Resource Management Agency
COUNTY OF TULARE
AGENDA ITEM

AGENDA DATE: February 11, 2020

Public Hearing Required	Yes ☐	N/A ☒
Scheduled Public Hearing w/Clerk	Yes ☐	N/A ☒
Published Notice Required	Yes ☐	N/A ☒
Advertised Published Notice	Yes ☐	N/A ☒
Meet & Confer Required	Yes ☐	N/A ☒
Electronic file(s) has been sent	Yes ☒	N/A ☐
Budget Transfer (Aud 308) attached	Yes ☐	N/A ☒
Personnel Resolution attached	Yes ☐	N/A ☒
Agreements are attached and signature line for Chairman is marked with tab(s)/flag(s)	Yes ☐	N/A ☒

CONTACT PERSON: Celeste Perez PHONE: (559) 624-7010

SUBJECT: Categorical Exemption for Ergostech Renewable Energy Solutions Project

REQUEST(S):

That the Board of Supervisors:

1. Adopt the Categorical Exemption prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines per Section 15302(c) Replacement or Reconstruction, Ergostech Renewable Energy Solutions Project; and

2. Authorize the Environmental Assessment Officer, or designee, to sign and file the Notice of Exemption with the County Clerk.

SUMMARY:

In accordance with the California Environmental Quality Act (CEQA), the County of Tulare has been delegated authority by the City of Lindsay and is therefore acting as the lead agency for the Ergostech's Renewable Hydrogen Production Improvement Project. The County is providing CEQA compliance review for this activity; and as such, RMA staff has determined that this activity is eligible for a categorical exemption (CE) under the CEQA guidelines. The proposed hydrogen producing plant facility is located in Tulare County, within an infrastructure related annexed area of the City of Lindsay, approximately 4 miles west-northwest of the City Limits of Lindsay, between Road 188 and State Highway 65, encompassing a total of 57 acres.

Ergostech's proposed project will create more than 20 new highly skilled full-time jobs within the first five years. The company's representatives have shown their plans to achieve these goals, requesting collaboration between several entities, such as

College of Sequoias and the Workforce Investment Board of Tulare County.

Moreover, Ergostech's Renewable Hydrogen Production Project would have the capability to operate 24 hours a day, 7 days a week, which will contribute to the reduction of 87.418 million tons of CO2e (Carbon Dioxide Equivalents), increasing the region's air quality and giving local waste generators the ability to transform waste into high added-value products.

The main feedstock for this activity is municipal sewer (influent) and will be delivered by the City of Lindsay's existing municipal WWTP pipeline with flow of, approximately, 9,000 standard cubic meters per day (scmd) (317,835 sc[feet]d) with an average BOD (Biochemical Oxygen Demand) of 191 mg/L (milligrams per liter of oxygen consumed). The second liquid feedstock used in the process is the wastewater produced in an industrial citric processing with delivery flow of 2,000 scmd (70,600 scfd) and BOD of 3394 mg/L. As third feedstock source, 2,800 scmd (99,960 scfd) of dairy manure with BOD of 229 mg/L will be transported from the generator by pipeline. Consequently, the total processed volume of feedstock is 13,800 scmd with total BOD of 663 mg/L.

In accordance with CEQA, the County has determined that a categorical exemption is applicable to the proposed action: The project will consist of a biohydrogen production plant with producing capacity of 3,800 tons of H2 per day. The production of biohydrogen and biomethane occurs in two sequential stages. On the first stage, the organic-based feedstock is converted in two main streams, a biogas stream composed mostly of biohydrogen and carbon dioxide, and a liquid stream composed mostly of byproducts such as volatile organic acids and alcohols. On the second stage, the released liquid stream of stage 1 is converted into two main products streams: the biogas stream, composed mostly of biomethane, and the liquid digestate stream, which is considered a renewable fertilizer.

The Project includes an analytical laboratory and an administrative office. The plant installations will include centrifugal pumps, storage tanks, an electric chiller, buffer solutions tanks, dosage pumps, fermenter, anaerobic digester, compressors, sulfide removal filter, gas purification systems, steam reforming reactor, water gas shift reactors, natural gas/biogas boiler for steam production and electrical infrastructure. Ergostech's plan includes odor, litter and noise control programs. Therefore, because the activity is adding a secondary beneficial process in reducing greenhouses gasses, and other air quality emission reduction measures, providing beneficial alternative energy production to an existing sewer treatment plant, which is described under CEQA as an existing use and is adapting and replacing existing off gassing processes, it would be consistent with Class 2 Section 15302(c), replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity to the existing City of Lindsay Sewer Treatment Facilities.

SUBJECT: Categorical Exemption for Ergostech Renewable Energy Solutions Project

DATE: February 11, 2020

FISCAL IMPACT/FINANCING:

No Net County Cost to the General Fund. The applicant has funded the drafting of the CEQA document(s). The construction will be funded by the California Energy Commission GFO-19-601, as a finalist of the Low Carbon Fuel Production Program, and other grant programs as the funding becomes available.

LINKAGE TO THE COUNTY OF TULARE STRATEGIC BUSINESS PLAN:

This project will enhance the air quality and supply Tulare County with jobs and improving quality of life by reducing emissions from the existing City of Lindsay sewage facility and other neighboring dairies.

ADMINISTRATIVE SIGN-OFF:

Aaron R. Bock, MCRP, JD, LEED AP
Assistant Director

Michael Washam
Associate Director

Reed Schenke, P.E.
Director

Attachment(s) Attachment A – Categorical Exemption
Attachment B – Project Description
Attachment C – Delegate Letter

BEFORE THE BOARD OF SUPERVISORS
COUNTY OF TULARE, STATE OF CALIFORNIA

IN THE MATTER OF A CATEGORICAL EXEMPTION FOR ERGOSTECH RENEWABLE ENERGY SOLUTIONS PROJECT	))))	**Resolution No. _____**

UPON MOTION OF SUPERVISOR _____, SECONDED BY SUPERVISOR _____, THE FOLLOWING WAS ADOPTED BY THE BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD FEBRUARY 11, 2019, BY THE FOLLOWING VOTE:

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST: JASON T. BRITT
COUNTY ADMINISTRATIVE OFFICER/
CLERK, BOARD OF SUPERVISORS

BY: _____
Deputy Clerk

* * * * * * * * * * * * * * * * * * *

1. Adopted the Categorical Exemption prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines per Section 15302(c) Replacement or Reconstruction, Ergostech Renewable Energy Solutions Project; and

2. Authorized the Environmental Assessment Officer, or designee, to sign and file the Notice of Exemption with the County Clerk.

Attachment "A"

Categorical Exemption

NOTICE OF EXEMPTION

To: ☐ Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

☐ Tulare County Clerk
Room 105, Courthouse
221 South Mooney Blvd.
Visalia, CA 93291

DATE RECEIVED FOR FILING AT TULARE COUNTY CLERK

Lead Agency: Tulare County Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7000
Attn: hguerra@co.tulare.ca.us

Applicant(s): Ergostech Renewable Hydrogen Energy Solutions, LLC
516 Shaw Avenue, Ste. 516
Fresno, CA 93704
(747) 219-8911

Activity/Project Title: Ergostech Renewable Hydrogen Production Facility

Activity/Project Location - Specific: North and south of Avenue 240 between Road 188 and SR 65, Tulare County, California (APN 153-210-049, 153-250-001, and 197-090-017.

Activity/Project Location- Section, Township, Range: S½ Section 34, Township 19S, Range 26E; and, N½ Section 3, Township 20S, Range 26E, MDB&M.

Activity/Project Location - City: City of Lindsay, CA **Project Location - County:** Tulare

Description of Nature, Purpose, and Beneficiaries of Activity/Project: The project will consist of a biohydrogen production plant with producing capacity of 3,800 tons of dissolved molecular hydrogen gas (H2) per day. The production of biohydrogen and biomethane occurs in two sequential stages. On the first stage, the organic-based feedstock is converted in two main streams, a biogas stream composed mostly of biohydrogen and carbon dioxide (from a neighboring dairy and an industrial citric processing facility), and a liquid stream composed mostly of byproducts such as volatile organic acids and alcohols (influent) received from the City Lindsay (Lindsay) Wastewater Treatment Plant (WTTP). On the second stage, the released liquid stream of stage 1 is converted into two main products streams: the biogas stream, composed mostly of biomethane, and the liquid digestate stream, which is considered a renewable fertilizer. The Project includes an analytical laboratory and an administrative office. The plant installations will include centrifugal pumps, storage tanks, an electric chiller, buffer solutions tanks, dosage pumps, fermenter, anaerobic digester, compressors, sulfide removal filter, gas purification systems, steam reforming reactor, water gas shift reactors, natural gas/biogas boiler for steam production and electrical infrastructure. Their plan include odor, litter and noise control programs. This project will reduce air quality and greenhouse gas emissions from the existing City of Lindsay sewage facility, neighboring dairy(ies), and the citric processing plant; result in the production of a renewable fuel to power vehicles; increase the Lindsay WWTP's treatment capacity of municipal effluent subsequently leading to a reduction in energy costs at the WWTP; and create approximately 20 full-time jobs for the region.

Exempt Status: (*check one*)

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☐ Common Sense Exemption: 14 Cal. Code Regs. Section 15061(b)(3)
- ☒ Categorical Exemption: **Class 2 (14 Cal. Code Regs. Section 15302(c)) (Replacement or Construction)**
- ☐ Statutory Exemptions:

Reasons why project is exempt: This action is consistent with Class 2 Section 15302(c) (Replacement or Construction) (c) Replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity. As such, the use of Sections 153032 are applicable and appropriate for this project.

Name of Public Agency Approving Project: Tulare County Board of Supervisors

Project Planner/Representative: Aaron R Bock, RMA **Area Code/Telephone:** 559-624-7050

By: _____ Date: _____ Title: Chief Environmental Planner
Hector Guerra

By: _____ Date: _____ Title: Environmental Assessment Officer
Reed Schenke RMA Director

☒ Signed by Lead Agency

Date received for filing at OPR: N/A

Attachment "B"

Project Description

ergos tech
renewable energy solutions

California Environmental Quality Act (CEQA)

Process description

Ergostech Renewable Energy Solutions

City of Lindsay, California

Prepared for: Resource Management Agency - Tulare County
5961 South Mooney Blvd.
Visalia, CA 93277

Prepared by: Ergostech Renewable energy solutions LCC
516 Shaw Ave suite 200,
Fresno CA

ERGOSTECH RENEWABLE HYDROGEN PRODUCTION FACILITY

Describes the basic characteristics of the project including location, need for the project, project objectives, technical and environmental characteristics, project size and design, project phasing and required permits.

1. Introduction

Founded in 2004 in Brazil and 2018 in California, Ergostech Renewable Energy Solutions (Ergostech) offers a complete waste-to-energy (WtE) solution which takes organic waste and transforms it into high-value, renewable fuels and products. In 2017, Ergostech started to focus on upscaling renewable fuel production from pilot to commercial scale, expanding its business in order to be consolidated not only as a process development and optimization company, but also as a global leader in renewable hydrogen production. As California is a global leader in promoting environmentally conscious development and strives to achieve aggressive renewable energy goals, Ergostech decided to expand into commercial-scale operations in the state.

2. Project objectives and purpose

Ergostech proposes to develop a renewable hydrogen production facility in the City of Lindsay, located in Tulare County, California that will transform land with limited use into a renewable fuel production facility. Organic wastes are processed into both biohydrogen and biogas, with additional biohydrogen extracted from the biogas by reforming process. In total, the process will result in a production capacity of 3,800 kgH_2/day. The plant facility will have 20 full-time employees working in rotating shifts, 24 hours a day 365 days per year.

California's logistic system as well as the agricultural industry and its waste is estimated to be responsible for almost 60% of the state's emissions. One source of these emissions is central valley cities and food processing businesses that have more waste to treat than existing capacity. Ergostech will process this untreated waste into bio-hydrogen. The primary use for this zero-emission fuel will be to power farm equipment, backup generators, heavy trucks and forklifts, and passenger vehicles. Californians will directly benefit from cleaner air and reduction in pollution-related health issues while combatting climate change, catalyzing innovation, and creating new economic opportunities.

Since hydrogen has the ability to support several sectors of the economy, including stationary power, heating, chemical production, and electrical grid storage and reliability, a source of clean and affordable hydrogen offers enormous benefits to economy of California. Our production facility will help jumpstart the hydrogen economy in the central valley, attracting other hydrogen-related businesses, developing a high-skilled and technical workforce, and making the region a national and global leader in the industry. This would also result in the country's most productive farmland also becoming the least polluting.

3. Project Location

3.1 Project Site and Site History

The producing plant facility is located in the city of Lindsay, in San Joaquim Valley, approximately 4 miles west-northwest of the city of Lindsay, between Roads 188 and State Highway 65 (Road 1986) on opposing sites of the Avenue 240 extensions (Figure 1), encompassing a total of 57 acres. The project area is delimited in Figure 2.

In the past years, the project site is an area in which the city has accepted olive processing wastewater, generated by Lindsay Olive Growers (LOG), at what are referred to as LOG East and West Pond Sites. Since the late 1960's, lined evaporative ponds had been used to contain the salty discharge that resulted from olive processing. Despite the presence of single-ply liners, the ponds leaked brine water into the soil, contaminating the underground water supply. Various assessments over the years identified elevated levels of brine disposal-related constituents in the underlying soils and groundwater in the area.

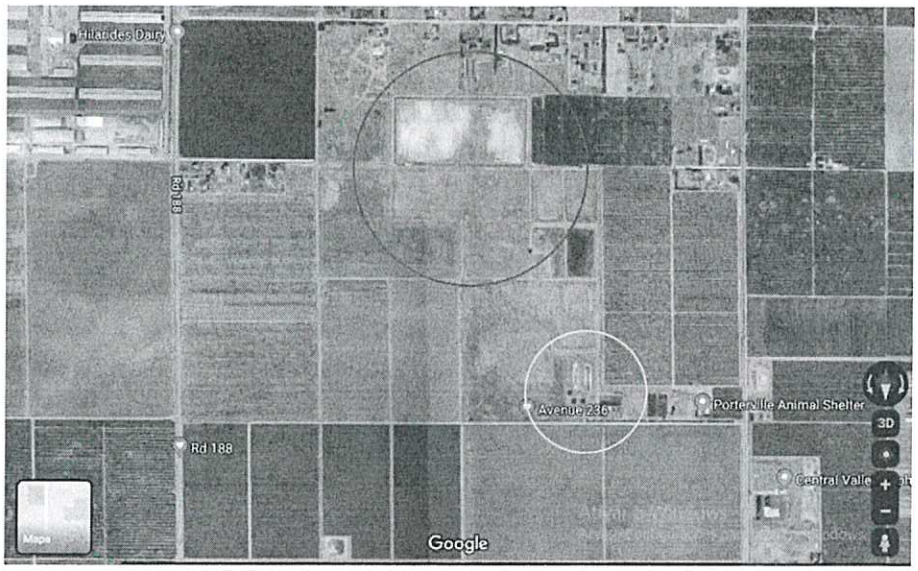

Figure 1: Project location. The red circle identifies the project location area and the yellow circle identifies the installed wastewater treatment plant facility. Source: Google maps.

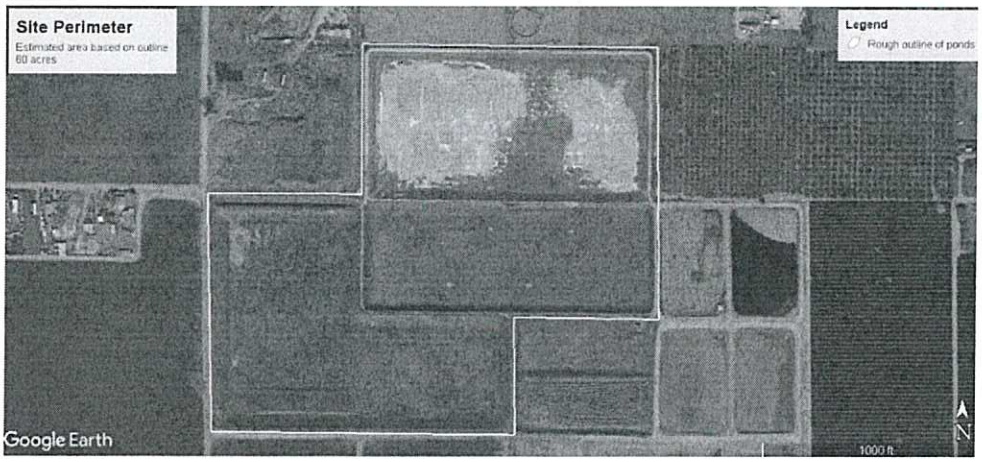

Figure 2: Project area delimitation. Source: Google maps.

3.2 Existing conditions and improvements

Land use near the site includes properties owned by the city, as the wastewater treatment plant, a landfill, besides a small commercial operation, irrigated cropland and rural residences of 5 to 20 acres.

The project area is vacant land and, therefore demolition of existing structure will not be required.

The improvements that will be implemented involves an area cover plan that would protect against further contamination of groundwater. Another accomplishment will consist of plant construction after the covering area.

4. Major design features

The project will consist of a biohydrogen production plant with producing capacity of 3,8 ton of H_2 per day. The production of biohydrogen and biomethane occurs in two sequential stages. On the first stage, the organic-based feedstock is converted in two main streams, a biogas stream composed mostly of biohydrogen and carbon dioxide, and a liquid stream composed mostly of byproducts such as volatile organic acids and alcohols. On the second stage, the released liquid stream of stage 1 is converted into two main products streams: the biogas stream, composed mostly by biomethane, and the liquid digestate stream, which is considered as a renewable fertilizer.

The gas processing and upgrading will be carried out according to the end use of each product (H_2, CH_4 and CO_2). The gas produced on stage 1 is blown to the purification unit for the sequential removal of H_2O by condensation and of CO_2. Furthermore, the gas produced on stage 2 will be upgraded and directed to the steam methane reformer for increasing renewable hydrogen production. In a final step, the hydrogen will be pressurized in stationary high-pressure compressor and stored in order to be distributed as a renewable fuel.

The project facility consists of the installation of front-end processing equipment, besides infrastructure to allocate analytical laboratory and administrative office. The plant installations will include centrifugal pumps, storage tanks, an electric chiller, buffer solutions tanks, dosage pumps, fermenter, anaerobic digester, compressors, sulfide removal filter, gas purification systems, steam reforming reactor, water gas shift reactors, natural gas/biogas boiler for steam production and electrical infrastructure.

5. Operational characteristics

The Project facility would have the capability to operate 24 hours a day, 7 days a week. The operational conditions of the project are consisted of several phases that will be described as follows:

5.1. Reception and processing feedstock

Organics-rich waste will be delivered by pipelines to the project facility. Different sources of feedstock will be used in this process such as domestic wastewater, dairy manure and industrial wastewater.

The main feedstock is municipal sewer (influent) and will be delivered by the existing municipal WWTP pipeline with flow of, approximately, 9,000 scmd (317,835 scfd) with an average BOD of 191 mg/L. The second liquid feedstock used in the process is the wastewater produced in an industrial citric processing with delivery flow of 2,000 scmd (70,600 scfd) and BOD of 3394 mg/L. As third feedstock source, 2,800 scmd (99,960 scfd) of dairy manure with BOD of 229 mg/L will be transported from the generator by pipeline. Consequently, the total processed volume of feedstock is 13,800 scmd with total BOD of 663 mg/L.

Once entering the pre-processing area, the feedstock will be blended into a predetermined ratio in a mixing tank composed of an agitation system to promote the homogenization of the feedstocks. After the homogenization, the feedstock blend will be transferred to the first reactor to start the gas production process.

The first reactor is composed by centrifugal pumps for feed and a parameters control system such as temperature, pH and level. In this reactor, anaerobic bacteria convert the feedstocks biologically into organic acids and biohydrogen, where the residence time is a maximum of 5 days. A gas stream composed mostly by H_2 and CO_2 will be extracted from the reactor for further purification and H_2 at 99.999% purity is produced. At this point the CO_2 is recovered, compressed and delivered.

The liquid slurry from the first reactor is pumped into the second reactor for the conversion to biogas containing CH_4, CO_2, H_2S, and H_2O. Biogas is extracted from the headspace of the tanks to the purification system. The material has a maximum residence time of 10 days in the tank.

5.2. Gas stream upgrade

Firstly, the gas stream produced in the first reactor is pumped to the dehydration unit, in which the gas mixture is cooled to condense out the bulk of water. CO_2 removal occurs in a pressure swing adsorption unit. The upgrading process yields a purified H_2 stream (99,999%) at the feed pressure.

The biogas stream produced in the second reactor, composed mostly of CH_4, CO_2, H_2S and H_2O is pumped to the dehydration unit, in which the gas mixture is cooled to condense out the bulk of water in it before flowing to the carbon dioxide (CO_2) and hydrogen sulfide filter. After these steps, the biomethane produced is compressed and heated to be conditioned to feed the reformer system. For the reforming process to produce gaseous H_2, steam is generated and mixed with this upgraded biogas (97% of CH_4 content). The biogas is reformed and the CO + H_2O mixture is cooled and fed into the water gas shift catalytic reactor, producing H_2 and CO_2. The reformate is cooled and most of the water contained in the reformate mixture condenses and can be recycled as reforming water. H_2

is separated using a pressure swing adsorption. The produced hydrogen will be compressed at 200 bar and will be distributed to H_2 fueling stations by H_2 tube trailers (thirteen H_2 tube trailers per day).

5.3 Co-products

The liquid effluent from the second reactor might have different uses such as: reclaimed water in the steam methane reactor; and renewable fertilizer, being distributed to nearby farmers. Consequently, approximately 50% of this effluent will be used as reclaimed water meanwhile the other 50% can be distributed as a renewable fertilizer, considering that Ergostech's process can reduce up to 80% the effluent's BOD/COD and that the liquid will be delivered to the Lindsay's wastewater treatment facility for another step of treatment in clarifiers, guaranteeing minimum BOD/COD in the bioferilizer. In addition, an additional tank called the buffer tank for post-digestion liquids and pH control will be installed at final step depending on the effluent conditions. Part of the liquid could return back to fermenter/digester and the remaining liquid digestate/biofertilizer is directed from the buffer tank to its final use as reclaimed water and biofertilizer.

Another co-product that will be produced is CO_2 recovered from both stream gas upgrading system that will be compressed and commercialized as a final product.

6. Environmental characteristics

6.1 Process residuals

The feedstock processing for gas production generates as product gas, liquid and solid materials. The gas and the liquid materials will be delivered as product (biogas, renewable hydrogen, compressed CO_2, reclaimed water and biofertilizer). The solid waste exiting the fermenter and the biodigester will be pressed and sent to a certified landfill.

The gas upgrading system mainly composed by the sulfide and CO_2 removal equipment, will generate some residues. For the CO_2 removal system, a water scrubber equipment will be used. The upgrading gas equipment (water scrubber) can generate gas residuals that could contains traces of H_2S and CH_4. In this case each system will be equipped with H_2S removal equipment and a security flare will be installed to burn the trace of CH_4 or to burn gases generated by an eventual gas loss in the process.

The removal of H_2S will be done using a biological alkaline removal in which will only generate elemental sulfur.

The administrative residuals will be minimum volume, as Ergostech is committed to conducting practices of energy efficiency, reduce pollution and waste, conserve water, and protect the environment and natural features according to our company's Environmentally Preferred Purchasing Policy.

6.2 Operational controls

A range of operational controls will be implemented to ensure that this facility has mechanisms in place to avert potential nuisance problems (odors, vectors, noise, dust) and to promote safe working conditions. These operational controls are described below:

- Odor Control

The primary odor control mechanisms at the facility will include processing all incoming materials in a timely manner using a "first in – first out" means of inventory control and conveying residues to the Ergostech plant by an enclosed pipe. Odor control practices for the receiving and processing area include: daily collection and clean-up of materials from the concrete pad; daily cleaning of the equipment and pad; and use of lime on pad surfaces and water collection systems as necessary.

- Litter Control

Litter control will be conducted by operations personnel, who will patrol the Project area boundary. Any accumulated litter will be collected and removed daily. Organic litter will be generated and used by Ergostech's process for increasing biogas and renewable hydrogen production.

- Noise Control

Noise will be controlled through the proper use and maintenance of mufflers on equipment, both stationary and mobile. Backup alarms will comply with all safety regulations and noise ordinances. Personal protective equipment will be available to all personnel. Employees will be provided with noise protection when working near noise-generating equipment or when otherwise required. The use of fuel cell forklifts as well as fuel cell vehicles do not generate any noise and, consequently, will contribute to minimize noise generation.

6.3 Project's potential to tackle fossil fuel greenhouse gases emissions

With its renewable hydrogen optimized production system, Ergostech will help jumpstart the hydrogen economy in Brazil, in California and in the whole world. Based on the Benefits Calculator Tool for the LCFPP, a total of 17,484 metric tons of CO_2e will be avoided in a year of operation. Furthermore, the plant will be capable of increasing renewable energy generation and divert waste to other productive uses. Additionally, the project will also bring benefits to the city of Lindsay, as Ergostech is committed to and is part of the agreement with the Lindsay municipality to join efforts to remedy the site's environmental debts (Water Board). The partnership with the city extends beyond these benefits by increasing the city's waste treatment capacity and optimizing the secondary treatment of the municipal effluent station with minimum city investment required, as with the implementation of Ergostech hydrogen treatment process will increase the BOD and COD removal rates of the influent. This will also lead to the reduction of the energy costs of the current Lindsay wastewater treatment facility in addition to being able to treat a larger volume of effluent by the municipality.

The following flow chart describes each stage mentioned above and shows each stream considered.

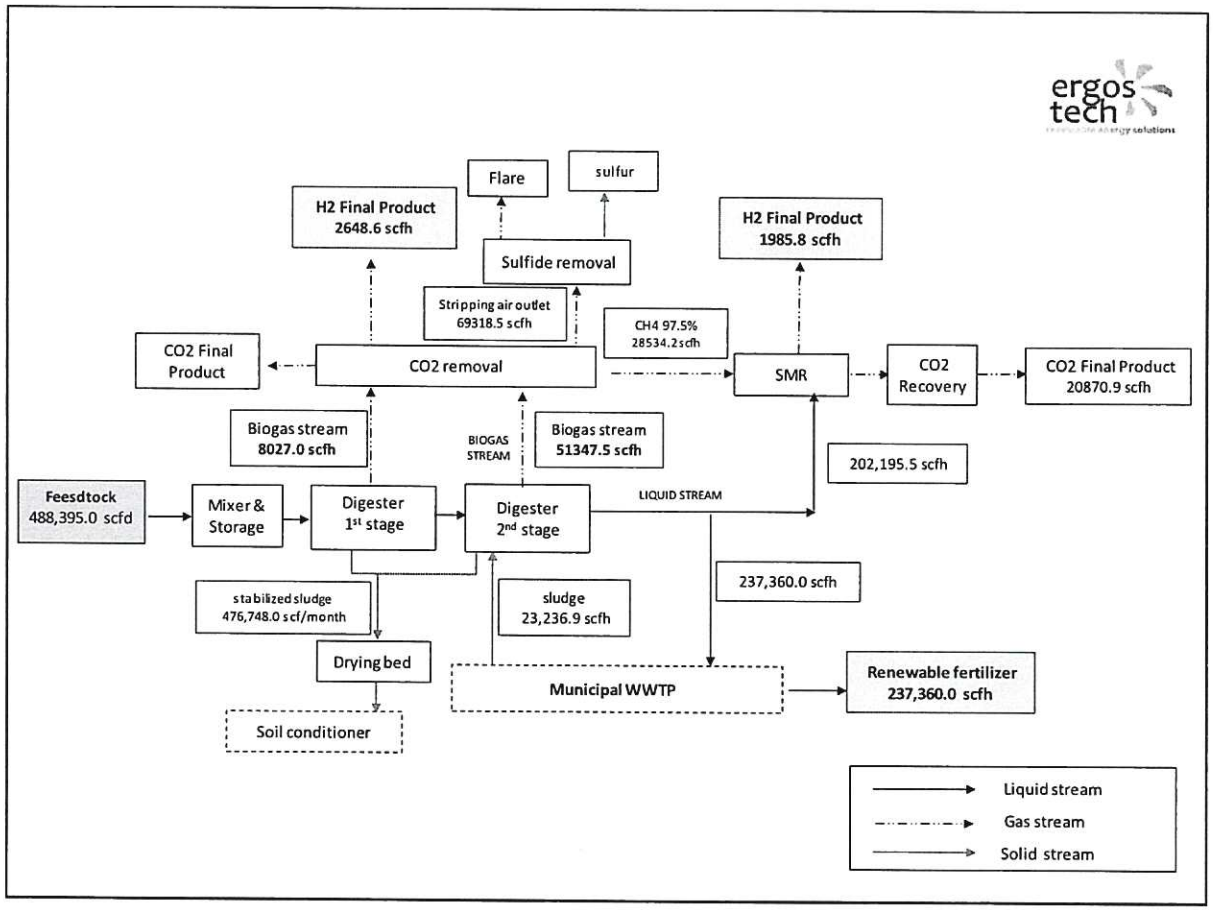

Figure 1: Process flow chart

7. Construction and operation

All processing equipment will be installed directly on the site without construction of a building with turn-key contracts. The equipment as well as other installations of the facility, as administrative and laboratorial infrastructure, are made of prefabricated compacted structures which will reduce the average number of vehicles and trucks in transit to and from the facility. During the civil engineering work, mechanical installation and electrical installation, an average of 60 trips per day is expected between vehicles and trucks. An estimated number of 25 workers per day is expected during this period.

The equipment and infrastructure implementation will occur near the beginning of 2021 and would take approximately12 months to complete.

Throughout the construction period, Ergostech will require the construction contractor to keep the work site free and clear of all rubbish and debris, and to promptly remove from the site, or from property adjacent to the site of the work, all unused and rejected materials, surplus earth, concrete, plaster, and debris.

Construction of the proposed pipelines for feedstock transport would involve trenching using a conventional cut and cover technique, and jacking and boring where necessary. The trenching technique would include saw cutting of the pavement where applicable, trench excavation, pipe installation, backfill operations, and re-surfacing to the original condition. Off-site disposal would also include construction related debris and spoils.

Ergostech and the construction contractor would coordinate with appropriate city of Lindsay's agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion during construction of this project. A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours and designated construction access routes will be developed.

During the plant operation, the number of trips generated per day are related to the trips of employees to and from the facility and H_2 delivery from the facility by hydrogen tube trailers. For employee's transportation, Ergostech pretends to have a H_2 bus. However, if this type of transportation is not implemented, roughly 40 trips of employees per day are estimated. For H_2 delivery, 13 delivery trips per day are estimated and 10 trips per day is expected for courier, clients and stakeholders.

8. Project phases and timeframe

The Ergostech project phases involves equipment acquisition, plant construction and commissioning, plant start-up and commercial operation. The Ergostech project plan is shown in Table 1.

Table 1. Project plan for the proposed project

Year	Activities	Comments
3Q2020 -4Q2020	Equipment acquisition and civil and electrical work	The equipment will be acquired near to the end of 2020 and civil.

2021	Construction/Installation	The construction will start in January 2021 abd the equipment installation will start from March 2021 to the beginning of 2021.
1Q2022	Commissioning	The commissioning project will be done in the first 3 months of 2022.
2Q2022-4Q2022	Plant Start-up	At the beginning of 2022 the plant start-up and ramp-up during the first year of operations will be done with a maximum capacity production of 1000 kgH_2 per day.
1Q2023 – 3Q2023	Plant commercial operation ramp-up	At the beginning of 2023 the plant operation will begin to produce in commercial scale ramping up from 1700 kgH_2 per day and reaching 3800 kgH_2 per day until September.
4Q2023	Plant commercial full operation	At the last half of 2023 the plant will operate at full capacity.

9. Permits

The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code Sections (§) §§ 21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to adversely affect the environment and requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. For the proposed project, Tulare County recognized its role in the CEQA process as lead agency while the city of Lindsay may be the responsible agency. Meetings with the lead agency and the responsible agency have preliminary concluded that Ergostech project belongs to a type of project that generally is consider not to have potential impact on the environment. Therefore, the lead agency believes that the project might be classified as Categorical Exempt from CEQA.

Appropriate building and conditional use permit from the city of Lindsay will be obtained for the project. Water use permit will be obtained from the Central Valley Regional Water Quality Control Board and air permit will be obtained from San Joaquim Valley Air Pollution Control District. There are no other required permits anticipated for the project.

Attachment "C"

Delegate Letter

Bret Harmon, MPA
Interim City Manager
Director of Finance
City of Lindsay

251 E. Honolulu, P.O. Box 369
Lindsay, CA 93247
559.562.7102 x 8011
bharmon@lindsay.ca.us

HG

Tulare County
Resource Management Agency

NOV 26 2019

RECT

November 18, 2019

Via E-mail and U.S. Mail

Michael Wahsam
Assistant Director
County of Tulare – Resource Management Agency
5961 South Mooney Blvd
Visalia, CA 93277

Hector Guerra
Chief Environmental Planner
County of Tulare – Resource Management Agency
5961 South Mooney Blvd
Visalia, CA 93277

Re: Delegate Letter

Dear Mr. Washam and Mr. Guerra,

In reply to your request, please be advised that City of Lindsay agrees and supports the proposition that the County of Tulare may be the Lead Agency pursuant to CEQA Guidelines section 15051 (a), associated with the Ergostech Renewable Energy Production facility.

Thank you for your courtesy and consideration,

Sincerely,

Bret Harmon