



Planning Commission  
Staff Report  
November 20, 2019

AGENDA ITEM # A

PREPARED BY:  
APPROVED BY:

BRIAN GUERRERO, PROJECT PLANNER  
MARK HENDRICKSON, DIRECTOR



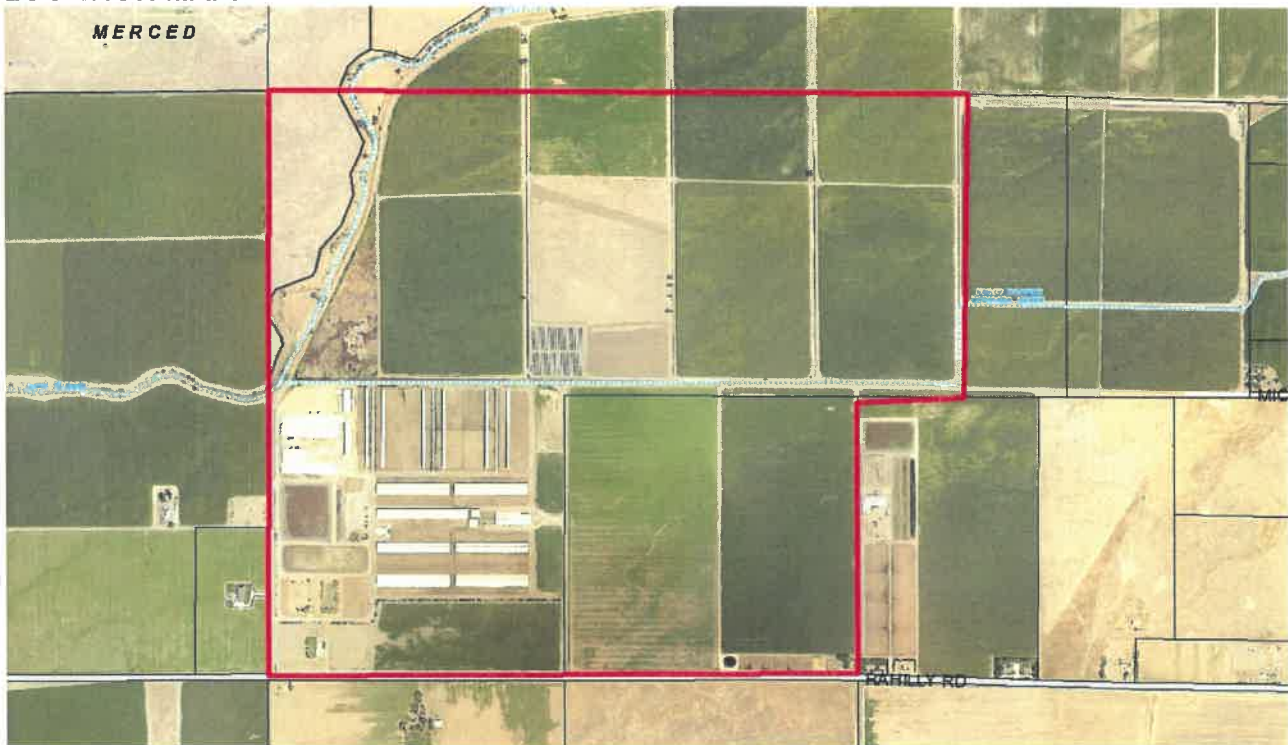
**CONDITIONAL USE PERMIT NO. CUP19-003 – Merced Pipeline, LLC:** Request to construct a central biogas upgrading, cleansing, monitoring and metering facility processing methane gas collected from regional dairy digesters via underground pipelines. The proposed project is located on the north side of Rahilly Road, approximately 0.5 miles west of Highway 59 on an existing dairy facility identified as APN 065-110-007. The project site is designated Agricultural in the General Plan and zoned A-1 (General Agricultural) BG CEQA: An IS/MND was prepared for the project.

**SUPERVISORIAL DISTRICT:** 1 – RODRIGO ESPINOSA

**RECOMMENDATION(S):**

1. Open/close public hearing;
2. Adopt the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program; and,
3. Approve Conditional Use Permit CUP19-003 based on the findings included in the staff report and subject to the proposed conditions of approval.

**LOCATION MAP:**



## BACKGROUND:

### Site Description

The proposed collection facility is located on the north side of Rahilly Road, approximately 0.5 miles west of Highway 59 in the Merced area. The site itself contains an existing dairy facility and row crops. The area is dominated by commercial farming operations with some single-family residences throughout the area. The collection facility would be located approximately 1,500 feet north of Rahilly Road.

### Surrounding Uses:

	<b>General Plan</b>	<b>Zoning</b>	<b>Current Land Use</b>
<b>On-Site:</b>	Agricultural	A-1	Dairy Facility/Row Crops
<b>North:</b>	Agricultural	A-1	Row Crops
<b>East:</b>	Agricultural	A-1	Row Crops
<b>South:</b>	Agricultural	A-1	Row Crops/SFD
<b>West:</b>	Agricultural	A-1	Row Crops

### Prior Actions/Entitlements

CUP99-022 – Approved to construct and operate a dairy for 7,613 animal units. MM19-004 – To install a dairy digester at an existing dairy facility.

## ANALYSIS:

### Project Description

The applicant is proposing to construct a biogas upgrade facility on the north side of Rahilly Road, 0.5 miles west of Highway 59. The upgrade facility would be located on an approximate 0.7 acre portion of the project site. The facility removes impurities, moisture and gas constituents not suitable for injection into a PG&E or other utility pipeline. The process includes removal of CO<sub>2</sub> and transforming biogas into biomethane, which is indistinguishable from conventional natural gas. The methane product is colorless, odorless and non-toxic, much like natural gas. However, a chemical odorant will be added to make leaks easy to smell. This gas product is then injected into the utility pipelines and returned to the grid for consumption.

The project also consists of construction of 34 miles of pipeline that will collect methane generated by nine individual dairy digesters at separate, existing facilities in the area. Collected methane will be transported to the collection facility via pipeline and converted to usable gas sold back to the grid at a pressure of less than 20 psi, which will be monitored at all times. The pipelines would be located predominantly on privately owned agricultural property via easements and/or within or across Merced or Madera County public rights-of-way (ROW) via encroachment permit.

### Consistency with Adopted Plans and Policies

#### 1. General Plan

The General Plan contains the principle statement concerning the County's goals and desires concerning land use and is designed to serve as the basis for development decision making. The plan is considered the local "constitution" for physical development and, as a long-range planning document, and serves to direct the physical growth and development of the County.

## **Land Use Element**

The vast majority of land in Merced County lies outside of existing cities, Rural Centers, Urban Communities, and Highway Interchange Centers. The Agricultural land use designation is applied to the majority of the land within the County to acknowledge the importance of agriculture and seek ways to protect productive agricultural land, promote agricultural processing and support operations, recognize and preserve valuable open space resources, and allow for the development of active dairy and poultry facilities in rural parts of the County.

Both potential sites and surrounding areas are designated Agricultural in the General Plan. Support of agricultural areas and projects are addressed by the following Land Use goal and policies:

Goal LU-2, (page LU-11)

*Preserve, promote, and expand the agricultural industry in Merced County.*

Policy LU-2.1: Agricultural Designation, (page LU-11)

*Apply the Agricultural land use designation as the primary designation in the County to support productive agricultural lands and promote the agricultural industry.*

Policy LU-2.9: Special Agricultural Uses, (page LU-13)

*Support special agricultural commercial uses in rural areas when they directly relate to and are part of an existing and permitted agricultural enterprise or operation.*

The proposed project would help achieve greenhouse gas emission reduction goals by providing a support use that helps reduce methane emissions. The project would support the growth of technology in the dairy industry and increase agricultural support job growth. Therefore, the project can be found consistent with the General Plan.

## **Agricultural Element**

The Agricultural Element of the General Plan focuses on supporting the agricultural community of Merced County by providing analysis and policy language that identifies the key role of agriculture in the local economy and provides for its continued importance in making land use decisions.

The following goals and policies are directly applicable to this proposal:

Goal AG-1, (page AG-1)

*Maintain the financial viability of the agricultural sector by encouraging expansion of commercial agriculture, attracting new agricultural support and value added industries, and promoting locally grown commodity sales.*

Policy AG-1.1: Merced County Farmers Competitive Edge, (page AG-2)

*Promote local agricultural operations and businesses that provide a competitive edge to Merced County farmers and ranchers.*

Policy AG-1.4: High Value Agricultural Industries, (page AG-2)

*Support the development of high-value food processing industries and the production of emerging crops and animal products that can lead to new markets for local products.*

The project has the potential to make direct and indirect positive contributions to the Merced County economy. Modernization of existing operations that provide a net benefit with regard to GHG reduction goals will result in more efficient practices for the applicant, new technology for the dairy industry, which may result in positive impacts for local agricultural and support businesses throughout Merced County.

## **2. Zoning Code**

The purposes of the Zoning Code are to: (a) help implement the goals, objectives and policies of the County General Plan; (b) assure compatibility between land uses; and (c) encourage development that protects and promotes the public health, safety and general welfare of the unincorporated areas of the county.

According to the Merced County Zoning Code, both proposed facility sites are located within the A-1 zoning district. The purpose of the general agricultural zone (A-1) is to provide for areas for more intensive farming operations dependent on higher quality soils, water availability and relatively flat topography, and agricultural commercial and/or industrial uses dependent on proximity to urban areas or location in sparsely populated low traffic areas.

Agricultural enterprises such as the Merced Pipeline, LLC Project are appropriately located in an area sparsely populated and less dependent on soil quality and water for irrigation. The development of a biogas collection facility that processes and distributes methane product to the electrical grid is an allowed agricultural support use in the A-1 zone and provides a net benefit to the Central Valley by helping to reduce GHG emissions. As a result, the proposed project can be found consistent with the zoning code.

## **California Environmental Quality Act (CEQA)**

The Initial Study/Mitigated Negative Declaration (IS/MND) was circulated to the community and other interested parties in order to solicit comments on the proposed project. The document was circulated from October 3, 2019 and the NOI was sent to property owners within 300 feet and posted by the Merced County Clerk-Recorder's Office from October 3, 2019 to November 1, 2019.

Staff received a comment letter dated October 23, 2019 from the State of California Central Valley Flood Protection Board stating that the proposed project is within the Chowchilla River and may require a Board permit prior to construction. The letter encourages the applicant to work with the Board to determine if additional permits are required prior to construction in any facilities under their jurisdiction. No other comments were received as of the writing of this report.

The project IS/MND analyzes the impacts of the biogas collection facility and pipelines for two potential locations within the framework established by the California Environmental Quality Act and the 2030 Merced County General Plan EIR, however, after preparation of the document, the applicant selected the "West" alternative identified in the IS/MND. This section of the staff report uses this framework to summarize the environmental impacts of the proposed collection facility and identifies recommended mitigation measures (as well as significant and unavoidable impacts if applicable). While these mitigation measures are detailed within the IS/MND, a list of these mitigation measures has also been attached as conditions of approval to this report for ease of reference.

### **A. Potential Effects That Are Less Than Significant**

Based on the Initial Study/Mitigated Negative Declaration the following environmental factors were found to have either “No Impact” or “Less than Significant Impact”.

- Aesthetics
- Agriculture and Forestry Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions
- Land Use/Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources
- Utilities/Service Systems
- Wildfire

The following potentially significant effects were found not to be significant or less than significant after mitigation as evaluated in the Initial Study/Mitigated Negative Declaration:

- Air Quality
- Biological Resources
- Cultural Resources
- Hazards & Hazardous Materials
- Hydrology/Water Quality
- Transportation

Proposed mitigation measures and the proposed mitigation monitoring and reporting program are attached to this report for review.

### **Community Engagement**

The project application and environmental document were routed to applicable County departments as well as outside agencies for comment. Comments were received from Environmental Health, Fire, and Public Works departments.

Comment letters are attached as “Exhibit C.”

The proposed project was publicly noticed (mailing to property owners within 300 feet of the project site for both the east and west options) for the minimum 10-day period. No comments were received as of the preparation of this report.

### **CONCLUSION:**

The proposed biogas collection facility and associated pipelines are located in an agricultural area of the County and is consistent with the General Plan and Zoning Code. An IS/MND has been prepared for the project and identified impacts that can be mitigated in order to bring the proposal to a less than significant effect on the environment. Therefore, Staff recommends adoption of the IS/MND and MMRP and approval of this project based on the project findings and subject to the recommended conditions of approval.

**RECOMMENDATION COMMISSION ACTION:**

**A. CEQA Determination**

**MOTION:** The Planning Commission adopts the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

**B. Project Determination**

Staff recommends that the Planning Commission approve Conditional Use Permit No. CUP19-003 based on the following findings and recommended conditions of approval by making the following motion.

**MOTION:** The Planning Commission approves Conditional Use Permit No. CUP19-003 based on the Project Findings and subject to the proposed Conditions of Approval.

**FINDINGS:**

1. Conditional Use Permit No. CUP19-003 proposes to construct a biogas upgrade facility and associated pipelines on the north side of Rahilly Road, 0.5 miles west of Highway 59 at an existing dairy facility.
2. The project site is designated and consistent with the Agricultural land use designation and the Merced County General Plan.
3. The project site is zoned and consistent with the A-1 (General Agricultural) zone.
4. The proposed use, as conditioned, will be compatible with adjacent uses, properties, and neighborhoods.
5. The application was referred to the following County agencies for review: Department of Public Works Building and Safety, and Roads Divisions, the Merced County Fire Department and the Merced County Division of Environmental Health.
6. The project, if operated in compliance with the approved Site Plan, the applicant's Operational Statement, and recommended conditions of approval, will not be a nuisance or detrimental to public health, safety and general welfare.
7. Notice of the application was sent to property owners within 300 feet of the project site and published in the Merced Sunstar. No comments were received.
8. The project is subject to all applicable County, State and Federal regulations.

**Exhibits**

- A. Conditions of Approval
- B. Site Plan
- C. Comments
- D. Initial Study/Mitigated Negative Declaration
- E. Mitigation Monitoring and Reporting Program

cc. Applicant: Stephanie Guerrero, Nathan Nisley, MAAS Energy

**Conditions of Approval – CUP19-003 – Merced Pipeline Project (MAAS Energy)**

Community and Economic Development Conditions:

1. Conditional Use Permit No. CUP19-003 is granted to construct a central biogas upgrading, cleansing, monitoring and metering facility processing methane gas collected from regional dairy digesters via underground pipelines on property located on the north side of Rahilly Road, approximately 0.5 miles west of Highway 59 in the Merced area, identified as APN 065-110-007.
2. The project shall be located, developed and operated in a manner described on the approved Plot Plan, Project Description, and Conditions of Approval of this permit.
3. The project shall comply with the Mitigation Measures listed in the IS/MND.
4. The project shall comply with all applicable public health, safety, and welfare regulations administered by the County of Merced, and in particular the County Fire Department, the Health Department/ Environmental Health Division, the Community and Economic Development Department, and Public Works Department/ Road and Building and Safety Divisions.
5. For the purpose of conditions monitoring, an inspection fee in the amount of **\$324.00** shall be required. This fee shall be paid within 30 days of approval of the project. Should additional inspections be required, inspection time shall be billed to the applicant/property owner at the established hourly rate at the time of the inspection. This permit will not be considered valid until the conditions monitoring fee has been paid.
6. Prior to issuance of a building permit, the project applicant must obtain all necessary permits and written authorizations and must demonstrate compliance with all applicable regulations administered by Federal and State agencies.
7. The applicant shall comply with all applicable standard conditions of approval listed in the Planning Commission Resolution No. 97-1.

Merced County Division of Environmental Health

8. The applicant shall maintain an accurate hazardous material business plan (HMBP) with Merced County Division of Environmental Health and maintain compliance with all applicable hazardous material regulations. Any changes to materials stored on-site that are above the threshold quantities must be updated in the facility's HMBP on the California Environmental Reporting System (CERS) within 30 days of commencement. Annual certifications are due on CERS by March 1 each year. Go to: <http://cers.calepa.ca.gov/>

County Counsel

9. **INDEMNITY AND HOLD HARMLESS AGREEMENT:**

## Exhibit A

MAAS Energy has the contracted duty (hereinafter "the duty") to defend, indemnify and hold harmless the County of Merced, its Board of Supervisors, commissions, officers, employees, agents, and assigns (hereinafter "COUNTY") from any claim, action, or proceeding arising out of, or in connection with the COUNTY's approval of the project including, but not limited to, COUNTY's actions regarding related environmental determinations. This obligation shall extend to any such claim, action, or proceeding against COUNTY to attack, set aside, void, or annul, an approval by COUNTY. In the event that a claim, action, or proceeding is brought, COUNTY shall promptly notify the applicant and cooperate fully in the defense. This clause for indemnification shall be interpreted to the broadest extent permitted by law.

### Public Works/Building and Safety Division

10. You must hire an architect or engineer licensed in the state of California to draw the plans for any proposed building. The plans and calculations must be submitted electronically to the Building Department for approval and a permit before any construction can begin.

### Merced County Fire Department

11. The following conditions are required:
  1. **Address identification.**  
New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. (CFC 505.1)
  2. **Fire Department access.**  
Fire Access shall be maintained in accordance with CFC Sec. 503. (503.1.2) A knock box keyed entry system is required. California Fire Code (2016) Section 503.1.2

#### **Additional access.**

The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

3. **Water storage: May be required**
4. **Must meet the provisions of CFC Chap. 53** requirements for compressed Gases, Process piping and labeling.
5. **704 placarding** required at each site.

### Mitigation Measures

AQ-1: Approved Dust Control Plan or Construction Notification form in compliance with Regulation VIII – PM<sub>10</sub> Prohibitions.



## Exhibit A

AQ-2: Implement Mitigation Measure AQ-1 to comply with SJVAPCD regulations.

BIO-1: Ground disturbance at natural drainage locations involving trenching across waterways & pre-construction surveys.

BIO-2: Pipeline installation at swale crossing locations.

BIO-3: 20' exclusion zone maintained during construction for elderberry shrub.

BIO-4: Pipeline installation at Healy Road

BIO-5: Pipeline installation at natural drainage locations.

BIO-6: Pre-construction surveys for active bird nests.

BIO-7: Disturbance within 100' of potential breeding habitat.

BIO-8: Construction work during active breeding season for Swainson's Hawk.

BIO-9: Pipeline installation across Chowchilla River.

BIO-10: Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance.

BIO-11: Implementation of Mitigation Measure BIO-2.

BIO-12: Wetland delineation.

CUL-1: Discovery of cultural resources, or remains of Native American origin.

CUL-2: Monitoring during ground-disturbing activities within 300 meters on each side of creeks or river crossings.

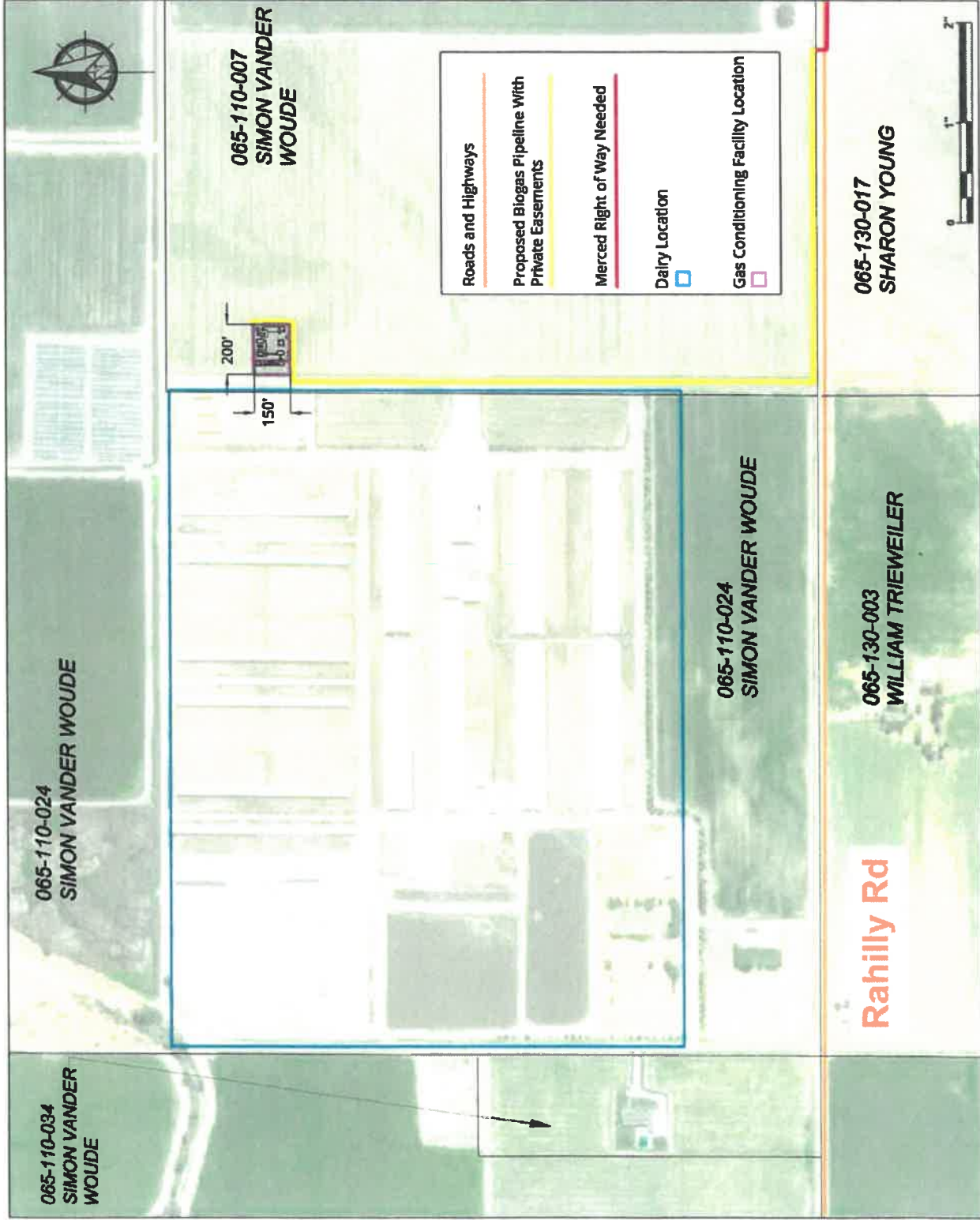
HAZ-1: Suspected contamination during construction activities.

HAZ-2: Implement Mitigation Measure TRA-1.

HYD-1: Permit registration documents for Construction General Permit Order 2009-0009-DWQ.

HYD-2 (West Option): Flood proofing certificate.

TR-1: Obtain encroachment permits and prepare a Traffic Control Plan.

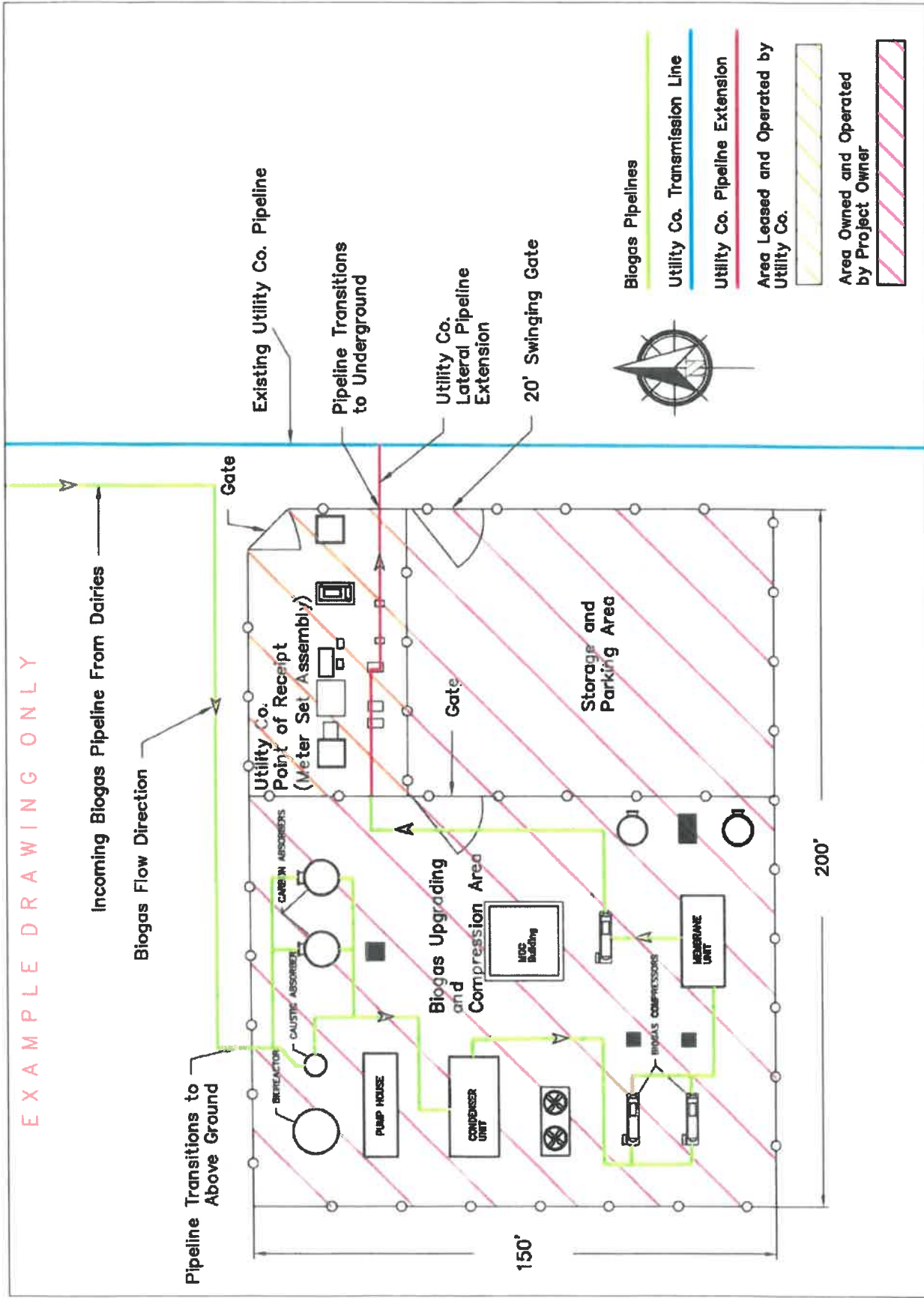


Merced Biogas Upgrade Facility Project CUP19-003

Figure 3

Project Location – West Option

EXAMPLE DRAWING ONLY



Merced Biogas Upgrade Facility Project CUP19-003

Figure 4

Example Biogas Upgrade and Injection Facility

SOURCE: Mass Energy Works 2019; Planning Partners 2019



**FIRE DEPARTMENT  
PREVENTION BUREAU**

2222 "M" STREET  
MERCED, CA 95340  
OFFICE (209) 385-7347  
FAX (209) 725-0174

**MIKE VAN LOBEN SELS**  
*Interim Fire Chief*  
(209) 966-3622

**JEREMY RAHN**  
*Division Chief*  
(209) 385-7450

**RICH BOHN**  
*Fire Marshal*  
(209) 385-7347

March 21, 2019

To: Stephanie Guerrero MAAS Energy  
c/o: Brian Guerrero

From: Rich Bohn  
Fire Marshal  
Merced County Fire Department

Re: CUP19-003 MASS Energy Dairy digester projects

After reviewing the above-mentioned application, I offer the following conditions for approval:

**1. Address identification.**

New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. (CFC 505.1)

**2. Fire Department access.**

Fire Access shall be maintained in accordance with CFC Sec. 503.(503.1.2) A knoxbox keyed entry system is required. California Fire Code (2016) Section 503.1.2 Additional access.

The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

**3. Water storage: May be required**

**4. Must meet the provisions of CFC Chap. 53 requirements for compressed Gases, Process piping and labeling.**

**5. 704 placarding required at each site.**

If you have any questions or concerns regarding the above condition, please feel free to contact our office at (209) 385-7347 Option 2



## DEPARTMENT OF PUBLIC HEALTH

Rebecca Nanyonjo-Kemp, DrPH  
*Director*  
Vicki Jones, MPA, REHS  
*Environmental Health Director*

### Memorandum

**DATE:** May 7, 2019  
**TO:** Brian Guerrero, Planner III  
**FROM:** Brent Cronk, EHS III  
(209) 385-7654 xt4568; [Brent.Cronk@countyofmerced.com](mailto:Brent.Cronk@countyofmerced.com)  
**SUBJECT:** **CONDITIONAL USE PERMIT No. CUP19-003 - MERCED PIPELINE, LLC - To construct a central biogas upgrading, cleansing, monitoring and metering facility processing methane gas collected from 8 regional dairy digesters via underground pipelines, and then injecting the cleaned gas product into PG & E pipelines for ultimate use by utility customers.**  
**SITUS:** West option: 1990 Rahilly Rd., Merced; APN 065-110-007  
East option: (no situs); APN 066-180-008

#### **Observations & Comments – Merced County Division of Environmental Health (MCDEH):**

The facility is not expected to require a public water system permit or an onsite septic system. No significant increase in sewage load to existing systems is expected.

The application provides the following information related to chemicals and waste material:

The upgrading facility removes impurities, moisture, and gas constituents that are not suitable for injection into the PG&E pipeline. The biogas upgrading facility would consist of moisture removal, H<sub>2</sub>S scrubbing, CO<sub>2</sub> stripping, and biomethane compressors. This process transforms biogas to biomethane, which is indistinguishable from conventional natural gas. The final step is a compressor to reach the injection pressure needed to enter the PG&E pipeline

The residual sulfur compound resulting from biogas processing would be transported off site and disposed of in accordance with regulations, and the CO<sub>2</sub> would be vented during operations. The facility would require upgraded or new electrical service to power the equipment.

Once operational, elemental sulfur would be produced, stored, and transported to a nearby landfill. Approximately 600 lbs. would be produced per day. Soda ash would also be stored on site for use in the sulfur scrubber. Approximately 350-700 lbs. of activated

carbon waste would be generated per week and disposed of in accordance with federal, state, and local regulations.

**Additional Information Needed Prior to Recommending Additional Permit Conditions:**

Additional information needs to be provided to MCDEH staff regarding the chemicals and waste. Please contact Ashley Fessenden at (209) 381-1100 or [Ashley.Fessenden@countyofmerced.com](mailto:Ashley.Fessenden@countyofmerced.com)

**Recommended Permit Conditions:**

The applicant shall maintain an accurate hazardous material business plan (HMBP) with Merced County Division of Environmental Health and maintain compliance with all applicable hazardous material regulations. Any changes to materials stored on-site that are above the threshold quantities must be updated in the facility's HMBP on the California Environmental Reporting System (CERS) within 30 days of commencement. Annual certifications are due on CERS by March 1 each year. Go to: <http://cers.calepa.ca.gov/>

Additional conditions may be needed after the applicant provides additional information to Ashley Fessenden.



October 23, 2019

Mr. Brian Guerrero  
Merced County  
2222 M Street  
Merced, California 95340

**Subject: Merced Biogas Upgrade Facility and Pipeline Project, Mitigated Negative Declaration,  
SCH No. 2019109012**

**Location: Merced County**

Dear Mr. Guerrero,

Central Valley Flood Protection Board (Board) staff has reviewed the subject document and provides the following comments:

The proposed project is within the Chowchilla River, a regulated stream under Board jurisdiction, and may require a Board permit prior to construction.

The Board's jurisdiction covers the entire Central Valley including all tributaries and distributaries of the Sacramento and San Joaquin Rivers, and the Tulare and Buena Vista basins south of the San Joaquin River.

Under authorities granted by California Water Code and Public Resources Code statutes, the Board enforces its Title 23, California Code of Regulations (Title 23) for the construction, maintenance, and protection of adopted plans of flood control, including the federal-State facilities of the State Plan of Flood Control, regulated streams, and designated floodways.

Pursuant to Title 23, Section 6 a Board permit is required prior to working within the Board's jurisdiction for the placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee.

Permits may also be required to bring existing works that predate permitting into compliance with Title 23, or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the works has not been clearly established or ownership and use have been revised.



Mr. Brian Guerrero  
October 23, 2019  
Page 2 of 2

Other federal (including U.S. Army Corps of Engineers Section 10 and 404 regulatory permits), State and local agency permits may be required and are the applicant's responsibility to obtain.

Board permit applications and Title 23 regulations are available on our website at <http://www.cvfpb.ca.gov/>. Maps of the Board's jurisdiction are also available from the California Department of Water Resources website at <http://gis.bam.water.ca.gov/bam/>.

Encroachment permit applications received on or after July 1, 2019 are subject to fees, additional information is available on the Board's website at <http://cvfpb.ca.gov/fees-2019/>.

Please contact James Herota at (916) 574-0651, or via email at [James.Herota@CVFlood.ca.gov](mailto:James.Herota@CVFlood.ca.gov) if you have any questions.

Sincerely,



Andrea Buckley  
Environmental Services and Land Management Branch Chief

cc: Office of Planning and Research  
P.O. Box 3044, Room 113  
Sacramento, CA 95812-3044