November 6, 2001.

According to Chapter 1 of the SJMSCP, its key purpose is to “provide a strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses, while protecting the region’s agricultural economy; preserving landowner property rights; providing for the long-term management of plant, fish and wildlife species, especially those that are currently listed, or may be listed in the future, under the Federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA); providing and maintaining multiple use Open Spaces which contribute to the quality of life of the residents of San Joaquin County; and, accommodating a growing population while minimizing costs to project proponents and society at large.”

In addition, the goals and principles of the SJMSCP include the following:

- Provide a County-wide strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses, while protecting the region’s agricultural economy.
- Preserve landowner property rights.

- Provide for the long-term management of plant, fish, and wildlife species, especially those that are currently listed, or may be listed in the future, under the ESA or the CESA.
- Provide and maintain multiple-use open spaces, which contribute to the quality of life of the residents of San Joaquin County.
- Accommodate a growing population while minimizing costs to project proponents and society at large.

In addition to providing compensation for conversion of open space to non open space uses, which affect plant and animal species covered by the SJMSCP, the SJMSCP also provides some compensation to offset impacts of open space conversions on non-wildlife related resources such as recreation, agriculture, scenic values and other beneficial open space uses. Specifically, the SJMSCP compensates for conversions of open space to urban development and the expansion of existing urban boundaries, among other activities, for public and private activities throughout the County and within Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy.

Participation in the SJMSCP is voluntary for both local jurisdictions and project applicants. Only agencies adopting the SJMSCP would be covered by the SJMSCP. Individual project applicants have two options if their project is located in a jurisdiction participating in the SJMSCP: mitigating under the SJMSCP or negotiating directly with the state and/or federal permitting agencies. If a project applicant opts for SJMSCP coverage in a jurisdiction that is participating under the SJMSCP, the following options are available, unless their activities are otherwise exempted: pay the appropriate fee; dedicate, as conservation easements or fee title, habitat lands; purchase approved mitigation bank credits; or, propose an alternative mitigation plan.

Responsibilities of permittees covered by the SJMSCP include, collection of fees, maintenance of implementing ordinances/resolutions, conditioning permits (if applicable), and coordinating with the Joint Powers Authority (JPA) for Annual Report accounting. Funds collected for the SJMSCP are to be used for the following: acquiring Preserve lands, enhancing Preserve lands, monitoring and management of Preserve lands in perpetuity, and the administration of the SJMSCP. Because the primary goal of SJMSCP to preserve productive agricultural use that is compatible with SJMSCP's biological goals, most of the SJMSCP's Preserve lands would be acquired through the purchase of easements in which landowners retain ownership of the land and continue to farm the land. These functions are managed by San Joaquin Council of Governments.

The proposed project is an annexation of land into an existing incorporated city limits and is located immediately adjacent to the boundaries of the defined community, which falls into the category of "Unmapped Land Use Project" under the SJMSCP. Projects in this category are subject to a case-by-case review by a Technical Advisory Committee (TAC) to ensure that the biological impacts of the proposed project are within the parameters established by the SJMSCP and the Biological Opinion.

"Unmapped Land Use Projects" that seek coverage under the SJMSCP are required to complete the "*Section 8.2.1(10) Checklist for Unmapped SJMSCP Projects*" with supporting documentation

for SJCOG to review and confirm that the proposed project is consistent with the SJMSCP and the Biological Opinion. If the TAC confirms that the proposed project is consistent with the SJMSCP, they will recommend to the Joint Powers Authority that the project receive coverage under the SJMSCP. As required by Mitigation Measure 5, the City must submit a Biological Assessment and SJMSCP Coverage Application to the San Joaquin Council of Governments (SJCOG) to include the project site in the SJMSCP. Compliance with this required would ensure that the project has a **less than significant** impact related to this environmental topic.

V. CULTURAL RESOURCES -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a), b), c), d): Less than Significant with Mitigation. A review of literature maintained by the Central California Information Center of the California Historical Resources Information System at California State University, Stanislaus identified that no previously identified prehistoric period cultural resources are known within, or within a 1/4 mile radius of the project site. Additionally, there are no known unique paleontological or archeological resources known to occur on, or within the immediate vicinity of the project site. Therefore, it is not anticipated that site grading and preparation activities would result in impacts to cultural, historical, archaeological or paleontological resources. There are no known human remains located on the project site, nor is there evidence to suggest that human remains may be present on the project site

However, as with most projects in California that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and historical resource or human remains. This is considered a **potentially significant** impact.

The implementation of Mitigation Measure 7 would require appropriate steps to preserve and/or document any previously undiscovered resources that may be encountered during construction activities, including human remains. Implementation of this measure would reduce this impact to a **less than significant** level.

Mitigation Measures

Mitigation Measure 7: *If any prehistoric or historic artifacts, human remains or other indications of archaeological resources are found during grading and construction activities, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be consulted to evaluate the finds and recommend appropriate mitigation measures.*

- *If cultural resources or Native American resources are identified, every effort shall be made to avoid significant cultural resources, with preservation an important goal. If significant sites cannot feasibly be avoided, appropriate mitigation measures, such as data recovery excavations or photographic documentation of buildings, shall be undertaken consistent with applicable state and federal regulations.*
 - *If human remains are discovered, all work shall be halted immediately within 50 meters (165 feet) of the discovery, the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.*
 - *If any fossils are encountered, there shall be no further disturbance of the area surrounding this find until the materials have been evaluated by a qualified paleontologist, and appropriate treatment measures have been identified.*

VI. GEOLOGY AND SOILS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?		X		
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii): Less than Significant. The project site is not located within an Earthquake Fault Zone, as defined by the State Geologist. The nearest mapped active fault (Carnegie/Corral Hollow) is located approximately 11 miles southwest of the project site. However, due to the proximity of the project site to numerous inactive and active faults in the surrounding region, the project site has the potential to experience groundshaking. The impact of groundshaking to people or property caused by seismic activity on nearby faults would be increased as a result of site development.

In order to minimize potential damage to the proposed structures caused by groundshaking, all construction would comply with the latest California Building Code standards, as required by

the City of Tracy Municipal Code 9.04.030. Implementation of the California Building Code standards, which include provisions for seismic building designs, would ensure that impacts associated with groundshaking would be less than significant. Building new structures for human use would increase the number of people exposed to local and regional seismic hazards. Seismic hazards are a significant risk for most property in California.

The Safety Element of the Tracy General Plan includes several goals, objectives and policies to reduce the risks to the community from earthquakes and other geologic hazards. In particular, the following policies would apply to the project site:

SA-1.1, Policy P1: Underground utilities, particularly water and natural gas mains, shall be designed to withstand seismic forces.

SA-1.1, Policy P2: Geotechnical reports shall be required for development in areas where potentially serious geologic risks exist. These reports should address the degree of hazard, design parameters for the project based on the hazard, and appropriate mitigation measures.

SA-1.2, Policy P1: All construction in Tracy shall conform to the California Building Code and the Tracy Municipal Code including provisions addressing unreinforced masonry buildings.

Implementation of the requirements of the California Building Code and the Tracy General Plan would ensure that impacts on humans associated with seismic hazards would be **less than significant**. No additional mitigation is required.

Responses a.iii), c), d): Less than Significant with Mitigation. Liquefaction normally occurs when sites underlain by saturated, loose to medium dense, granular soils are subjected to relatively high ground shaking. During an earthquake, ground shaking may cause certain types of soil deposits to lose shear strength, resulting in ground settlement, oscillation, loss of bearing capacity, landsliding, and the buoyant rise of buried structures. The majority of liquefaction hazards are associated with sandy soils, silty soils of low plasticity, and some gravelly soils. Cohesive soils are generally not considered to be susceptible to liquefaction. In general, liquefaction hazards are most severe within the upper 50 feet of the surface, except where slope faces or deep foundations are present (CDMG Special Publication 117, 1997).

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections.

Available data indicates the groundwater table fluctuates between an elevation of +2.8 msl and -6.7 msl, or approximately 2 to 12 feet below the ground surface in the project vicinity. The groundwater levels near the project site are considered to be relatively high, and the project

site is underlain by Holocene alluvial and flood basin deposits, and is located within a seismically active area. These conditions indicate that a risk of seismic settlement and liquefaction exist.

The surface and near-surface soils at the project site are variable and contain significant thickness of clays. Laboratory tests of collected surface soils near the project site indicate these clays possess a medium expansion potential that can develop swelling pressures with increases in soil moisture content. Special preparation during site grading and deepening of foundations, accompanied with presaturation of the soil subgrade prior to floor slab placement and reinforcement of floor slabs, may be required to help mitigate the effects of expansive soils.

The Safety Element of the General Plan includes Objective SA-1.1, Policy 1, which requires that geotechnical engineering studies be undertaken for any development in areas where potentially serious geologic risks exist. The implementation of this policy would reduce the potential risk of liquefaction and hazards associated with expansive soils. Given the soils types present on the project site and the relatively high groundwater table, the risk for seismic settlement and/or liquefaction is considered to be a **potentially significant** impact.

Mitigation Measure 8 requires the preparation of a design-level geotechnical engineering study to identify and address potential soil hazards prior to project construction. Additionally, Mitigation Measure 9 includes requirements for soil treatments and possibly replacements during subsurface construction activities, prior to the placement of building foundations. Implementation of these mitigation measures would reduce impacts associated with liquefaction and expansive soils to a **less than significant** level.

Mitigation Measures

Mitigation Measure 8: *In accordance with the California Building Code (Title 24, Part 2) Section 1804A.3 and A.5, and the requirements of Tracy General Plan Objective SA-1.1, Policy 1, liquefaction and seismic settlement potential shall be addressed in the design level geotechnical engineering investigations. The City's Building Division of the Development and Engineering Services Department shall ensure that all the pertinent sections of the California Building Code shall be adhered to in the construction of buildings and structures on site, and that all appropriate measures are implemented in order to reduce the risk of liquefaction and seismic settlement prior to the issuance of a Building Permit.*

Mitigation Measure 9: *During excavation activities and prior to the placement of fill on the site, a certified geotechnical engineer shall be retained by the City and/or project applicant to evaluate subgrade soils for the extent of their expansive potential in areas where buildings or structures are proposed. For areas found to contain soft, potentially expansive clays, the soil shall be removed (i.e., over excavated) and/or stabilized prior to the placement and compaction of fill. Stabilization techniques may include, but are not limited to, the placement of 18 inches of ½-inch to ¾-inch crushed rock over stabilization fabric (such as Mirafi 500X or equivalent), placement of larger, angular stabilization rock (1-inch to 3-inch, clean) and use of chemical treatments such as lime to*

reduce the soil's expansive potential. In addition, building construction alternatives, such as the use of alternative foundation types (i.e., post-tension, piles, etc.) versus end-bearing foundations, shall be considered and implemented where appropriate. Final techniques shall be (a) developed by a certified geotechnical engineer or engineering geologist and (b) reviewed and approved by the City prior to issuance of building permits for each stage of project construction.

Responses a.iv): Less than Significant. The project site is relatively flat and there are no slopes in the vicinity of the project site. As such, the project site is exposed to little or no risk associated with landslides. This is a **less than significant** impact and no mitigation is required.

Response b): Less than Significant with Mitigation. Construction and site preparation activities associated with development of the project site include clearing existing agricultural, native and non-native vegetative ground cover prior to site grading for the installation of the proposed Plant, supporting structures, and facilities. During the construction preparation process, existing vegetation would be removed to grade and compact the project site, as necessary. As construction occurs, these exposed surfaces could be susceptible to erosion from wind and water. Effects from erosion include impacts on water quality and air quality. Exposed soils that are not properly contained or capped increase the potential for increased airborne dust and increased discharge of sediment and other pollutants into nearby surface water sources. Risks associated with erosive surface soils can be reduced by using appropriate controls during construction and properly revegetating exposed areas. Mitigation Measures 3 and 4 requires the implementation of various dust control measures during site preparation and construction activities that would reduce the potential for soil erosion and the loss of topsoil. Additionally, Mitigation Measure 11 would require the implementation of various best management practices (BMPs) that would reduce the potential for disturbed soils and ground surfaces to result in erosion and sediment discharge into adjacent surface waters during construction activities. The implementation of these required mitigation measures would reduce these impacts to a **less than significant** level and no additional mitigation is required.

Response e): No Impact. The project site would be served by public wastewater facilities and does not require an alternative wastewater system such as septic tanks. Implementation of the proposed project would have **no impact** on this environmental issue.

XII. GREENHOUSE GAS EMISSIONS – WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. Once operational, the proposed project would burn agricultural residuals and woody biomass material to generate thermal heat. The combustion of this biomass material would result in the release of CO₂ emissions. CO₂ is the most common and prolific type of greenhouse gas. As described in the project description, the CST biomass burner system is ultra clean firing. Recent source testing of the CST system at the Musco Olive Plant showed that the emissions from the CST system are the lowest of any bio-mass fired system in California.

CO₂ emissions for the Plant were estimated using the set of emission factors published by the EPA in 40 CFR Part 90. The factor considered most similar to the anticipated fuel stream for the Plant is associated with wood and wood residuals. Using this factor, it is estimated that the proposed project would generate approximately 36.2 tons of CO₂ per hour, or 870 tons per day. The proposed Plant would generate approximately 16.4 MW/hr of electricity, and would result in approximately 0.45 tons of CO₂ per MW/hr. As a comparison, electricity produced from coal generates approximately 1.3 tons of CO₂ per MW/hr, and electricity produced from natural gas generates approximately 0.7 tons of CO₂ per MW/hr.

Of the 16.4 MW/hr of electricity produced by the Plant, approximately 15 MW/hr would be distributed to the local power grid and utilized by the City of Tracy and other local electricity users. It is assumed that the energy produced by the Plant would offset the use of energy produced from sources such as coal and natural gas, both of which generate higher levels of CO₂ per MW/hr. It is not known exactly what percentage of the existing electricity used in the project area comes from coal and natural gas. However, it is assumed that coal and natural gas generated electricity would be offset by electricity provided by the proposed project. While some portion of the electricity in the project area undoubtedly comes from renewable sources, such as solar, which generates little to no CO₂ per megawatt hour, it is assumed that energy provided by the project would not replace energy sources that generate less CO₂ per megawatt hour than the proposed project. The basis for this assumption is rooted in the requirements of Executive Order S-14-08, which requires that all retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020.

It is further noted that SB 1368 requires the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC) to set a global warming emissions standard for electricity used in California — regardless of whether it's generated in-state or purchased from plants in other states. The new standard applies to any new long-term financial contracts for base load electricity, and applies both to investor-owned utilities and municipal utilities. The standard for baseload generation owned by, or under long-term contract to publicly owned utilities, is an emissions performance standard (EPS) of 1,100 lbs CO₂ per megawatt hour, which is equal to 0.55 tons of CO₂ per megawatt hour. It is noted that the project would emit 0.45 tons of CO₂ per megawatt hour, which is below the established EPS. It is further noted that the CPUC has determined that biomass generation of electricity is EPS compliant because alternative means of disposing biomass such as open air burning and landfill deposition have the potential to generate greater concentrations of greenhouse gas in the atmosphere, including methane.

Therefore, while the proposed project would result in the direct emissions of up to 870 tons per day of CO₂, the project would offset a greater amount of CO₂ by displacing the use of energy from sources that generate higher levels of CO₂ per MW/hr. Overall, the project is anticipated to result in a net reduction of GHGs in the project region, and would result in positive impacts associated with GHGs.

Additionally, as further described in the project description, the proposed project would not utilize any forest materials or result in the loss or removal of any vegetation or biomass material that would not otherwise be disposed of. The project would utilize agricultural woody biomass, such as tree prunings and removed crops, as well as urban wood waste and waste from urban tree removal activities. All fuel for the project would be generated and sourced from within 50 miles of the project site. The use of these fuel types would not remove any trees or other living biomass vegetation that provide positive carbon sequestration benefits.

It is further noted that the proposed project includes plans to eventually install a large solar thermal mirror system in the southwestern portion of the project site. The solar thermal mirror system may eventually supplement the use of biomass as a thermal heat source for the proposed desalination plant. Thermal heat energy derived from solar sources does not directly generate GHGs. However, it is not known when, or with certainty if, the solar array system will be installed and operational. Therefore, this analysis is based on a worst-case scenario, and discloses direct GHG emissions that would be generated by the project if only biomass fuel were used to generate thermal heat for the Plant.

The project would also generate limited volumes of CO₂ associated with vehicle trips. Vehicle trips associated with the project include up to 28 new employees. The GHGs emitted from 28 employee trips per day would be negligible, and would not significantly contribute additional sources of GHGs to the atmosphere. The project may also generate up to 20 truck trips per day associated with deliveries of biomass fuel to the project site. As described in the project description, all fuel for the project site would originate within 50 miles of the Plant. Agra Trading, which is located on the project site, would provide 100% of the biomass fuel for the project. Agra Trading currently provides biomass fuel to clients throughout the region, including areas not within the immediate vicinity of the project site. As such, the 20 additional

vehicle trips generated by the project would be considerably shorter in distance, and may actually result in a reduction of GHGs from truck trips delivering biomass fuel throughout the region. It is estimated that employee trips and truck trips combined would generate fewer than 520 tons/year of CO₂.

As described above, the proposed project would generate new direct sources of GHGs. However, the project is anticipated to offset an even higher level of existing GHGs that are generated through energy production from sources such as coal and natural gas. Therefore, the project would not result in a net increase in atmospheric CO₂. This is a **less than significant** impact, and no mitigation is required.

Response b): No Impact. There are numerous local and state-level programs and plans in place that aim to reduce GHG levels in California and the City of Tracy. State-level programs include, but are not limited to:

Bioenergy Action Plan – Executive Order #S-06-06

Executive Order #S-06-06 establishes targets for the use and production of biofuels and biopower and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The executive order establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20% of its biofuels within California by 2010, 40% by 2020, and 75% by 2050. The executive order also calls for the state to meet a target for use of biomass electricity, including biomass cogeneration facilities.

California Executive Orders S-3-05 and S-20-06, and Assembly Bill 32

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by 2020 and 3) 80% below the 1990 levels by 2050.

In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team (CAT). Each CAT working group will develop a Near-term Implementation Plan (CATNIPs) for the specific climate change mitigation measures and adaptation strategies being addressed by the working group. These will be the measures and strategies that will be underway or completed by the end of 2010. The CATNIP will include a brief description of the measures and strategies, the steps to be taken in implementation, the agency/department responsible, and the timeline for completion. The Energy Working Group of the Climate Action Team focuses its efforts on both green house gas emission reduction and adaptation actions affecting the energy sector.

CARB, which is part of Cal-EPA, develops air quality regulations at the state level. The state regulations mirror federal regulations by establishing industry-specific pollution controls for criteria, toxic, and nuisance pollutants. California also requires areas to develop plans and strategies for attaining state ambient air quality standards as set forth in the California Clean Air Act of 1988. In addition to developing regulations, CARB develops motor vehicle emission standards for California vehicles.

Assembly Bill 32- Climate Change Scoping Plan

On December 11, 2008 ARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of ARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce CO₂e emissions by 169 million metric tons (MMT), or approximately 30%, from the state's projected 2020 emissions level of 596 MMT of CO₂e under a business-as-usual scenario. (This is a reduction of 42 MMT CO₂e, or almost 10%, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions ARB recommends for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO₂e),
- the Low-Carbon Fuel Standard (15.0 MMT CO₂e),
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e), and
- a renewable portfolio standard for electricity production (21.3 MMT CO₂e).

The Cal-EPA 2011 Greenhouse Gas Reduction Report Card (January, 2011) reported that in 2009, the date for which the most current data are available, California had achieved a reduction of 1.3 MMT CO₂e compared to 2007 levels from implementation of the RPS program.

Senate Bill 1368

SB 1368 requires the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC) to set a global warming emissions standard for electricity used in California — regardless of whether it's generated in-state or purchased from plants in other states. The new standard applies to any new long-term financial contracts for base load electricity, and applies both to investor-owned utilities and municipal utilities. The standard for baseload generation owned by, or under long-term contract to publicly owned utilities, is an emissions performance standard (EPS) of 1,100 lbs CO₂ per megawatt-hour (MWh). However, the CPUC has determined that biomass generation of electricity is EPS compliant because alternative means of disposing biomass such as open air burning and landfill deposition have the potential to generate greater concentrations of greenhouse gas in the atmosphere, including methane.

Senate Bills 1078 and 107 and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20% of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33% renewable power by 2020.

California Renewables Portfolio Standard (RPS)

Established in 2002 under Senate Bill 1078 and accelerated in 2006 under Senate Bill 107, California's Renewables Portfolio Standard (RPS) is one of the most ambitious renewable energy standards in the country. The RPS program requires electric corporations to increase procurement from eligible renewable energy resources by at least 1% of their retail sales annually, until they reach 20% by 2010. Biomass generated electricity is considered an eligible renewable energy source for the RPS program.

The proposed project is consistent with all of the applicable Statewide programs to reduce GHGs described above.

Additionally, the City of Tracy recently adopted the Tracy Sustainability Action Plan. The Sustainability Action Plan includes programs and measures to reduce GHGs through community and municipal operations. Programs and measures contained in the Sustainability Action Plan that relate to the proposed project include:

Measure E-1(k): Develop a public-private partnership to provide incentives for co-generation projects for commercial and industrial facilities using outside funds.

Measure E-1(l): Encourage the development of alternative energy projects and conduct a review of City policies and ordinances to address alternative energy production. Develop protocols for alternative energy storage, such as biodiesel, hydrogen, and/or compressed air. Continue to research the location needs for alternative energy producers and send direct, targeted marketing pieces to alternative energy producers that are appropriate for Tracy. Identify possible City-owned sites for production of local renewable energy sources such as solar, wind, small hydro, and biogas.

Measure E-1(m): Encourage the inclusion of alternative energy facilities that are a secondary use to another project. Identify the best means to avoid noise, aesthetic, and other potential land use compatibility conflicts for alternative energy facilities (e.g. installing tracking solar PV or angling fixed solar PV in a manner that reduces glare to surrounding land uses). Identify and remove regulatory or procedural barriers to producing renewable energy as a secondary use to another project, such as updating codes, guidelines, and zoning.

The proposed project would assist the City of Tracy with implementation of the Sustainability Action Plan, and is consistent with the measures described above.

As described above, the proposed project is consistent with all applicable local and State programs and measures aimed at reducing GHG levels. There is **no impact**.

VIII. HAZARDS AND HAZARDOUS MATERIALS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			X	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant with Mitigation. The proposed project would include a Selective catalytic reduction (SCR) system to reduce emissions of nitrogen oxide gas (NOx). SCR systems inject ammonia into boiler flue gas and pass it through a catalyst bed where the ammonia and NOx react to form nitrogen and water vapor. In the United States, SCR systems are often the technology of choice for meeting air emissions regulations that govern the amount of NOx emissions that can be released into the atmosphere. Other technologies for NOx reduction include low NOx burners, staged combustion, gas recirculation, low excess air firing, and selective non-catalytic reduction (SNCR).

Selective catalytic reducers (SCR) work in a manner similar to the way a catalytic converter works to reduce automobile emissions. A gaseous or liquid reductant (generally ammonia or urea) is added to the exhaust gases before they exit a smokestack. The mixed gases travel through several catalytic layers, causing a reaction between the NO_x emissions and the ammonia injection. The reaction converts the NO_x emissions into pure nitrogen and water vapors. The benign elements are then released into the air.

The project's SCR system will require the transport, storage, and use of aqueous ammonia at the project site. Aqueous ammonia is a hazardous substance and toxic chemical, classified by the U.S. Department of Transportation and the Occupational Safety and Health Administration (OSHA) as a hazardous material, and by the U.S. EPA as an "extremely hazardous substance." At low concentrations in the air, ammonia causes irritation to the eyes, nose and throat. At higher concentrations, it causes coughing, bronchial spasms, conjunctivitis, laryngitis, and pulmonary edema.

Anhydrous ammonia delivered to the project site would arrive in pressurized tank trucks, and would be stored on site in a pressurized steel tanks subject to 29 CFR 1919.111 and built in accordance with ASME Boiler and Vessel Code, and rated to 250 pound-force per square in gauge, and equipped with protections and sensors. It is estimated that approximately 3,000 pounds of anhydrous ammonia would be stored on site for use in the SCR system. The facility would install a 600-gallon pressure vessel to store the anhydrous ammonia. At 90% full, the tank capacity is 540 gallons, or 2,780 pounds. It is estimated that the tank would be refilled approximately once per month.

Anhydrous Ammonia (ammonia) (CAS No. 7664-41-7) is subject to the California Accidental Release Prevention Program (CalARP) regulations (Title 19, CCR, Chapter 4.5). The threshold quantity of storage that triggers the CalARP program is 500 pounds of anhydrous ammonia. At 10,000 pounds, the Federal Risk Management Program is triggered.

A Risk Management Plan (RMP) is required when a facility uses a regulated substance in excess of the CalARP threshold quantity, as is the case with the proposed project. An RMP must be completed and submitted to the San Joaquin County Environmental Compliance Division, the Administering Agency for the CalARP Program, in accordance with the California Health and Safety Code, Division 20, Chapter 6.95, Article 2 and the California Code of Regulation (CCR) Title 19 Division 2, Chapter 4.5, Articles 1 through 11.

The RMP summarizes the facility's accidental release prevention program implementation activities, including: Maintenance, Hazard Review, Operating Procedures, Training, Offsite Consequence Analysis, Incident Investigation, Emergency Response Program, and Compliance Audit. The RMP is required to be updated at least every five years, and the facility is required to be inspected by the San Joaquin County Environmental Compliance Division at least once every three years.

Implementation of Mitigation Measure 10 requires the project applicant to prepare and submit an RMP to the San Joaquin County Environmental Compliance Division for review and approval

prior to operation of the SCR system. Compliance with the RMP requirements would reduce risks associated with the accidental release of ammonia to a less than significant level.

Mitigation Measures

Mitigation Measure 10: *The project applicant shall prepare a Risk Management Plan (RMP) for the use and storage of anhydrous ammonia that meets the requirements of California Health and Safety Code, Division 20, Chapter 6.95, Article 2 and the California Code of Regulation (CCR) Title 19 Division 2, Chapter 4.5, Articles 1 through 11. The RMP shall be submitted to the San Joaquin County Environmental Compliance Division for review and approval prior to operation of the SCR system.*

Response c): Less than Significant. The project site is not located within ¼ mile of an existing or proposed school, and would therefore, not result in the exposure of any school site to any hazardous materials that may be used or stored at the project site. As described under Response a), above, the project is subject to mitigation measures that would reduce potential impacts associated with the use or storage of hazardous materials on the project site that would reduce this impact to a less than significant level. However, since there are no schools in the immediate vicinity of the project site, this impact is considered **less than significant** and no additional mitigation is required.

Response d): Less than Significant. According to the California Department of Toxic Substances Control (DTSC) there are no Federal Superfund Sites, State Response Sites, or Voluntary Cleanup Sites on, or in the vicinity of the project site. The DTSC Envirostor Database identifies three cleanup sites in the vicinity of the City of Tracy. The cleanup site nearest the project site is located at the corner of Tracy Blvd. and Beechnut Ave., over two miles south of the project site. A search of the State Water Resources Control Board Geotracker Database revealed a leaking underground storage tank on the project site. According to the Geotracker Database, gasoline leaked from an underground storage tank, and cleanup activities were completed in January 2011. Cleanup activities were verified, and the case was formally closed in July 2011. Therefore, the project site does not contain any known hazardous materials, and this is a **less than significant** impact.

Responses e), f): Less than Significant. The Federal Aviation Administration (FAA) establishes distances of ground clearance for take-off and landing safety based on such items as the type of aircraft using the airport. The San Joaquin County Airport Land Use Commission (ALUC) is an advisory body that assists local agencies with ensuring the compatibility of land uses in the vicinity of airports. The County ALUC reviews proposed development projects for consistency with airport land use compatibility. The General Plan presents a policy that is designed to ensure that new development is consistent with setbacks, height and land use restrictions as determined by the Federal Aviation Administration and the San Joaquin County Airport Land Use Commission, as well as the policies of the City's Airport Master Plan.

The Tracy Municipal Airport is the closest airport to the project site, located approximately eight miles south of the site. The Airport is a general aviation airport owned by the City and managed by the Parks and Community Services Department. The Tracy Airport Master Plan

shows that the project site is not located within a flight zone and the proposed project is not considered an incompatible land use. Implementation of the proposed project would have a **less than significant** impact with regards to this environmental issue.

Response g): No Impact. The General Plan includes policies that require the City to maintain emergency access routes that are free of traffic impediments (Objective SA-6.1, P1 and A2). The proposed project does not include any actions that would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Furthermore, the proposed project would not result in population growth that would increase the demand for emergency services during disasters. Implementation of the proposed project would result in **no impact** on this environmental topic.

Response h): Less than Significant. The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

The City has areas with an abundance of flashy fuels (i.e. grassland) in the outlying residential parcels and open lands that when combined with warm and dry summers with temperatures often exceeding 100 degrees Fahrenheit create a situation that results in higher risk of wildland fires. Most wildland fires are human caused, so areas with easy human access to land with the appropriate fire parameters generally result in an increased risk of fire.

The California Department of Forestry has designated the western and southern edge of the City as having a moderate wildland fire potential. This is predominately a result of the hills and grassland habitat that persists. The proposed project is located on the northern edge of the City in an area that is actively farmed or used for industrial uses. This area is considered lower risk to wildfires when compared to the hilly area on the south side of the City.

The General Plan includes a variety of policies that are designed to minimize wildfire risk. These standard policies include the use of fire-resistant plants, ground cover, and roofing materials, and clearing areas around structures of potential fuel (Objective SA-3.1, P1 and P4). The General Plan also establishes fire flow and hydrant standards to facilitate fire-fighting in the event of a fire (Objective SA-3.1, P3).

Biomass fuel for the proposed project would be sourced from the existing Agra Trading company operations on the project site. Agra Trading currently maintains biomass fuel stock on the site, and the proposed project would not result in significant changes to the existing baseline environmental conditions. Fuel piles are actively managed and rotated on a continuous basis to reduce risks associated with combustion that may occur if biomass piles were left to decompose. This risk of wildland fires at the project site is considered a **less than significant** impact.

IX. HYDROLOGY AND WATER QUALITY -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		X		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		X		
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		X		
f) Otherwise substantially degrade water quality?		X		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant. As described above in the project description, the primary purpose of the proposed project is to construct and operate an approximately 1,200,000 gallon per day (gpd) desalination plant in the City of Tracy. The desalination plant would process treated effluent currently generated by the Tracy WWTP to a quality that is suitable for discharge into the Sacramento San Joaquin Delta (Delta) and meets State standards for water quality discharge. The Tracy WWTP currently processes approximately 9,000,000 gpd of effluent. The WWTP discharges this treated effluent directly into the Delta. The WWTP's discharge currently contains salt in amounts that exceed the Delta salinity standards. Salinity in water is generally measured in Total Dissolved Solids (TDS). Project implementation would effectively remove salt from approximately 13 percent of the WWTP's effluent. The treated desalination water would then be blended back into the remaining WWTP effluent prior to discharge into the Delta. The newly blended and treated effluent will have lower salinity and will assist the City in compliance with all applicable Delta salinity standards. Overall, the proposed project would have result in significantly beneficial impacts to water quality. For the purposes of this analysis, this is a **less than significant** impact, and no mitigation is required.

Responses b): Less than Significant. The proposed project would treat wastewater generated at the Tracy WWTP plant to reduce salinity levels. No groundwater would be used by the proposed project, and the project would not increase existing levels of groundwater pumping. Groundwater recharge occurs primarily through percolation of surface waters through the soil and into the groundwater basin. The addition of significant areas of impervious surfaces (such as roads, parking lots, buildings, etc) can interfere with this natural groundwater recharge process. The project will include areas of impervious surfaces, such as the proposed parking lots and various structures. However, given the relatively large size of the groundwater basin in the Tracy area, the areas of impervious surfaces added as a result of project implementation will not adversely affect the recharge capabilities of the local groundwater basin. The largest area of the project site that may be disturbed would be the southwestern portion of the site where the solar arrays would be located. The ground cover beneath the solar arrays would not be paved, and therefore, the proposed project would not impair the ability of this area of the project site to absorb surface waters, primarily rainfall. Given the relatively small area of new impervious surfaces that would be constructed by the project, the project would not significantly impair groundwater recharge in the area. This is a **less than significant** impact and no mitigation is required.

Responses c), d), e), f): Less than Significant with Mitigation. When land is in a natural or undeveloped condition, soils, mulch, vegetation, and plant roots absorb rainwater. This absorption process is called infiltration or percolation. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off of a site is defined as storm water runoff. When a site is in

a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed with urban uses. Houses, buildings, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff may result in flooding if adequate storm drainage facilities are not provided.

Development of the project site would place a limited amount of impervious surfaces on an approximately 13-acre portion of the project site where the Plant would be constructed. Development of the project site would potentially increase local runoff production, and would introduce constituents into storm water that are typically associated with urban runoff. These constituents include heavy metals (such as lead, zinc, and copper) and petroleum hydrocarbons. Best management practices (BMPs) will be applied to the proposed site development to limit the concentrations of these constituents in any site runoff that is discharged into downstream facilities to acceptable levels. It is anticipated that stormwater flows from the project site would be directed to the irrigation canals located to the north of the project site.

In order to ensure that stormwater runoff from the project site does not adversely increase pollutant levels in adjacent surface waters and stormwater conveyance infrastructure, Mitigation Measure 11 requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP). As described below, the SWPPP would require the application of best management practices (BMPs) to effectively reduce pollutants from stormwater leaving the site during both the construction and operational phases of the project. The implementation of this mitigation measure would reduce this impact to a **less than significant** level. Additionally, the project is subject to the requirements of Chapter 11.34 of the Tracy Municipal Code – Stormwater Management and Discharge Control. The purpose of this Chapter is to *“Protect and promote the health, safety and general welfare of the citizens of the City by controlling non-stormwater discharges to the stormwater conveyance system, by eliminating discharges to the stormwater conveyance system from spills, dumping, or disposal of materials other than stormwater, and by reducing pollutants in urban stormwater discharges to the maximum extent practicable.”*

This chapter is intended to assist in the protection and enhancement of the water quality of watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Federal Water Pollution Control Act (Clean Water Act, 33 USC Section 1251 et seq.), Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.) and National Pollutant Discharge Elimination System (“NPDES”) Permit No. CAS000004, as such permit is amended and/or renewed.

Mitigation Measures

Mitigation Measure 11: *The project shall prepare a Storm Water Pollution Prevention Plan (SWPPP) that includes specific types and sources of stormwater pollutants, determine the location and nature of potential impacts, and specify appropriate control measures to eliminate any potentially significant impacts on receiving water quality from stormwater runoff. The SWPPP shall require treatment BMPs that incorporate, at a minimum, the required hydraulic sizing design criteria for volume and flow to treat projected stormwater runoff. The SWPPP shall comply with the most current standards established by the Central Valley RWQCB. Best Management Practices shall be selected from the City’s Manual of Stormwater Quality Control Standards for New Development and Redevelopment according to site requirements and shall be subject to approval by the City Engineer and Central Valley RWQCB.*

Responses g), h): Less than Significant. The 100-year floodplain denotes an area that has a one percent chance of being inundated during any particular 12-month period. The risk of this area being flooded in any century is one percent but statistically the risk is almost 40 percent in any 50-year period.

Floodplain zones are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs). These tools assist cities in mitigating flooding hazards through land use planning. FEMA also outlines specific regulations for any construction, whether residential, commercial, or industrial within 100-year floodplains.

The project site is located within flood zone AE at an elevation of approximately 11 feet (based upon FEMA FIRM Map No. FM0602990570C). Lands within the FEMA-designated 100-year floodplain or Zone A are subject to mandatory flood insurance purchase as required by FEMA. The insurance rating is based on the difference between the base flood elevation (BFE), the average depth of the flooding above the ground surface for a specific area, and the elevation of the lowest floor. Because Tracy participates in the National Flood Insurance Program, it must require development permits to ensure that construction materials and methods will mitigate future flood damage. New construction and substantial improvements of residential structures are also required to “have the lowest floor (including the basement) elevated to or above the base flood level.” Non-residential structures must have their utility systems above the BFE or be of flood-proof construction.

There are no residences or residential structures proposed as part of the project. The project would place non-residential structures within the 100-year flood zone, as mapped by FEMA.

The purpose of Chapter 9.52 of the Tracy Municipal Code –Floodplain Regulations – is to: *“Promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed: (a) To protect human life and health; (b) To minimize expenditure of public money for costly flood control projects; (c) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (d) To minimize prolonged business interruptions; (e) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard; (f) To help maintain a*

stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas; (g) To ensure that potential buyers are notified that property is in an area of special flood hazard; and (h) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.” (Prior code Section 9-13.03)

The chapter includes methods and provisions for restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazard or which result in damaging increases in flood height or velocities; requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; controlling filling, grading, dredging, and other development which may increase flood damage; and preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. This chapter applies to all areas of special flood hazards within the jurisdiction of the City, and includes areas of special flood hazards as identified by the FEMA Flood Insurance Study of the City of Tracy, dated June 18, 1987.

The proposed project would not impact or impede the flow of any surface water resources (rivers or streams) during a flood event. While the project site and the associated structures may be subject to water damage during a flood event, project implementation would not increase the risk of flooding offsite during a storm event. The project must comply with the regulations and standards set forth in Chapter 9.52 of the Tracy Municipal Code. Compliance with these requirements would reduce potential flood damage to structures on-site and would reduce this impact to a **less than significant** level. No additional mitigation is required.

Responses i), j): Less than Significant. The project site is located within the inundation risk area for San Luis Reservoir and New Melones Dam. The safety of dams in California is stringently monitored by the California Department of Water Resources, Division of Safety of Dams. In the unlikely event of a dam failure, there is the potential that the project site could become inundated with water. However, there are no residences proposed within the project site that would place people or residential structures at risk of dam failure. As described above, the project site is located within the 100-year flood zone, compliance with the requirements of Chapter 9.52 of the Tracy Municipal Code would ensure that the elevations of all on-site building pads are elevated above flood levels or that the structures are developed to be otherwise protected from flood waters. The Tracy General Plan EIR (2006) concluded that the risk associated with dam failure within the planning area was less than significant. Implementation of the proposed project would not increase the risk of exposure to dam failure, place new residences within a dam failure inundation zone, nor would it expose people to significant risk of dam failure.

There are no significant bodies of water near the project site that could result in the occurrence of a seiche or tsunami. Additionally, the project site and the surrounding areas are essentially flat, which precludes the possibility of mudflows occurring on the project site. This is a **less than significant** impact and no mitigation is required.

X. LAND USE AND PLANNING - Would the project:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?		X		

RESPONSES TO CHECKLIST QUESTIONS

Responses a): No Impact. The project site is surrounded by agricultural and industrial lands. Implementation of the proposed project would not divide an established community. There is **no impact** and no mitigation is required.

Responses b): Less than Significant. Implementation of the proposed project would require annexation of the project site into the City of Tracy, a General Plan Amendment (GPA) to designate portions of the site as Industrial (I), and rezoning of the project site to Light Industrial (M-1) to accommodate the proposed uses. The first action that the City of Tracy will take with respect to consideration of the proposed project would be to annex the site into the City limits, approve the GPA and rezone the site to Light Industrial (M-1). Prior to any land use changes, the project site would be under the City's jurisdiction. Therefore, the proposed project is not reviewed for consistency with the policies and objectives of the San Joaquin County General Plan.

As described in the Tracy General Plan, specific uses allowed in the industrial category range from flex/office space to manufacturing to warehousing and distribution. Industrial parcels should have a maximum FAR of 0.5. Ancillary uses, such as restaurants and consumer services, may be allowed to serve the daily needs of the workers. Industrial uses are located to provide proper truck access, buffering from incompatible uses and proximity with rail corridors and transit links. The proposed project would be an allowed use within the Industrial land use designation, and would not conflict with the City's General Plan.

The project would require annexation approval from the San Joaquin Local Agency Formation Commissions (LAFCO). The San Joaquin LAFCO is a state-mandated local agency responsible for: the oversight of boundary changes to cities and special districts; the formation of new agencies, including incorporation of new cities; and the consolidation of existing agencies. The broad goals of LAFCO are to ensure the orderly formation of local government agencies, to preserve agricultural and open space lands, and to discourage urban sprawl.

Annexation Policies and Procedures

The following policies govern LAFCO determinations regarding annexations. In some cases, these policies are summarized.

1. **Spheres and Municipal Service Reviews:** The annexation must be consistent with the internal planning horizon of the SOI and shall normally lie within the first planning increment boundary. The MSR and SOI Plan must demonstrate that adequate services can be provided.
2. **Plan for Services:** Every proposal must include a plan for services consistent with Section 56653 of Government code and the Municipal Services Review demonstrating that the need for services can be met.
3. **Contiguity:** Territory proposed to be annexed must be contiguous to the annexing city or district unless specifically allowed by statute. Territory is not contiguous if the only connection is a strip of land more than 300 feet long and less than 200 wide, that width to be exclusive of highways. A proposed annexation must not result in areas that are difficult to serve.
4. **Development Within Jurisdiction:** Development of vacant or non-prime agricultural lands within the existing City or SOI is encouraged before approval of any proposal which would lead to development outside the SOI of existing open space lands for non-open space uses.
5. **Progressive Urban Pattern:** Annexations shall be progressive steps toward filling in the territory designated by the SOI with growth from inner toward outer areas.
6. **Piecemeal Annexation Prohibited:** Annexations must be consistent with the schedule for annexation that is contained in the agency's Sphere of Influence Plan. LAFCO will modify small piece-meal or irregular annexations, to include additional territory in order to promote orderly annexation and logical boundaries, while maintaining a viable proposal. In such cases, detailed development plans may not be required for those additional areas but compliance with CEQA is required.
7. **Annexation to Eliminate Islands:** This policy is not applicable because the proposed Project would not involve annexation of an island of unincorporated land.
8. **Annexations that Create Islands:** An annexation must not result in the creation of an island of unincorporated territory or otherwise distort existing boundaries. LAFCO may approve such an annexation if the application of this policy would be detrimental to the orderly development of the community and a reasonable effort has been made to include the island in the annexation but that inclusion is not feasible. This policy is not applicable because the proposed Project would not create an island of unincorporated land.

9. **Substantially Surrounded:** The subject territory of an annexation proposal shall be deemed “substantially surrounded” if it is within the sphere of influence of the affected city and two-thirds (66-2/3%) of its boundary is surrounded by the affected city. This policy is not applicable to the proposed Project because it pertains to island annexations.
10. **Definite and Certain Boundaries:** All boundaries shall be definite and certain and conform to lines of assessment or ownership.
11. **Service Requirements:** This policy is not applicable to the proposed project because it pertains to annexations to provide services.
12. **Adverse Impacts of Annexation of Other Agencies:** LAFCO will consider any significant adverse effects upon other service recipients or other agencies serving the area and may condition any approval to mitigate such impacts.
13. **District’s Proposal to Provide New, Different, or Divestiture of a Particular Function of Class of Services:** This policy is not applicable to the proposed Project because it pertains to districts that provide services.

The Project proposes to annex the Project site into the City. At the time LAFCO considers the annexation application, it must be consistent with LAFCO policies. The proposed Project would be consistent with Policy 1, which requires annexations to be within the internal planning horizon of the Sphere of Influence. It also stipulates that approval of the annexation is dependent on demonstration in the Municipal Service Review (MSR) and Sphere of Influence (SOI) Plan that adequate services can be provided to the annexed area. The Project site is within the first planning increment boundary of the City’s existing SOI. LAFCO is currently in receipt and is reviewing but has not yet adopted the City’s MSR or SOI Update. However, these documents would be in place prior to consideration of the annexation request and would demonstrate that adequate services would be provided.

Policy 2 requires annexation proposals to include a Plan for Services. When the application for annexation is submitted to LAFCO, it would include a Plan for Services that addresses the items identified in Section 56653 of the California Government Code.

The proposed Project would also be consistent with Policy 3, which requires the annexation to be contiguous to the City. The project site is immediately contiguous to the City of Tracy along its southern boundary. Policy 4 requires development of urban uses within the existing jurisdiction or Sphere of Influence before development of existing open space for non-open space uses is allowed outside the jurisdiction or existing Sphere of Influence. The proposed project would develop land that is contiguous to existing urban development within the City and is within the City’s Sphere of Influence.

The Project would result in progressive steps toward filling in the territory designated by the City’s Sphere of Influence for future development and would not represent piece meal annexation, consistent with Policies 5 and 6. The proposed annexation would also conform to

the lines of assessment and property ownership, consistent with Policy 10. Finally, pursuant to Policy 12, the proposed annexation would not result in impacts on other service recipients or agencies serving the area.

As described above, the proposed project would be consistent with LAFCO requirements and the City's General Plan. This is considered a **less than significant** impact and no mitigation is required.

Response c): Less than Signification with Mitigation. The project site is located within the jurisdiction of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan ("Plan" or "SJMSCP") and is located within the Central/Southwest Transition Zone of the SJMSCP. The San Joaquin Council of Governments (SJCOG) prepared the Plan pursuant to a Memorandum of Understanding adopted by SJCOG, San Joaquin County, the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), Caltrans, and the cities of Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy in October 1994. On February 27, 2001, the Plan was unanimously adopted in its entirety by SJCOG. The City of Tracy adopted the Plan on November 6, 2001.

According to Chapter 1 of the SJMSCP, its key purpose is to "provide a strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses, while protecting the region's agricultural economy; preserving landowner property rights; providing for the long-term management of plant, fish and wildlife species, especially those that are currently listed, or may be listed in the future, under the Federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA); providing and maintaining multiple use Open Spaces which contribute to the quality of life of the residents of San Joaquin County; and, accommodating a growing population while minimizing costs to project proponents and society at large."

In addition, the goals and principles of the SJMSCP include the following:

- Provide a County-wide strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses, while protecting the region's agricultural economy.
- Preserve landowner property rights.
- Provide for the long-term management of plant, fish, and wildlife species, especially those that are currently listed, or may be listed in the future, under the ESA or the CESA.
- Provide and maintain multiple-use open spaces, which contribute to the quality of life of the residents of San Joaquin County.
- Accommodate a growing population while minimizing costs to project proponents and society at large.

In addition to providing compensation for conversion of open space to non open space uses, which affect plant and animal species covered by the SJMSCP, the SJMSCP also provides some

compensation to offset impacts of open space conversions on non-wildlife related resources such as recreation, agriculture, scenic values and other beneficial open space uses. Specifically, the SJMSCP compensates for conversions of open space to urban development and the expansion of existing urban boundaries, among other activities, for public and private activities throughout the County and within Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy.

Participation in the SJMSCP is voluntary for both local jurisdictions and project applicants. Only agencies adopting the SJMSCP would be covered by the SJMSCP. Individual project applicants have two options if their project is located in a jurisdiction participating in the SJMSCP: mitigating under the SJMSCP or negotiating directly with the state and/or federal permitting agencies. If a project applicant opts for SJMSCP coverage in a jurisdiction that is participating under the SJMSCP, the following options are available, unless their activities are otherwise exempted: pay the appropriate fee; dedicate, as conservation easements or fee title, habitat lands; purchase approved mitigation bank credits; or, propose an alternative mitigation plan.

Responsibilities of permittees covered by the SJMSCP include, collection of fees, maintenance of implementing ordinances/resolutions, conditioning permits (if applicable), and coordinating with the Joint Powers Authority (JPA) for Annual Report accounting. Funds collected for the SJMSCP are to be used for the following: acquiring Preserve lands, enhancing Preserve lands, monitoring and management of Preserve lands in perpetuity, and the administration of the SJMSCP. Because the primary goal of SJMSCP to preserve productive agricultural use that is compatible with SJMSCP's biological goals, most of the SJMSCP's Preserve lands would be acquired through the purchase of easements in which landowners retain ownership of the land and continue to farm the land. These functions are managed by San Joaquin Council of Governments.

The proposed project is an annexation of land into an existing incorporated city limits and is located immediately adjacent to the boundaries of the defined community, which falls into the category of "Unmapped Land Use Project" under the SJMSCP. Projects in this category are subject to a case-by-case review by a Technical Advisory Committee (TAC) to ensure that the biological impacts of the proposed project are within the parameters established by the SJMSCP and the Biological Opinion.

"Unmapped Land Use Projects" that seek coverage under the SJMSCP are required to complete the "*Section 8.2.1(10) Checklist for Unmapped SJMSCP Projects*" with supporting documentation for SJCOG to review and confirm that the proposed project is consistent with the SJMSCP and the Biological Opinion. If the TAC confirms that the proposed project is consistent with the SJMSCP, they will recommend to the Joint Powers Authority that the project receive coverage under the SJMSCP. As required by Mitigation Measure 5, the City must submit a Biological Assessment and SJMSCP Coverage Application to the San Joaquin Council of Governments (SJCOG) to include the project site in the SJMSCP. Compliance with this required would ensure that the project has a **less than significant** impact related to this environmental topic.

XI. MINERAL RESOURCES -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. As described in the Tracy General Plan EIR, the main mineral resources found in San Joaquin County, and the Tracy Planning Area, are sand and gravel (aggregate), which are primarily used for construction materials like asphalt and concrete. According to the California Geological Survey (CGS) evaluation of the quality and quantity of these resources, the most marketable aggregate materials in San Joaquin County are found in three main areas:

- ◆ In the Corral Hollow alluvial fan deposits south of Tracy
- ◆ Along the channel and floodplain deposits of the Mokelumne River
- ◆ Along the San Joaquin River near Lathrop

Figure 4.8-1 of the General Plan EIR identifies Mineral Resource Zones (MRZs) throughout the Tracy Planning Area. The project site is located within an area designated as MRZ-1. The MRZ-1 designation applies to areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. Therefore, the project would not result in the loss of availability of a known mineral resource. In the event that mineral resources were determined in the future to be present on the project site, implementation of the project would not preclude the ability to extract these resources in the future. Therefore, this impact is considered **less than significant**

XII. NOISE -- WOULD THE PROJECT RESULT IN:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a), c): Less than Significant. Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local planning criteria or ordinances, or substantially increase noise levels at noise-sensitive land uses.

There are no existing noise sensitive land uses adjacent to the project site. The project site is located in an agricultural and industrial area that generally has a relatively high level of ambient background noise throughout the day. There nearest noise sensitive land uses are residences located approximately 0.5 miles to the south of the site.

A review of noise studies conducted for comparable facilities indicated that the project would be expected to generate average hourly daytime noise levels of less than 65 dBA at the property line. This noise level is within the thresholds established by the Tracy General Plan, and would not constitute a significant increase in ambient noise levels. The Tracy General Plan establishes

noise levels for district zones. The project site is surrounded by industrial and agricultural zones, each of which have established 75 dBA as the maximum hourly average noise level.

Project implementation would result in an increase in daily vehicle and truck trips to the project site. However, these trips would be dispersed throughout the day, and are not anticipated to generate more than 7 additional trips in any given hour throughout the day. The majority of new vehicle trips generated by the project would occur during the daytime, when sensitivity to noise is reduced (when compared to nighttime noise sensitivity). The project site is located within an area designated and zoned for industrial uses, and the ambient background noise levels are relatively high under existing conditions.

This increase in daily vehicle trips would not significantly increase the ambient traffic noise levels in the project vicinity and would not result in a violation of any established noise thresholds in the project vicinity.

Due to the project's projected noise levels' compliance with the General Plan, and the lack of sensitive receptors in the project vicinity, this impact is considered **less than significant** and no mitigation is required.

Responses b), d): Less than Significant. Operation of the proposed project would not result in groundborne vibrations. Construction of the project may result in temporary increases in ambient noise levels from the use of heavy machinery and equipment used during construction. Pile driving or blasting would not be required for project construction, and therefore, groundborne vibration would not occur during construction activities. Additionally, as described above, the project site is not located near any sensitive noise receptors. Construction activities associated with the project are required to occur during the daytime hours between 7:00 a.m. and 7:00 p.m., which would ensure that construction noise does not increase ambient nighttime noise levels in the project vicinity. Additionally, construction noise would be temporary, and limited to the time needed to complete site preparation activities. This is considered a **less than significant** impact and no mitigation is required.

Responses e) and f): No Impact. The project site is not located within two miles of a public airport or a private airstrip. There is **no impact**.

XIII. POPULATION AND HOUSING -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			X	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), c): Less than Significant. Implementation of the project would not directly result in population growth, nor would it convert any land use designations to a use that would allow for the construction of housing. The proposed project will not generate a significant number of new jobs which could lead indirectly to population growth.

The project would not extend water, wastewater and electrical infrastructure to an area that could result in indirect population growth as a result of new infrastructure, as the lands surrounding the site would remain under their current agricultural and industrial designations, and the extension of infrastructure to the site would not facilitate the construction of housing in an area that is not currently served by infrastructure.

There are no homes or residents currently located on the project site, and therefore, no homes or people would be displaced as a result of project implementation. These impacts are considered **less than significant** and no mitigation is required.

XIV. PUBLIC SERVICES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?			X	
ii) Police protection?			X	
iii) Schools?			X	
iv) Parks?			X	
v) Other public facilities?			X	

*RESPONSES TO CHECKLIST QUESTIONS***Response a): Less than Significant.****Fire Protection and Emergency Medical Services**

The Tracy Fire Department, as a member agency of the South County Fire Authority, provides fire protection, life safety, and emergency response services to 167 square miles of the southern part of San Joaquin County. In 1999, the South County Fire Authority was established to more effectively and efficiently serve the City of Tracy, the Tracy Rural Fire Protection District (FPD), and the Mountain House Community Services District (CSD).

The Fire Authority currently operates seven fire stations and an administrative office. Twenty-four hour-a-day staffing is provided with five paramedic engine companies, two basic life support engine companies, and one ladder truck company. Three fire stations are within the incorporated area of the City of Tracy, three are in the surrounding rural Tracy area, and one is located in the planned Community of Mountain House.

Medical transport is provided by private ambulance. American Medical Response is the exclusive emergency ambulance service provider in San Joaquin County.

The Tracy Fire Department has 74.94 full-time equivalent (FTE) fire fighters/ fire station staff, and an additional 4.30 FTE civilian staff. The 2010 ratio of fire fighters per 1,000 population was 0.9 certified fire fighters per 1,000 population.

The Tracy Fire Department conducted a Standards of Response Coverage study in late 2007. Findings of the study indicated that the Department has challenges in meeting its established response time objectives in the areas of the West Valley Mall and Downtown Tracy utilizing existing resources. The Department is currently in the process of mitigating the deficiency in the area of the West Valley Mall through the potential relocation of an existing fire station. Future development will create a need for expanded fire and emergency medical services.

Currently the Department is working on a plan to expand its ability to deliver Advanced Life Support services from all seven Fire Department facilities. Since November 2008, the Fire Department has expanded its provision of Advanced Life Support Services to six of the seven fire stations; there are plans to provide these services from the final station upon successful relocation of the facility, which is expected to be completed in fiscal year 2012/2013. Emergency medical services in Tracy and the surrounding areas are reported to be good, as Tracy is one of only three fire departments in San Joaquin County that provide Advanced Life Support services, and there are no reported concerns about the level of service provided.

Recognizing the potential need for increases in fire protection and emergency medical services, the City's General Plan includes policies to ensure that adequate related facilities are funded and provided to meet future growth (Objective PF-1.1, P1). This policy will be implemented through the review of all new projects within the SOI, prior to development, and through the collection of development impact fees for the funding of facilities,

The project site and the surrounding area is served by Fire Station #96, which is currently located at 301 West Grantline Road, approximately 1 mile south-southwest of the project site. The Tracy Fire Department is currently in the process of relocating Station #96 to 1800 West Grantline Road, which is approximately 1.5 miles southwest of the project site. The City owns the land at the new site of Station #96, and has identified the relocated fire station as a Capital Improvement Project (CIP 71061). The contract to begin improvements on the site was approved by the Tracy City Council on August 2, 2011. The relocated Station #96 will be operated by the same staff as the existing Station #96 and is scheduled to begin operating in 2013. The project site is located within the Fire Department's 5-minute response zone.

Implementation of the proposed project would not adversely impact existing fire and emergency services within the City, and would not require the construction of new fire protection facilities.

In order to provide adequate fire protection and suppression services to the project site, the Tracy Fire Department must have access to adequate onsite hydrants with adequate fire-flow pressure available to meet the needs of fire suppression units. The final site plans and development specifications developed for the proposed project will indicate the location and design specifications of the fire hydrants that will be required within the project site.

Police Protection

The Tracy Police Department provides police protection services to the City of Tracy. Its headquarters are located at 1000 Civic Center Drive, and there are no satellite offices or plans

to construct any in the near future (General Plan Draft EIR, 2006). The Department currently employs 91 officers, and responded to over 72,500 calls for service in 2008. The Department also has 43 non-sworn positions, which include both full- and part-time administrators, communications dispatchers, community services personnel, animal control, crime scene technicians, and a records superintendent. The City has a goal of a 5-minute response time for Priority 1 calls (life threatening situations).

The police station is located approximately 2.25 miles from the project site. The Department divides calls for service into three categories:

- Priority 1 calls are defined as life threatening situations.
- Priority 2 calls are not life threatening, but require immediate response.
- Priority 3 calls cover all other calls received by the police.

The average response time for Priority 1 calls within the City limits is approximately seven to nine minutes. Response time for Priority 2 and 3 calls is, on average, between 20 and 30 minutes. The Tracy Police Department provides mutual aid to the San Joaquin County Sheriff's office, and vice versa, when a situation exceeds the capabilities of either department. Mutual aid is coordinated through the San Joaquin County Sheriff.

It is not anticipated that implementation of the proposed project would result in significant new demand for police services. Project implementation would not require the construction of new police facilities to serve the project site, nor would it result in impacts to the existing response times and existing police protection service levels.

Schools, Parks and Other Public Facilities

The proposed project would not result in population growth in the City of Tracy. Since the project would not result in population growth, implementation of the project would not result in increased enrollment in area schools, which could lead to impacts, nor would the project increase demand for parks or other public facilities.

As described above, the proposed project would not increase demand for fire, police or emergency services. Nor would the project increase demand for schools, parks or other public facilities. This is a **less than significant** impact and no mitigation is required.

XV. RECREATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): No Impact. The proposed project would not increase the use of existing recreational facilities, nor would it include the construction of new recreational facilities. There is **no impact**.

XVI. TRANSPORTATION/TRAFFIC -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?			X	
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a), b): Less than Significant. The proposed project would result in minimal increases in traffic in the project area. The Plant would operate 24 hours per day, and would utilize seven to nine employees per shift. Additionally, the project may require up to 20 truck trips per day associated with biomass fuel deliveries. These trips are anticipated to occur throughout the day, and would not be concentrated during peak travel hours. A worst-case scenario is that the project could generate up to 14 additional vehicle trips in any given hour (nine employee trips and five truck trips). The addition of 14 additional vehicle trips in an hour does not constitute a significant increase in traffic, nor would it result in a decreased level of service on area roadways or intersections. This is considered a **less than significant** impact and no mitigation is required.

Response c): No Impact. The project site is not located in the vicinity of a public airport or private airstrip. Project implementation would have **no impact** on air traffic patterns.

Responses d) and e): No Impact. There are no roadway design improvements proposed as part of the project, and therefore, no changes to the area roadways would occur. Emergency access to the project site would be provided to the project site from Arbor Avenue. As described above, the project would result in minimal traffic impacts, and would not increase area traffic to a point where emergency access would be impeded. There is **no impact**.

Response f): Less than Significant. Implementation of the proposed project would not result in a significantly increased demand for parking at the project site. Vehicle trips to the project site include employee trips and trucks carrying biomass fuel. The project site plans will include adequate parking for employee vehicles, and a fuel delivery area will be maintained that will allow for adequate truck access. This is a **less than significant** impact and no mitigation is required.

Response g): No Impact. The project would have no impact on any existing plans or policies related to alternative transportation. There is **no impact**.

XVII. UTILITIES AND SERVICE SYSTEMS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a): No Impact. The primary objective and purpose of the proposed project is to reduce salinity levels in the wastewater treated at the adjacent Tracy WWTP. The proposed project would effectively treat the wastewater to near potable levels, which would assist the Tracy WWTP in meeting water quality standards for discharges to the Delta. The proposed project would result in a beneficial impact to wastewater treatment, and as such, there is **no impact**.

Responses b): Less than Significant. As described throughout this document, the proposed project would be constructed and operated to further treat wastewater treated at the Tracy WWTP. The potential environmental impacts associated with the construction of new wastewater treatment facilities has been addressed throughout this document, and mitigation measures have been included that would reduce all potential project impacts to a **less than significant** level.

Responses c): Less than Significant. The proposed project would result in the limited increase of impervious surfaces on the project site, and would not require the construction of stormwater or drainage infrastructure beyond the project site boundaries. Potential impacts associated with construction activities on the project site have been addressed throughout this document, and mitigation measures to protect water quality and reduce environmental impacts have been required. This is a **less than significant** impact and no additional mitigation is required.

Responses d): No Impact. The primary objective and purpose of the proposed project is to reduce salinity levels in the wastewater treated at the adjacent Tracy WWTP. The proposed project would effectively treat the wastewater to near potable levels, which would assist the Tracy WWTP in meeting water quality standards for discharges to the Delta. The proposed project would not result in increased demand for potable water, and as such, there is **no impact**.

Responses e): No Impact. The primary objective and purpose of the proposed project is to reduce salinity levels in the wastewater treated at the adjacent Tracy WWTP. The proposed project would effectively treat the wastewater to near potable levels, which would assist the Tracy WWTP in meeting water quality standards for discharges to the Delta. The proposed project would not result in the increased generation of wastewater, and as such, there is **no impact**.

Responses f), g): No impact. The proposed project would not generate significant volumes of solid waste. The proposed project would burn biomass fuels in the form of agricultural woody waste, urban wood waste and other biomass such as urban tree trimmings. It is likely that a portion of this biomass fuel stream might otherwise be disposed of in landfills if it were not used as fuel for the project. Therefore, the proposed project would likely result in a net reduction in solid waste sent to landfills. The only residual byproduct generated by the project, other than electricity and clean water, is salt, which would be removed from the treated wastewater. The project applicant intends to sell or distribute the accumulated salt to commercial enterprises for use on the open market. Salt may be disposed of in landfills in limited quantities, but would not result in any conflicts related to the disposal of solid waste or exceed the permitted capacity of a landfill. There is **no impact**.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), c): Less than Significant. As described throughout the analysis above, the proposed project would not result in any significant impacts to the environment. The proposed project is required to implement mitigation measures that would reduce any potentially significant impacts to a less than significant level. The project would not result in any cumulative impacts, impacts to biological resources or impacts to cultural and/or historical resources. These are **less than significant** impacts.

RESOLUTION 2012-075

ADOPTING A MITIGATED NEGATIVE DECLARATION FOR
THE TRACY DESALINATION AND GREEN ENERGY PROJECT
APPLICATION NUMBERS GPA11-0004 AND A/P11-0001

WHEREAS, The Tracy Desalination and Green Energy Project site comprises approximately 241 acres of City-owned land located within the City's Sphere of Influence, immediately north of the Tracy City limits, east of Tracy Boulevard in the vicinity of Sugar Road, Assessor's Parcel Numbers 212-160-05, 212-160-09 and 212-160-11; and

WHEREAS, The Tracy Desalination and Green Energy Project consists of the construction and operation of a desalination plant that would remove salt from treated effluent that is being processed by the City's Wastewater Treatment Plant to a level that meets the State's standards for discharge into the Sacramento San Joaquin Delta; the project would also include a biomass cogeneration energy production component that would produce approximately 16.4 megawatt-hours of electricity; and

WHEREAS, The project includes applications for a General Plan Amendment to designate the 241-acre project site as Industrial, annexation of the 241-acre project site into the City of Tracy, and pre-zoning of the 241-acre project site to Light Industrial (M1), Application Numbers GPA11-0004 and A/P11-0001; and

WHEREAS, In accordance with the California Environmental Quality Act (CEQA) regulations and CEQA Guidelines, the City prepared an Initial Study for the Tracy Desalination and Green Energy Project; and

WHEREAS, Based on the findings and mitigation measures contained within the Initial Study, a Mitigated Negative Declaration was prepared, and is attached to the May 1, 2012 City Council staff report as Attachment B; and

WHEREAS, The Mitigated Negative Declaration was circulated for public review from December 1, 2011 until December 30, 2011 and extended until January 24, 2012; and

WHEREAS, A total of four comment letters were received; none of which challenged the adequacy of the environmental analysis or raised any issues or concerns that would warrant changes to the Mitigated Negative Declaration or a recirculation of the Mitigated Negative Declaration; and

WHEREAS, The comment letters are attached to the May 1, 2012 City Council staff report as Attachment C; and

WHEREAS, The description of the project boundary, which was published in the Mitigated Negative Declaration, indicated that approximately 13-acres of APN 212-160-11 were included in the project area proposed for annexation. The project boundary has been changed to indicate that the entire 17.1-acre area of APN 212-160-11 is included in the area proposed for annexation. LAFCo policies require that annexation boundaries conform to property boundary lines; and

WHEREAS, The area being added to the project boundary is the location of the former Holly Sugar Administrative Buildings (City-owned). The addition of this approximately 4.1-acre area to the project boundary does not result in any new significant or potentially significant environmental impacts, nor does it increase the severity of any previously identified environmental impacts or require any changes to mitigation measures included in the Initial Study/Mitigated Negative Declaration because the majority of this area is paved or covered in gravel road base, and contains the former administrative building and associated support structures historically used for equipment and vehicle storage; and because the proposed Tracy Desalination and Green Energy Project would not result in the alteration of this portion of the project area. The proposed change only involves inclusion of this portion of APN 212-160-11 into the area proposed for annexation; and

WHEREAS, The proposed revision to the project boundary does not constitute a "substantial revision" as defined by CEQA Guidelines Section 15073.5(b). The proposed change to the project boundary does not result in any new or increased significant effects. The proposed change to the project boundary is considered new information which merely clarifies, amplifies, or makes insignificant modifications to the MND. As such, recirculation of the document is not required, as specified by CEQA Guidelines Section 15073.5(c); and

WHEREAS, The Planning Commission held a duly noticed public hearing on March 14, 2012 and recommended that the City Council adopt the Mitigated Negative Declaration for the Tracy Desalination and Green Energy Project; and

WHEREAS, The City Council held a duly noticed public hearing on May 1, 2012 to consider the Mitigated Negative Declaration;

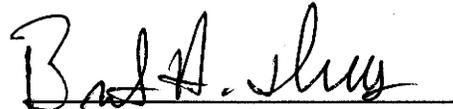
NOW, THEREFORE BE IT RESOLVED that the City Council hereby adopts the Mitigated Negative Declaration for the 241-acre Tracy Desalination and Green Energy Project, Application Numbers GPA11-0004 and A/P11-0001.

* * * * *

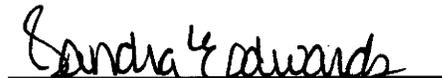
Resolution 2012-075
Page 3

The foregoing Resolution No. 2012-075 was adopted by the Tracy City Council
on the 1st day of May 2012, by the following vote:

AYES:	COUNCIL MEMBERS:	ABERCROMBIE, ELLIOTT, MACIEL, RICKMAN, IVES
NOES:	COUNCIL MEMBERS:	NONE
ABSENT:	COUNCIL MEMBERS:	NONE
ABSTAIN:	COUNCIL MEMBERS:	NONE


MAYOR

ATTEST:


CITY CLERK

ADDENDUM
TO THE
INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION
FOR THE
TRACY DESALINATION AND GREEN ENERGY PROJECT

SCH# 2011122004

SEPTEMBER 2012

Prepared for:

City of Tracy
Department of Development and Engineering Services
333 Civic Center Plaza
Tracy, CA 95676

Prepared by:

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1.0 INTRODUCTION

This environmental document is an Addendum to the Tracy Desalination and Green Energy Project Initial Study/Mitigated Negative Declaration (IS/MND), SCH # 2011122004, GPA 11-0004 and A/P 11-0001. The project and the IS/MND for this project were approved and adopted by the City of Tracy City Council on May 1, 2012. Since certification and adoption of the IS/MND, the project plans have been slightly modified, requiring the need for further environmental analysis, as contained in this document.

1.1 BACKGROUND

The Tracy Desalination and Green Energy Project IS/MND (SCH# 2011122004) was completed and circulated for public review and comment in December 2011. The IS/MND evaluated potential impacts associated with annexation of the site to the City of Tracy, a General Plan Amendment to designate the site Industrial, rezoning of the site to Industrial, and impacts associated with the construction and operation of a 1.2 million gallons per day (MGD) desalination plant and biomass electricity generation facility. The IS/MND addressed the full range of environmental topics included in Appendix G of the CEQA Guidelines, including: aesthetics, agricultural and forest resources; air quality; biological resources; cultural resources; geology and soils; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; noise; population and housing; public services; recreation; transportation and traffic; utilities and service systems; and cumulative impacts.

All environmental impacts addressed in the IS/MND have been mitigated to below a level of significance through implementation of mitigation measures.

Since certification of the IS/MND and approval of the project on May 1, 2012, the project has undergone minor revisions related to the heat source for the boiler and the energy outputs from the plant. These revisions are described in Section 2.0 of this document, and are the subject of this Addendum.

1.2 PURPOSE OF THE ADDENDUM

When a proposed project is changed after project approval and certification of an environmental document prepared under CEQA, a determination must be made by the Lead Agency as to whether an Addendum or a Subsequent MND is prepared. Criteria, as set forth in CEQA Guidelines Section 15162, are used to assess which environmental document is appropriate. The criteria for determining whether an Addendum or Subsequent MND is prepared are outlined below. If the criteria below are true and applicable to the project, then an Addendum is the appropriate environmental document.

1. No new significant impacts will result from the project or from new mitigation measures.
2. No substantial increase in the severity of an environmental impact will occur.

3. No new feasible alternatives or mitigation measures that would reduce impacts previously found not to be feasible have, in fact, been found to be feasible.

Based upon the information provided in Section 3.0 of this document, the proposed revisions to the previously approved Tracy Desalination and Green Energy Project will not result in new significant impacts or substantially increase the severity of impacts previously identified in the IS/MND, and there are no previously infeasible alternatives that are now feasible. Therefore, an Addendum is appropriate, and this Addendum has been prepared to address the environmental effects of the revisions to the project.

1.3 CONCLUSIONS

This addendum addresses the environmental effects associated with the revisions to the Tracy Desalination and Green Energy project that have occurred since certification of the IS/MND and approval of the project on May 1, 2012. The conclusions of the analysis in this Addendum are not substantially different from those made in the IS/MND. The same impacts identified in the IS/MND remain, and have been mitigated to a less-than-significant level, as identified in the IS/MND. No new significant impacts would result, and no substantial increase in the severity of impacts from those previously identified in the IS/MND would occur. This Addendum has been prepared consistent with the requirements of Section 15162 and 15164 of the CEQA Guidelines.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

The location and setting of the project has not changed. The project site consists of approximately 241 acres previously located within the City's Sphere of Influence, immediately north of the Tracy City limits. The project site includes APN 212-160-05, APN 212-160-09, and portions of APN 212-160-11. Annexation of the project site into the City of Tracy was approved by the San Joaquin LAFCO on August 17, 2012.

The project site is bounded by Tracy Boulevard to the west, Arbor Avenue and industrial uses to the south, and agricultural lands to the north. Agra Trading, a biomass fuel recycling and trading company, is located on a portion of the project site. The site is bisected by West Sugar Road, which runs in an east-west direction.

The northern and western boundaries of the project site are adjacent to agricultural lands in active agricultural production. The southern boundary of the project site is adjacent to primarily industrial uses with some commercial uses. These uses include, but are not limited to a mini-storage facility, an equipment rental facility, and automotive repair facilities. The City of Tracy Wastewater Treatment Plant (WWTP) is located immediately southeast of the project site. Lands to the east of the project site are currently used for industrial operations. An existing rail spur is located immediately east of the project site and terminates on the project site.

2.2 PROJECT REVISIONS SINCE IS/MND CERTIFICATION

The project analyzed in the December 2011 IS/MND, which was certified on May 1, 2012, consists of a 1.2 MGD desalination plant that would treat treated wastewater from the adjacent Tracy Wastewater Treatment Plant (WWTP) to reduce salinity levels in the treated wastewater. The desalinated wastewater would then be blended back into the remaining treated effluent at the WWTP prior to discharge into the Delta.

In order to operate the desalination plant, a heat source is needed. The project originally proposed to burn locally-sourced biomass waste, including but not limited to nut shells, olive pits, agricultural residuals, tree prunings, and clean urban wood waste. In addition to providing a heat source for the desalination process, the combustion of these biomass materials would have generated electricity, which would have been sold to the local utility grid for distribution to local and regional markets. Since approval of the project in May 2012, the City and project proponent were unable to secure a favorable power purchase agreement with local electricity providers, which rendered the project financially infeasible. In order to ensure that the project is financially feasible, the City and the project proponent have proposed minor changes related to the project's heat source and energy outputs.

The revised project would utilize natural gas as a heat source to power the desalination plant. Natural gas is available to the project site via two existing on-site high-pressure natural gas lines. The project would utilize approximately 350 MM/btu of natural gas per hour. The project would no longer use biomass materials as a heat source for project operations.

Additionally, during the desalination process, the revised project would process sugar beets in order to produce ethanol as an output of the process. Beets would be delivered to the plant on a daily basis via truck and rail, and would be sourced from area farms within 50 miles of the plant. After arrival at the plant, the beets would be washed and shredded. The beets would be heated and processed in order to remove the sugars from the beets. The sugar water removed from the beets would be concentrated and stored, and then fermented. After fermentation, the sugar water would be distilled to remove the alcohol generated during the fermentation process. The removed alcohol would be processed onsite into ethanol, which would be transported from the site for sale to the local market via truck and rail. Approximately two tankers trucks of ethanol would be processed on a daily basis, and the ethanol would be transported offsite by truck and by rail.

Beet pulp from the process would be dried indoors in a closed loop drier. Air used in the drying process would then be directed to a regenerative thermal oxidizer for odor and volatile organic compounds (VOC) removal. The dried beet pulp would be removed from the site mixed with salt (which is a residual product from the desalination process) and sold locally as a cattle feed. Water used in the beet processing would be cleaned and returned to the system for reuse. The entire process would occur within the confines of the plant in a controlled indoor environment. The beets would be kept indoors in a receiving building before processing. The beets would be harvested approximately 9-10 months per year from farms generally within 50 miles of the site. During off harvesting times, the plant would process its sugar water reserve, which would allow

for year-round operation of the plant. The plant would have virtually no waste. All beet pulp would be processed and sold as cattle feed. All of the water entering the system, including the wastewater from the City's WWTP, would be processed to clean water. The salt that results from the cleaning of the City's wastewater would be mixed into the cattle feed as a flavoring.

Other than the use of natural gas as a heat source (rather than biomass waste) and the generation of ethanol (rather than electricity), all other aspects of the project would remain unchanged, including the location and size of buildings, the site boundaries and the potential future solar thermal arrays.

3.0 ENVIRONMENTAL ANALYSIS

As explained in Chapter 1.0, this comparative analysis has been undertaken pursuant to the provisions of CEQA Guidelines Sections 15162 and 15164 to provide the City with the factual basis for determining whether any changes to the project, any changes in circumstance, or any new information since the IS/MND was certified on May 1, 2012 require additional environmental review or preparation of a Subsequent MND. The environmental analysis and mitigation measures provided in the IS/MND remain current and applicable to the proposed project in areas and aspects of the project unaffected by the project revisions identified in Chapter 2.0 of this Addendum.

AESTHETICS

The proposed project changes would not result in any new or altered impacts with respect to aesthetics and visual resources. The location, type, and appearance of structures and site improvements would not change from the analysis presented in the IS/MND. The IS/MND requires the implementation of Mitigation Measure 1, which requires the preparation and implementation of a lighting plan to reduce light spillage and nighttime lighting impacts. This Mitigation Measure would still be required and enforced. No new mitigation measures are required for the project revisions.

AGRICULTURAL AND FOREST RESOURCES

The proposed project changes would not result in any new or altered impacts with respect to agricultural and forest resources. The area of disturbance of the project would not change, and the project would not result in any increased impacts to agricultural lands or resources beyond those addressed in the IS/MND. The project would still be subject to the requirements of Mitigation Measure 2, which requires the payment Agricultural Mitigation Fess to offset the loss of Prime and Unique Farmland that would occur if the future solar array component of the project were constructed. This Mitigation Measure would still be required and enforced. No new mitigation measures are required for the project revisions.

AIR QUALITY

Potential project impacts associated with air quality emissions from operation of the revised project would actually decrease as a result of the proposed project changes. Table 1 shows the quantified operational emissions from biomass combustion that would have occurred under the original project proposal, and compares those emissions levels to emissions that would occur from the combustion of natural gas as the primary heat source, as proposed in the project revisions described in Chapter 2.0 of this Addendum.

TABLE 1: COMPARATIVE PLANT EMISSIONS

Pollutant	Biomass Combustion (Tons/Year)- Original Project Proposal	Natural Gas Combustion (Tons/Year)- Proposed Project Revisions	Change (Tons/Year)	Offset Threshold (tons/year)	Offset Required?	Major Source Threshold (tons/year)	Is Source a Major Source?
NOx	6.31	0.75	-5.56	10	No	10	No
PM10	7.67	0.23	-7.44	14.6	No	70	No
SOx	1.53	0.34	-1.16	27.38	No	70	No
CO	24.53	1.75	-22.78	100	No	100	No
VOC	7.67	0.51	-7.16	10	No	10	No

Source: BEST Environmental, 2011 and 2012, and De Novo Planning Group, 2011 and 2012.

As shown in Table 1 above, the emissions from combustion of natural gas would be notably lower than emissions that would have occurred from the combustion of biomass materials for plant operations. As shown in the Table, the IS/MND concluded that the original biomass plant design would be below the San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds for emissions offsets and major source emissions thresholds. The proposed revisions would not increase air quality emissions, but rather, air quality emissions would be lower under the proposed project revisions.

Emissions from truck trips associated with the project revisions would remain unchanged when compared to the analysis presented in the IS/MND. The IS/MND addressed mobile source emissions associated with approximately 20 truck trips per day. The volume of truck trips associated with the project revisions would be approximately 20 total trips per day. As such, this impact would remain unchanged and no additional mitigation is required.

With respect to the potential for the revised project to generate odors; the proposed project revisions include the use of an indoor, closed-loop system to capture and remove any odors generated during the beet sugar fermentation process. The system would have a closed-loop drying system and all air used in the drying process will be processed through a regenerative thermal oxidizer. If the plant has to shut down for any reason, the beets can be left in the ground for up to two months without generating odors. The beets would be kept indoors in a receiving building before processing. The beets would be harvested approximately 9-10 months per year. During off harvesting times the plant would process its sugar water reserve. The process from beet washing to cattle feed and ethanol removal would be in a closed indoor loop

and will be very closely monitored to ensure that no odors are generated. This change in the proposed project would not result in the increase generation of odors, and this impact is not more severe or significant than what was analyzed in the IS/MND. No new mitigation measures are required for the project revisions.

Construction-related emissions would not change when compared to the project addressed in the IS/MND. The revised project would be subject to the requirements of Mitigation Measures 3 and 4, which require the implementation of best management practices for construction and grading activities, as required by SJVAPCD Rule VIII. No new mitigation measures are required for the project revisions.

BIOLOGICAL RESOURCES

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the IS/MND. As such, no changes to potential impacts to biological resources would occur as a result of the proposed project revisions compared to the potential impacts described in the IS/MND. The IS/MND requires the project to implement Mitigation Measures 5 and 6, which require the project to obtain coverage under the San Joaquin Multi Species Conservation Plan (SJMSCP), and to ensure that construction activities do not adversely impact burrowing owls. These Mitigation Measures would be required by the project revisions and would reduce potential impacts to a less than significant level, as described in the IS/MND. No new mitigation measures are required for the project revisions.

CULTURAL RESOURCES

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the IS/MND. As such, no changes to potential impacts to cultural resources would occur as a result of the proposed project revisions compared to the potential impacts described in the IS/MND. The IS/MND requires the project to implement Mitigation Measure 7, which includes standard measures that must be implemented if a previously unknown cultural or historical resource is encountered during site grading and construction activities. This Mitigation Measure would be required by the project revisions and would reduce potential impacts to a less than significant level, as described in the IS/MND. No new mitigation measures are required for the project revisions.

GEOLOGY AND SOILS

The footprint of the project and the areas proposed for disturbance would not change from the conditions addressed in the IS/MND. As such, no changes to potential impacts to geology and soils would occur as a result of the proposed project revisions compared to the potential impacts described in the IS/MND. The IS/MND requires the project to implement Mitigation Measures 8 and 9, which require the project to implement site-specific geotechnical engineering measures in order to comply with the California Building Code to ensure that structures and foundations are designed to meet stability and safety standards. These Mitigation Measures would be required by the project revisions and would reduce potential impacts to a less than significant level, as described in the IS/MND. No new mitigation measures are required for the project revisions.

GREENHOUSE GASES

Emissions of greenhouse gases (GHGs) would decrease under the proposed project revisions when compared to the originally proposed project. As described in the IS/MND, the combustion of biomass materials to generate up to 16.4 MW of electricity would generate approximately 870 tons/day of GHGs. The revised project would generate up to 4 MW of electricity from the combustion of natural gas, and the natural gas combustion would be used as the primary heat source in the desalination and ethanol production process. On a Btu basis, burning one million Btu of natural gas will release about 117 lbs. of CO₂. The revised project would burn 350 MM/btu/hr, which equates to approximately 491.4 tons/day of CO₂. This is nearly half of the daily emissions of CO₂ that would have occurred under the originally proposed project. Additionally, the revised project would generate ethanol for sale to the local market as a fuel blend supplement. Ethanol is considered a renewable biofuel by the California Energy Commission, and is an eligible renewable fuel under the State's Renewables Portfolio Standard. As such, the proposed project revisions are consistent with Statewide efforts to increase the supply of qualified renewable fuel supplies. Given that the proposed project revisions would result in a decreased level of GHGs generated directly from the project when compared to the original project, and the project revisions are consistent with Statewide plans and efforts to increase the availability of renewable fuels, the project revisions would not increase the severity of impacts related to GHGs and climate change. No new mitigation measures are required for the project revisions.

HAZARDS AND HAZARDOUS MATERIALS

The original project addressed in the IS/MND included the use, storage and transport of hazardous materials regulated under the CalARP program, including anhydrous ammonia for use in the Selective catalytic reduction (SCR) system to reduce emissions of nitrogen oxide gas (NO_x). The use of anhydrous ammonia would be greatly reduced, if not completely eliminated under the proposed project revisions. The revised project would utilize chemicals in the ethanol production process, including, but not necessarily limited to, sulfuric acid (94%), phosphoric acid (75%), urea (30% solution), defoaming agent, and caustic soda. The exact mix of chemicals used would be determined during plant operations and would be based on the sugar content of the processed beets, among other factors. The project operator would prepare a hazardous materials business plan (HMBP) that would include details regarding the type, volume, storage, and transport of chemicals used at the plant. The HMBP would comply with all applicable local, state, and federal regulations related to the use, storage and transport of regulated chemicals and materials.

The IS/MND addressed impacts associated with the use, transport and storage of anhydrous ammonia. Anhydrous Ammonia (ammonia) (CAS No. 7664-41-7) is subject to the California Accidental Release Prevention Program (CalARP) regulations (Title 19, CCR, Chapter 4.5), and is regulated as an "extremely hazardous material". The IS/MND included Mitigation Measure 10, which requires the preparation of a Risk Management Plan (RMP) for the use and storage of anhydrous ammonia that meets the requirements of California Health and Safety Code, Division 20, Chapter 6.95, Article 2 and the California Code of Regulation (CCR) Title 19 Division 2, Chapter 4.5, Articles 1 through 11.

The revised project would utilize chemicals including, but not necessarily limited to, sulfuric acid (94%), phosphoric acid (75%), urea (30% solution), defoaming agent, and caustic soda. These materials are not classified as “extremely hazardous materials” since they pose a lesser risk to the public and the environment than anhydrous ammonia, and the preparation of a Risk Management Plan is not required for these substances. If the project operators determines that the use of chemicals regulated under the CalARP program are required, then all applicable regulations related to the safe storage and use of these chemicals would be implemented. The implementation of Mitigation Measure 10, as described in the IS/MND would ensure that any and all chemicals or hazardous materials used at the project site would comply with applicable regulations, through the preparation of a Risk Management Plan and/or Hazardous Materials Business Plan. This mitigation measure is included in the IS/MND and would remain applicable in light of the proposed project changes. Therefore, potential impacts associated with hazardous materials would not substantially increase as a result of the proposed project revisions. No new mitigation measures are required for the project revisions.

HYDROLOGY AND WATER QUALITY

The proposed project revisions would result in the same area of disturbance, project footprint and grading/drainage improvements as what was addressed in the IS/MND. There would be no changes when compared to the originally proposed project. The IS/MND includes Mitigation Measure 11, which requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) prior to site grading activities in order to protect surface water quality in the project area. This Mitigation Measures would be required by the project revisions and would reduce potential impacts to a less than significant level, as described in the IS/MND. No new mitigation measures are required for the project revisions.

LAND USE AND PLANNING

The proposed project revisions would not result in any new or substantially increased impacts related to land use and planning compared to the analysis contained in the IS/MND. The San Joaquin LAFCO has already approved the annexation of the project site into the City of Tracy, and the City has approved the General Plan Amendment to designate the site Industrial and prezone the site Industrial. There would be no changes to impacts related to land use and planning beyond those addressed in the IS/MND, and no new mitigation requirements are required for the project revisions.

MINERAL RESOURCES

The project’s footprint and area of disturbance would not change from what was addressed in the IS/MND. The IS/MND determined that the project would not result in any impacts related to mineral resources. No new mitigation measures are required for the project revisions.

NOISE

There are no existing noise-sensitive land uses adjacent to the project site. The project site is located in an agricultural and industrial area that generally has a relatively high level of ambient background noise throughout the day. There nearest noise sensitive land uses are residences located approximately 0.5 miles to the south of the site.

The generation of noises on the project site from operation of the plant would not change under the project revisions compared to the analysis contained in the IS/MND. The original project would have generated up to 20 truck trips per day to transport biomass materials to the project site. The revised project would generate approximately the same number of truck trips as the originally proposed project. Truck trips from the revised project would include the transport of beets to the site (approximately 8-10 trips per day) and the transport of processed ethanol and cattle feed from the site to the local market (approximately 8-10 trips per days). As such, the project revisions would result in approximately the same number of truck trips and would not increase the potential to generate increased noise levels on roadways in the project vicinity. There would be no increase in the severity of impacts related to noise beyond those addressed in the IS/MND, and no new mitigation requirements are required for the project revisions.

POPULATION AND HOUSING

As described in the IS/MND, implementation of the project would not directly result in population growth, nor would it convert any land use designations to a use that would allow for the construction of housing. The proposed project will not generate a significant number of new jobs which could lead indirectly to population growth. There are no homes or residences currently located on the project site, and therefore, no homes or people would be displaced as a result of project implementation. There would be no change to the analysis contained in the IS/MND and the project revisions would not increase the severity of any impacts related to population and housing. No new mitigation requirements are required for the project revisions.

PUBLIC SERVICES AND RECREATION

As described in the IS/MND, the project would not result in any impacts related to public services, including police, fire, schools, parks or other public facilities. None of the proposed revisions to the project would result in new public services impacts or increase the severity of any impacts related to public services. Impacts related to this topic would remain unchanged from the analysis in the IS/MND. No new mitigation requirements are required for the project revisions.

TRANSPORTATION AND TRAFFIC

As described in the IS/MND, the project would not result in any significant impacts to traffic, transportation facilities, or area roadways or intersections. The original project addressed in the IS/MND would have generated up to 20 truck trips per day associated with the transport of biomass materials to the project site. The revised project would generate approximately the same number of truck trips as was analyzed in the IS/MND. It is estimated that approximately 8-10 truck trips per day would be required to transport beets to the site for processing. An additional 8-10 trips per day would be generated from hauling processed ethanol to the local market and hauling beet waste for cattle feed to the local market. Compared to the analysis contained in the IS/MND, the project revisions would not result in increased impacts to the area transportation network. No new mitigation requirements are required for the project revisions.

UTILITIES AND SERVICE SYSTEMS

As described in the IS/MND, the project would not result in any impacts related to utility services, including water, sewer, drainage, or solid waste. None of the proposed revisions to the project would result in new utilities impacts or increase the severity of any impacts related to utilities. Impacts related to this topic would remain unchanged from the analysis in the IS/MND. No new mitigation requirements are required for the project revisions.

CONCLUSIONS

Based on the information provided above, the proposed project revisions would not result in an increase of impacts to any environmental topic previously addressed in the IS/MND, nor would the project result in new environmental impacts that were not previously addressed in the IS/MND.

Based on the evidence included in this Addendum, the proposed project, as described in Chapter 2.0, would not result in a substantial change in the conclusions and analysis included in the IS/MND, which was adopted by the Tracy City Council on May 1, 2012.

RESOLUTION 2012-188

AUTHORIZING AMENDMENT NO. 1 TO THE
EXCLUSIVE NEGOTIATING RIGHTS AGREEMENT
BETWEEN COMBINED SOLAR TECHNOLOGIES, INC. AND CITY OF TRACY FOR GREEN
ENERGY AND THERMAL DESALINATION PROJECT,
ADOPTION OF AN ADDENDUM TO THE CEQA NEGATIVE DECLARATION
AND AUTHORIZING THE MAYOR TO EXECUTE THE AMENDMENT

WHEREAS, On April 20, 2010, City Council authorized Combined Solar Technologies, Inc. (CST) to conduct a Green Energy Pilot Project at the Wastewater Treatment Plant (WWTP); and

WHEREAS, On January 4, 2011, City Council authorized staff to negotiate with CST for a feasibility study; and

WHEREAS, On April 19, 2011, City Council authorized an Exclusive Negotiating Rights Agreement with CST; and

WHEREAS, CST completed a feasibility study and a California Environmental Quality Act Negative Declaration was prepared and adopted by City Council on May 1, 2012; and

WHEREAS, The proposed project has been modified to include production of ethanol, as well as electricity and thermal desalination; and

WHEREAS, An addendum to the previously adopted CEQA Negative Declaration has been prepared which identifies that the environmental impacts for the proposed project are less than those evaluated in the existing project Negative Declaration; and

WHEREAS, A portion of the electricity produced would be used at the WWTP, and ethanol and excess electricity produced by the energy plant would be sold; and

WHEREAS, The City would receive the benefit of desalinated water to blend with the wastewater treatment plant effluent; and

WHEREAS, An additional eighteen months of time is needed to develop the project.

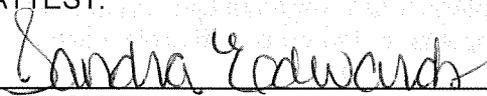
NOW, THEREFORE, BE IT RESOLVED That the City Council authorizes the Amendment No. 1 to the Exclusive Negotiating Rights Agreement Between Combined Solar Technologies, Inc. and the City of Tracy for the Green Energy and Thermal Desalination Project, adopts the addendum to the CEQA Negative Declaration and authorizes the Mayor to execute the Amendment.

The foregoing Resolution 2012-188 was passed and adopted by the Tracy City Council on the 4th day of September, 2012, by the following vote:

AYES: COUNCIL MEMBERS: ABERCROMBIE, ELLIOTT, MACIEL, RICKMAN
NOES: COUNCIL MEMBERS: NONE
ABSENT: COUNCIL MEMBERS: IVES
ABSTAIN: COUNCIL MEMBERS: NONE



MAYOR PRO TEM

ATTEST:


CITY CLERK

RESOLUTION NO: 17-0510-12a

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION - RE: TRACY RENEWABLE ENERGY

WHEREAS, Tracy Renewable Energy has requested funding for “The Tracy Integrated Campus: Renewable Ethanol from Sugar Beets Project” (hereafter, “Project”), a project to design, build, and operate an over 15 million diesel gallon equivalent per year ethanol facility, and more fully set forth in proposed Agreement ARV-16-022 (hereafter, “ARV-16-022”); and

WHEREAS, the City of Tracy is the lead agency pursuant to California Environmental Quality Act (hereafter, “CEQA”) (Pub. Resources Code section 21000 et seq.) and the State CEQA Guidelines (Cal. Code Regs., tit. 14, section 15000 et seq.); and

WHEREAS, the City of Tracy, in December 2011, prepared an Initial Study to determine the possible environmental impacts of the Tracy Desalination and Green Energy Project, which includes an analysis of the possible environmental impacts of the Project; and on the basis of the Initial Study, prepared a Mitigated Negative Declaration; and

WHEREAS, the City of Tracy, on May 1, 2012, adopted Resolution 2012-075, thereby adopting the Mitigated Negative Declaration; and

WHEREAS, the City of Tracy, in September 2012, prepared an Addendum to the Mitigated Negative Declaration; and

WHEREAS, the City of Tracy, on September 4, 2012, adopted Resolution 2012-188, thereby adopting the Addendum to the Mitigated Negative Declaration; and

WHEREAS, the State Energy Resources Conservation and Development Commission (hereafter, “Energy Commission”) is a responsible agency and must therefore, pursuant to State CEQA Guidelines sections 15091 and 15096, subdivision (h), make certain findings prior to approval of ARV-16-022; and

WHEREAS, the Energy Commission has reviewed and considered the December 2011 Initial Study and Mitigated Negative Declaration and September 2012 Addendum to the Mitigated Negative Declaration and other related documents in the record before it; and

WHEREAS, the Energy Commission has no information indicating that the environmental documentation is inadequate, and has used its own independent judgment to consider the Initial Study and Mitigated Negative Declaration and Addendum to the Mitigated Negative Declaration in deciding whether to approve ARV-16-022.

THEREFORE BE IT RESOLVED, that the Energy Commission finds, on the basis of the entire record before it, that since the Mitigated Negative Declaration and Addendum to the Mitigated Negative Declaration were adopted by the City of Tracy, there have been no substantial changes to the project and no substantial changes in project circumstances that would require major revisions to the Mitigated Negative Declaration and Addendum to the Mitigated Negative Declaration due to the involvement of new significant environmental effects or a substantial 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 Mitigated Negative Declaration and Addendum to the Mitigated Negative Declaration nor has the Energy Commission identified any feasible alternative or additional feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect approving ARV-16-022 would have on the environment; and

BE IT FURTHER RESOLVED, the City of Tracy has already adopted the mitigation measures recommended in the Mitigated Negative Declaration and Addendum to the Mitigated Negative Declaration and as set forth in the Mitigation Monitoring and Reporting Program, has authority to implement the mitigation measures, or to seek any required approvals for the mitigation measures, and such measures are within the responsibility of the City of Tracy and that the Energy Commission finds, on the basis of the entire record before it, that the mitigation measures incorporated in the Mitigated Negative Declaration and Addendum to the Mitigated Negative Declaration will eliminate or mitigate the environmental impacts of the proposed project to less than significant levels; and

BE IT FURTHER RESOLVED, that the Energy Commission approves Agreement ARV-16-022 with Tracy Renewable Energy for \$5,179,885; and

BE IT FURTHER RESOLVED, that the Executive Director or his/her designee shall execute the same on behalf of the Energy Commission.

CERTIFICATION

The undersigned Secretariat to the Commission 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 California Energy Commission held on May 10, 2017.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Cody Goldthrite,
Secretariat