

**San Joaquin Valley Unified
Air Pollution Control District**

**Microgy Pipeline Project for
Cloverdale, Hollandia & Wreden Dairies**

Project Number C-1073612, C-1073613 & C-1073611

**Initial Study and Mitigated
Negative Declaration**

March 2008

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2008**

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INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

Microgy Pipeline Project for Cloverdale, Hollandia & Wreden Dairies

January 2008

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Project Sponsors
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19142 10 ½ Avenue
Hanford, CA 93230

Hollandia Farms, Inc.
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Hanford, CA 93230

Wreden Ranch LLC
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Hanford, CA 93230

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A. INTRODUCTION

The San Joaquin Valley Unified Air Pollution Control District (District) has received Authority to Construct (ATC) applications from Cloverdale Dairy, LLC, Hollandia Farms, Inc. and Wreden Ranch LLC to construct and operate anaerobic digesters at their existing dairy facilities located in Kings County, California. In addition to the digesters the applicants are proposing to construct an underground pipeline system to connect the digesters to the Southern California Gas Company's pipeline system. The digesters will digest dairy cow manure to produce biogas. The biogas would be piped to Southern California Gas Company for distribution and sale.

B. PURPOSE AND AUTHORITY

The District has discretionary approval power over the project via its Permits Required Rule (Rule 2010) and New and Modified Stationary Source Review Rule (Rule 2201). No other Agency is known to have discretionary approval over the Project. As such, the District is the public agency having principal responsibility for approving the Project and serves as Lead Agency; California Environmental Quality Act (CEQA) Guidelines 15367.

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The ERG was prepared to comply with this requirement and is an internal document used to comply with CEQA.

The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.



Under CEQA the Lead Agency is required to:

- Conduct preliminary reviews to determine if applications are subject to CEQA [CCR §15060].
- Conduct review to determine if projects are exempt from CEQA [CCR §15061].
- Prepare Initial Studies for projects that may have adverse environmental impacts [CCR §15063].
- Determine the significance of the environmental effects caused by the project [CCR §15064].
- Prepare Negative Declarations or Mitigated Negative Declarations for projects with no significant environmental impacts [CCR §15070].
- Prepare, or contract to prepare, EIRs for projects with significant environmental impacts [CCR §15081].
- Adopt reporting or monitoring programs for the changes made to projects or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment [PRC §21081.6 & CCR §15097].
- Comply with CEQA noticing and filing requirements.

C. PROJECT BACKGROUND INFORMATION

Project Description

Peter de Jong and EJ de Jong (de Jong Investment Group) in partnership with Microgy® are proposing to construct and operate anaerobic digesters at the Cloverdale Dairy, Hollandia Farms, and Wreden Ranch dairy facilities. The digesters will digest dairy cow manure from the dairies' current operations to produce biogas. The biogas is principally composed of 60-70% methane and 30-40% carbon dioxide. The biogas produced by the digesters will be transported from the digester site to an interconnection point with the gas transmission network owned and operated by Southern California Gas Company. The biogas from Cloverdale Dairy and Wreden Ranch will be transported to Hollandia Farms via a six-inch high-density polyethylene (HDPE) pipeline. Kings County has determined that adding the digesters will require a Site Plan Review for each dairy. The installation also requires an Authority to Construct (ATC) for each dairy from the District. The digesters' processes modifies the dairies' current manure management systems and will therefore require approval of Individual Waste Discharge Requirements (WDRs) by the Regional Water Quality Control Board (RWQCB). The WDRs will comply with regulations recently adopted by the RWQCB to maintain water quality at existing dairies. No expansion of herd size is proposed.



Project Location

The project is located in Kings County, California, which is the San Joaquin Valley Air Basin (SJVAB) (see Figure 1). The three dairy facilities, Cloverdale Dairy, Hollandia Farms, and Wreden Ranch, are contiguous properties under common ownership. Figure 2 outlines the project boundaries.

Cloverdale Dairy, LLC is located at 19142 10^{1/2} Avenue in Kings County, California. Dairy facilities and land application fields include parcels: 028-250-006, 028-250-005, 028-250-012, 028-250-013, and 028-250-014. A site map is provided in Figure 3.

Hollandia Farms, Inc. is located at 7905 Kansas Avenue in Kings County, California. Dairy facilities and land application fields include parcels: 028-204-11, 28-204-12, 028-204-008, 028-204-011, 028-204-012, 028-270-001, 028-260-038, 028-203-013, and 028-203-014. A site map is provided in Figure 4.

Wreden Ranch LLC is located at 8749 Lansing Avenue in Kings County, California. Dairy facilities and land application fields include parcels: 028-260-019, 028-250-010, 028-260-040, 028-250-021, 028-260-034, 028-250-018, 028-260-033, 028-260-039, and 028-260-005. A site map is provided in Figure 5.

General Plan Designation and Zoning

Cloverdale Dairy and Wreden Ranch are currently designated in the Kings County 1993 General Plan as General Agriculture and are currently zoned as General Agriculture, 40-acre minimum (AG40).

Hollandia Farms is currently designated in the Kings County 1993 General Plan as General Agriculture and is currently zoned General Agriculture, 20-acre minimum and (AG20) and General Agriculture, 40-acre minimum lot (AG40).

Surrounding Land Uses and Setting

The area surrounding the three facilities is zoned for agricultural uses. These uses include dairy and general agricultural farming operations.

The District has verified that the proposed project is not within 1,000 feet of the outer boundary of any schools. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to the project.



Other Public Agencies Whose Approval Is Required

California Regional Water Quality Control Board (RWQCB)

The RWQCB will require Individual Waste Discharge Requirements (WDRs) for each of the three (3) dairies.

Kings County Planning Department

Kings County will require a Site Plan Review approval for each of the three (3) dairies. Kings County considers these approvals ministerial as the digester and pipeline are considered auxiliary equipment for the existing operations

California Department of Transportation (Caltrans)

Caltrans will require an Encroachment Permit for the gas pipeline.

California Department of Fish and Game (DFG)

CDFG will require a Notification of Lake or Streambed Alteration.

D. DECISION TO PREPARE A MITIGATED NEGATIVE DECLARATION

The District has considered the environmental effects of the project and has determined that with mitigation the project will have a less than significant impact on the environment. Project design elements and mitigation measures that reduce the project's impact on the environment would be enforced through:

- District permit conditions and offset fees,
- Kings County conditions of approval, and
- RWQCB Waste Discharge Requirements. Consistent with CEQA requirements, the District has prepared an Initial Study and determined that a Mitigated Negative Declaration would be appropriate for the project.



Figure 1

Regional Location within the SJVAB

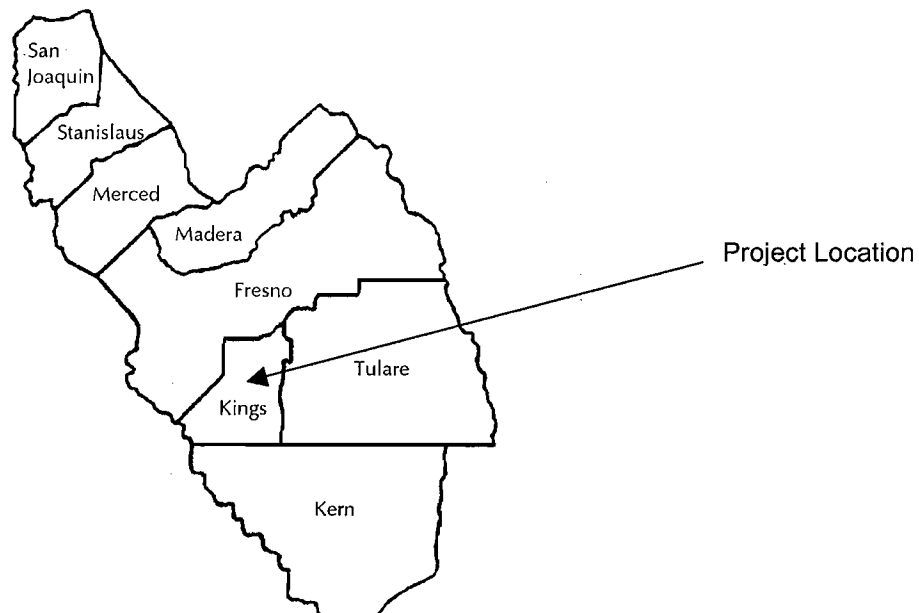
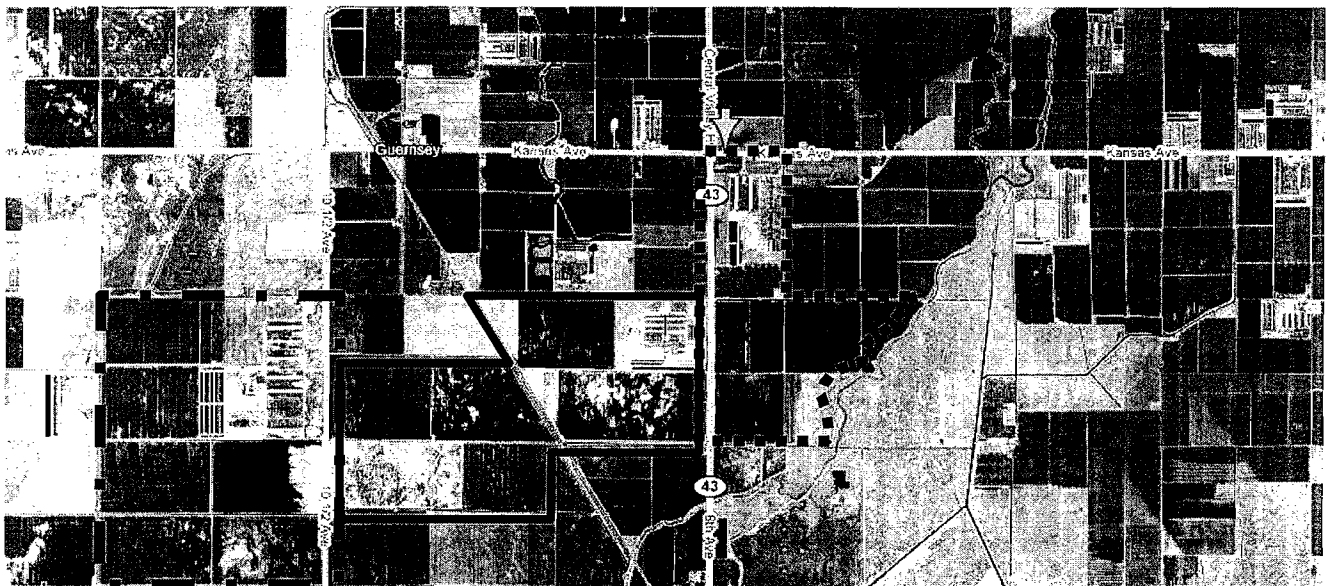


Figure 2

Project Site and Vicinity Map



--- Cloverdale Dairy — Wreden Ranch Hollandia Farms



Figure 3

Project Site Map – Cloverdale Dairy

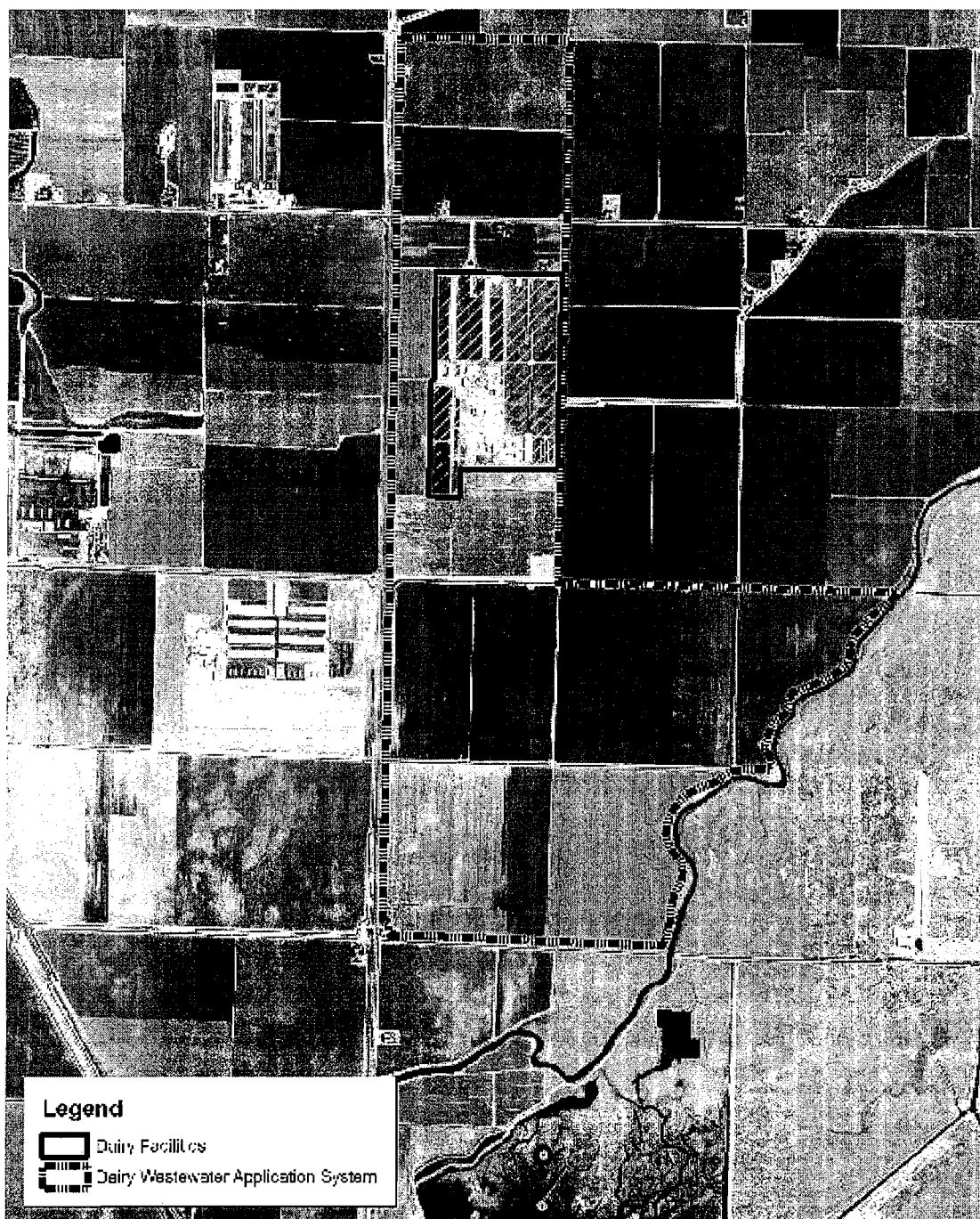


Source: USDA NRI, Kings County (2003), Microgy, Inc., and M&A G S (2007)



Figure 4

Project Site – Hollandia Farms



Source: USDA NRI, Kings County (2005), Microgy, Inc., and M&A G S (2007)



Figure 5

Project Site Map – Wreden Ranch





E. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

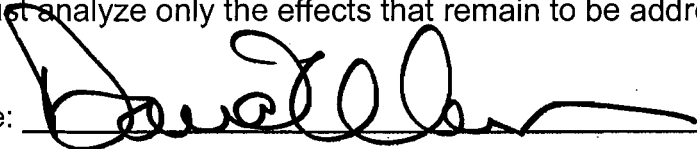
The environmental factors checked below would be potentially affected by the proposed Project, involving at least one impact that is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated", as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| ☐ Aesthetics | ☐ Agriculture Resources | ☐ Air Quality |
| ☒ Biological Resources | ☐ Cultural Resources | ☐ Geology/Soils |
| ☐ Hazards & 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 | |

F. DETERMINATION

I certify that the project was independently reviewed and analyzed and that this document reflects the independent judgment of the District.

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ 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 the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION has been 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 significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

Signature: 

Date: 3/6/08

Printed name: David Warner

Title: Director of Permit Services



G. ENVIRONMENTAL IMPACT CHECKLIST

I. AESTHETICS		Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
<u>Would the Project</u>	Potentially Significant Impact			
a) Affect a scenic vista or scenic highway?				X
b) Have a demonstrable negative aesthetic effect?				X
c) Create light or glare?			X	

a) *Have a substantial adverse effect on a scenic vista?*

No Impact. The proposed project would add a manure digester to an existing dairy. No scenic vistas exist on the project site and none exist on the properties immediately adjacent to the project site (Kings County General Plan 1993). The absence of scenic vistas on or near the project site and the proposed digester structure's consistency with building height requirements would preclude the possibility of potential adverse impacts on scenic vistas. No impacts in this regard would occur.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No Impact. No scenic resources such as rock outcroppings, trees, or historic buildings will be disturbed by the proposed project (Kings County General Plan 1993). No impacts in this regard would occur.

c) *Create light or glare?*

Less than Significant Impact: The structures required for the digesters are similar to those used for storing other materials at farming operations such as grain silos and fertilizer storage and would not be expected to produce substantial amounts of light and glare. See Exhibit 1 for the typical appearance of the digesters.



II. AGRICULTURAL RESOURCES <u>Would the Project</u>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X

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?

No Impact. The project is an integral part of an agricultural use (dairy) and so will not convert any farmland to non-agricultural uses. No impacts in this regard would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site is in an operational dairy consistent with agriculture zoning and uses. This precludes the possibility of a conflict with agricultural zoning or an active Williamson Act contract. No impacts in this regard would occur.

c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

No Impact. The project site is in an operational dairy consistent with agriculture zoning and uses. No impacts in this regard would occur.



III. AIR QUALITY	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
Would the Project				
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 Uses

The Cloverdale Dairy facility is currently operating with 3,898 milk cows and 3,598 support stock. The Hollandia Farms facility is currently operating with 2,214 milk cows and 4,624 support stock. The Wreden Ranch facility is currently operating with 4,462 milk cows and 3,981 support stock. No expansion of herd size is proposed for any of the dairies.

The dairy facilities each contain a milk barn, free stalls, and open corrals for the animals. Each facility currently handles manure with the use of water to flush manure into a channel and then transfers it into an existing lagoon system. Finally, wastewater is transferred from the lagoons to existing agricultural fields for crop cultivation.

Cloverdale Dairy comprises approximately 235 acres of facilities and roadways. Hollandia Farms comprises approximately 135 acres of facilities and roadways. Wreden Ranch comprises approximately 148 acres of facilities and roadways. Adjacent contiguous cropland, which will receive liquid effluent and solids from the dairy operation comprise approximately 1,544 acres.

Project Details

Manure collection: The existing flush system at the dairy will be modified to provide for manure of 8-12% solids to be delivered to the digester mix tank. Manure from the free stalls and corral feed lanes will be collected using a vacuum truck and transported to the mix tank at the digestion facility twice a day. Fresh water and/or recycled digester



effluent will be added to the mix tank to maintain the desired solids content of the manure slurry. The slurry will be pumped into the digester facility, which will consist of two, aboveground steel-welded tanks at the Cloverdale Dairy and Wreden Ranch facilities, and one aboveground steel-welded tank at the Hollandia Farms facility. The slurry will remain for an average of approximately 20 days. The effluent exiting the digester will be pumped through a manure solids separator. The solids will be used for bedding in the freestall barns, and the liquid will be directed to the existing manure storage lagoon. As necessary, lanes will continue to be flushed after manure has been vacuumed. Handling of the corral manure and milking parlor manure will not change.

Digester Equipment: The digesters will be aboveground steel tanks. A natural gas-fired water heater will be used to maintain these digesters at thermophilic temperatures. Agricultural and other food by-products (substrate) will be delivered to the facilities and mixed with the manure. The substrate enhances the biogas formation process. The substrate will be delivered directly into a mixing tank immediately upon arrival. The substrate will be stored in enclosed tanks and will not be exposed to the atmosphere; minimizing the impact of potential odors. See Table 1 for a complete list description of the equipment associated with the project.

Operational Time: The dairies operate 24 hours a day, seven days a week. Operational times will not change. The digesters will similarly operate 24 hours a day, seven days a week and are designed to store approximately 3 weeks worth of dairy waste.

Number of customers/ visitors/employees: Number of visitors and number of dairy employees is not expected to change; however there will be up to two (2) Microgy employees on-site at various times, monitoring the system. These employees are expected to maintain digesters at multiple dairies.

Service and Delivery Vehicles: The substrate will be delivered by truck from a variety of agricultural and food facilities. Microgy estimates six (6) truckloads delivered to the site per day; however, since the site is currently accessed by trucks delivering feed and other supplies and milk transport, no roadway improvements are expected to be needed to accommodate the small increase from substrate trips.

Access to site/parking area: Trucks and employees servicing the digester will access the site using the same facilities as the existing trucks and dairy employees.

Effluent: The effluent from the digester will pass through a screen or press separator. The water will flow to the dairy's existing lagoon system, and the separated solids will be used for freestall bedding, composting, or land application. Lagoon water will be applied to croplands in accordance with the dairy's updated Comprehensive Nutrient Management Plan (CNMP).



Table 1. Project Equipment/ Structures:

New Structures	Description	Number	Height	Volume
Digester Tanks	Aboveground steel tanks	2 ^a	60 feet (ft)	1.2 Million Gallons (MG) each
Utility Water Tank	Aboveground steel tank	1	24 ft	145,000 gallons (g)
Substrate Tank	Aboveground steel tank	1 ^b	54 ft	230,000 g ^b
Solid Substrate Pit	In-Ground Concrete Pit	1	8 ft depth	12,000 g
Manure Mix Tank	Aboveground steel tank	1 ^c	24 ft	325,000 g ^c
Manure Sump	In-Ground Concrete Pit	1	8 ft depth	12,000 g
Maintenance Building	Metal, fully enclosed, single-story building	1	Maximum roof height of 18'-0" (single pitch at 12:1)	30' x 60'
Screen Separator	Typical farm equipment	1	—	(1,800 square feet)
Flare	Totally Enclosed Ground Flare	1 ^d	40 ft	—
Gas Treatment and Compression Area ^c	Stationary equipment, mostly pipes, towers, and a compressor	1 ^e	—	—
Natural Gas-Fired Water Heater	CLE 125 Hot Water Boiler – Ultra Low Emission Option (15 ppm NOx)	1 ^f	—	Vent Stack Diameter= 16"

^a Only 1 Digester Tank will be located at the Hollandia Farms facility.

^b Substrate Tank at Hollandia Farms facility will be 34 ft and hold 135,000 g.

^c Manure Mix Tank at Hollandia Farms facility will be 18 ft and hold 245,000 g.

^c Flare will be located at Wreden Ranch facility.

^d Microgy will be using conventional, Amine Gas Conditioning Equipment to render the biogas compatible with natural gas pipeline specifications.

^e Gas treatment will be located at Hollandia Farms facility.

^f Hot Water Boiler at Hollandia Farms facility will be Standard Low Emission Option (20 ppm NOx)

Source: Microgy® 2007



Water Resources: Vacuuming the manure is expected to reduce the volume of water currently used for flushing the areas where manure accumulates. The proposed project will utilize the existing wastewater discharge system and will not discharge effluent into any body of water other than the existing dairy's existing settling ponds, storage lagoon and self-contained irrigation system. The dairy will continue to control the amount of nutrients applied to the land, as it does currently, through mixing with fresh irrigation water and monitoring, as required by their updated CNMP, to assure water quality standards and WDRs are met. The WDRs ensure that the dairy is designed and operated such that wastewater stored in the lagoon and applied to crops will not result in degradation to groundwater or discharge to surface waters.

Biogas treatment (Cloverdale Dairy and Wreden Ranch): During the anaerobic digestion of the manure-substrate mixture sulfate and a portion of the other sulfur compounds contained in the mixture are reduced to hydrogen sulfide. Hydrogen sulfide is partitioned between gas and liquid phases in the digesters. The biogas discharged from the digester flows through a Biotrickler, which consists of containerized packed media. On this media are bacteria that use hydrogen sulfide as an energy source to produce elemental sulfur and sulfuric acid. Liquid from a sump at the bottom of the Biotrickler is sprayed over the media to remove accumulated acid and is discharged with the digester effluent. Elemental sulfur discharged would be finely divided, colloidal or molecular and would be applied to agricultural fields along with lagoon water where it would ultimately be converted to sulfate. Sulfur is an essential plant and animal nutrient. Periodic fresh water flushes remove sulfur and accumulated bacteria media and is discharged along with waste effluent from the digester. The acidic effluent is neutralized by basic lagoon water upon discharge to the lagoon. Flow rate through Biotrickler is included in effluent flow rates given for the digester system. This rate is about one gpm plus about 1,000 gallons during the periodic fresh water flushes. The sulfur will be accounted for in the dairy's nutrient management plan.

Biogas treatment (Hollandia Farms): The biogas produced will pass through a biological treatment scrubber to remove the hydrogen sulfide to permitted levels. The byproduct, elemental sulfur, will be returned to the fields as a fertilizer. The sulfur will be incorporated in the comprehensive nutrient management plan.

Biogas transmission: Low-pressure biogas will be piped underground from the digesters at the Cloverdale Dairy facilities to the digesters at the Wreden Ranch facilities across property owned by the dairies. The biogas will be combined at the Wreden Ranch facility and piped underground across property owned by the dairies to the Hollandia Farms facility. At the Hollandia Farms facility, the biogas from all three dairies will be treated to pipeline quality and pressure and piped underground along Kansas Avenue to the Southern California Gas pipeline interconnection point located approximately one and a half miles east of the Hollandia Farms facility.

Use of biogas: Southern California Gas Company will receive the biogas at a point of interconnection between Microgy's pipeline facilities and Southern California Gas



Company's transmission network. The biogas will then be distributed for sale over Southern California Gas Company's gas network.

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The San Joaquin Valley is designated non-attainment of state and federal health based air quality standards for ozone and respirable particulate matter (PM). Under the federal classification scheme, the San Joaquin Valley is classified serious non-attainment for both the PM₁₀ (particulate matter less than 10 micrometers in diameter) standard and the 8-hour ozone standard.

To meet federal Clean Air Act (CAA) requirements, the DISTRICT has adopted an Extreme Ozone Attainment Demonstration Plan (EOADP) (2004) and a PM₁₀ attainment demonstration plan (2006 PM₁₀ Plan). Although the federal one-hour ozone standard has been revoked by EPA and replaced with an 8-hour standard, the planning requirements for the one-hour plan remain in effect until replaced by a federal 8-hour ozone attainment plan that is due to EPA by June 15, 2007.

Determination Criteria: This determination criteria for compliance with the current air quality plans (AQPs) is compliance with the control measures in the AQPs. The construction and operation of the proposed project will be subject to District rules and requirements, including permitting requirements. This project will comply with all applicable District rules including, but not limited to:

- Rule 2201 – New and Modified Stationary Source Review. This rule ensures that growth in emissions from all stationary sources in the air basin do not impact air quality. Rule 2201 requires the use of best available control technology and emission offsets for projects exceeding offset thresholds contained in the rule.
- Rule 4311 – Flares. Rule 4311 limits VOC and NO_x emissions generated by the operation of flares.
- Rule 4306 – Boilers, Steam Generators, and Process Heaters – Phase 3. This rule limits NO_x and CO emissions from boilers, steam generators, and process heaters. The rule applies to any gaseous or liquid fuel fired boilers, steam generators, and process heaters with a total rated heat input greater than 5 million Btu per hour.
- Rules 4201 and 4202 – PM Concentration and PM Emission Rate. Rule 4201 and 4202 protect air quality by establishing a PM emission standard and allowable emission rates, respectively.
- Rule 8021 – Construction, Demolition, Excavation, Extraction and Other Earthmoving Activities. The purpose of this rule is to limit fugitive dust emissions



from earthmoving activities through a combination of opacity limits, equipment and activity prohibitions, and dust-suppressing requirements. The project is exempt from the requirement of providing a Dust Control Plan since the digester site is less than 5 acres.

- Rule 8071 – Unpaved Vehicle/Equipment Traffic Areas. The purpose of this rule is to limit dust emissions from travel on unpaved parking areas. If the project exceeds the applicability threshold of 25 daily vehicle trips by vehicles with three or more axles, control requirements listed in the rule must be met. Six substrate truck deliveries are expected per day resulting in 12 trips. The applicant proposes to apply soil stabilizer to limit emissions from unpaved areas.
- Rule 9510 – Indirect Source Review. The proposed project is specifically exempt from Rule 9510 per Rule 9510 §4.4.3.2.

The project will increase combustion related emissions from a natural gas fired boiler used to heat the manure to enhance digestion and from an emergency flare used to burn biogas when it cannot be inserted into the utility's gas pipeline. The digester decreases ROG emissions from the decomposition of manure that currently occur in the anaerobic lagoon and during land application of manure. Since the manure decomposition occurs in a contained environment and more efficiently digests odor causing organic compounds in the manure, odor is expected to be reduced. The project will not exceed District offset thresholds, major source thresholds, and significance thresholds. The project will be required to implement Best Available Control Technology (BACT) for the boiler and the flare. The installation of the digester, boiler, and flare require the issuance of an Authority to Construct (ATC) and Permit to Operate in compliance with Rule 2201. For these reasons, it is appropriate to conclude that the proposed project complies with the applicable air quality plans and will not result in a significant impact.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact. The proposed project does not have the potential to contribute to the possible violation of an existing air quality standard or an existing or projected air quality violation.

District Thresholds of Significance

Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the District's "Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI)." The criteria for these emission thresholds include compliance with the State and National air quality standards and conformity with existing air quality plans for the SJVAB.



Thresholds of Significance are used for determining whether project emissions would have a significant adverse impact on air quality. The District has established a 10-ton per year Threshold of Significance for ROG, which includes emissions of VOC, and a 10-ton per year Threshold of Significance for NOx. The District has not established a Threshold of Significance for PM10, but would consider project specific emissions of 15 tons PM10 per year to be less than significant.

Short-Term Construction-Related Impacts

Air quality impacts may occur during site preparation and construction activities required to implement the proposed improvements. Major sources of emissions during construction include exhaust generated from the use of heavy equipment and on-road vehicles, fugitive dust generated as a result of soil disturbance during excavation and grading activities. Per the District's guidance, compliance with the District's Regulation VIII – Fugitive PM10 Prohibitions will reduce the impact of PM10 (dust) to less than significant. The GAMAQI only considers construction emissions that exceed the annual NOx thresholds to be significant.

Large construction projects lasting many months may exceed the District's annual threshold for NOx emissions and could expose area residents to diesel particulate. This project falls well below the annual threshold as shown in Table 2.

The nearest sensitive receptors to the project are: an existing house approximately 3,500 feet northeast of Cloverdale Dairy, an existing house approximately 4,900 feet to the northeast of Hollandia Farms, and an existing house approximately 3,600 west of Wreden Ranch. The construction activity required to construct the project is limited in size and duration (3 acres at Cloverdale Dairy and Wreden Ranch, and 4 acres at Hollandia Farms). Although the GAMAQI does not recommend PM10 quantification from construction, a threshold of 15 tons per year will be used to gauge potential PM10 impacts from construction. The proposed PM10 threshold is consistent with the GAMAQI's NOx and ROG thresholds, which are based on the District's New and Modified Stationary Source Review offset thresholds.

It is estimated that construction would start in 2008, with operation starting in 2009. Emissions were quantified using URBEMIS 2007 version 9.2.2. As seen in Table 2 below construction emissions fall below the District's Thresholds of Significance and will not have a significant impact on air quality.



Table 2. Construction Emissions

2008 Construction Emissions	ROG (tons/year)	NOx (tons/year)	PM ₁₀ * (tons/year)
Cloverdale Dairy	0.17	1.21	0.07
Hollandia Farms	0.17	1.24	0.07
Wreden Ranch	0.17	1.21	0.07
Total	0.51	3.66	0.21

* Total PM₁₀

Stationary Source Impacts

The District's ATC Application Review has calculated the facility's Pre- and Post-Project Emissions as identified below in Table 3. The Pre-Project Stationary Source Potential to Emit (SSPE1) and the Post-Project Stationary Source Potential to Emit (SSPE2) are the Potential to Emit (PE), prior to and after implementation of the project, from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. The table also identifies the facility's Stationary Source Increase in Permitted Emissions (SSIPE).

Table 3. Stationary Source Increase in Permitted Emissions

Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	(SSIPE) (lb/year)	Significance Threshold	Significant Impact
NO _x	65,771	85,770	19,999	20,000 lb/year	No
SO _x	373	11,202	10,829	54,750 lb/year	No
PM ₁₀	147,857	151,637	3,780	29,200 lb/year	No
CO	13,220	60,800	47,580	200,000 lb/year	No
VOC	364,106	290,017	-74,089	20,000 lb/year	No
NH ₃	1,303,544	1,303,544	0	NA	No

The District's permitting program for stationary sources requires the installation of Best Available Control Technology (BACT) to minimize emissions at the project site and requires the facility to provide emission offsets when thresholds contained in Rule 2201 are exceeded. No offset thresholds will be exceeded. This ensures that growth in long-term emissions from the stationary emissions from the project will not cause a significant impact. In addition, the digester will reduce ROG emissions from



manure decomposition that currently takes place in the lagoon and from land application of the manure. As seen above, ROG emissions will be reduced by 37.04 tons per year.

Mobile Emission Impacts

There is an increase in operational emissions not subject to District permit from delivery truck trips, employee trips, and off-road equipment. URBEMIS 2007 version 9.2.2 was used to quantify the emissions from the trucks and employee trips. The truck trips are due to delivery of non-hazardous food wastes to the digester (substrate) that are used to enhance the digestion process. The digesters are well situated to receive this material from food processing industry facilities in nearby communities. Although no specific sources have been identified, much of this type of material is currently disposed of in landfills or by land application. Therefore, not all mobile source emissions would be new emissions and attributable to the project. As a conservative estimate it is assumed that 50 percent of the mobile emissions would be related to new trips and vehicle miles traveled. Emissions related to the tractor that will be used to vacuum the manure was estimated using offroad engine emission factors from the California Air Resources Board's Carl Moyer Program Guidelines and hours of operation estimates based on the speed of the tractor during manure collection and the distance covered during each run. Table 4 provides the results of this analysis.

Table 4. Operational Emissions from Non-Permitted Sources

Emissions Source	Facility	ROG (tons/year)	NOx (tons/year)	PM ₁₀ [*] (tons/year)
Manure Vac Tractor	Cloverdale	0.42	2.32	0.19
	Hollandia	0.20	1.12	0.09
	Wreden	0.41	2.25	0.19
Mobile - Employee	Cloverdale	0.03	0.03	0.03
	Hollandia	0.03	0.03	0.03
	Wreden	0.03	0.03	0.03
Mobile - Truck	Cloverdale	0.07	1.14	0.07
	Hollandia	0.07	1.14	0.07
	Wreden	0.07	1.14	0.07
Total Emissions		1.33	9.20	0.77
Significance Threshold		10.00	10.00	NA
Exceeds Threshold?		No	No	No



Short-term and long-term air quality impacts associated with the project are less than significant. The project will not violate an air quality standard or contribute to a violation of an air quality standard in the project area.

Greenhouse Gas Emissions

Introduction:

Federal and state laws require emission control measures in areas where air pollution exceeds ambient air quality standards. The San Joaquin Valley is one of these areas. The San Joaquin Valley Unified Air District (District) consists of the following eight counties: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the Valley portion of Kern. The District's primary focus is taking action to improve the health and quality of life of people living in the Valley, while striving to meet health based state and federal ambient air quality standards. This is achieved through adopting and implementing cost-effective air pollution control measures, providing meaningful incentives for reducing emissions, and by developing creative alternatives for achieving emissions reductions. The District's strategies focus on reducing Criteria Pollutants to meet federal and state standards, and regulating stationary source emissions.

Recent concerns over global warming have created a greater interest in greenhouse gases (GHG) and their contribution to global climate change (GCC). However, at this time there are no generally accepted thresholds of significance for determining the impact of GHG emissions from an individual project on GCC. Thus, permitting agencies are in the position of developing policy and guidance to ascertain and mitigate to the extent feasible the effects of GHG, for CEQA purposes, without the normal degree of accepted guidance and case law.

Greenhouse Gases: Gases that trap heat in the atmosphere are called greenhouse gases; they act in the atmosphere in a manner analogous to the way a greenhouse retains heat. Common GHG include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Without the natural heat trapping effect of GHG, the earth's surface would be about 34 degrees Centigrade cooler (Climate Action Team, 2006). Natural processes and human activities are primarily responsible for the emission of GHG. Green house gases include:

Water Vapor: Although not considered a pollutant, water vapor is the most important, abundant, and variable GHG. In the atmosphere, it maintains a climate necessary for life. The main source of water vapor is evaporation from the ocean (approximately 85 percent). Other sources include sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves.



Ozone: Unlike other GHG, ozone is relatively short-lived and, therefore, is not global in nature. It is difficult to make an accurate determination of the contribution of ozone precursors (nitrogen oxides and volatile organic compounds) to global climate change (California Air Resources Board (CARB) 2004b).

Aerosols: Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols. Sulfate aerosols are emitted when fuel-containing sulfur is burned. Black carbon (or soot) is emitted during biomass burning or incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

Carbon dioxide: Carbon dioxide (CO₂) is an odorless, colorless gas, which has both natural and anthropogenic sources. Natural sources include the following: respiration of bacteria, plants, animals, and fungus, evaporation from oceans, volcanic outgassing, and decomposition of dead organic matter. Anthropogenic sources of carbon dioxide are from burning coal, oil, natural gas, and wood. Concentrations of CO₂ were 379 parts per million (ppm) in 2005, which is an increase of 1.4 ppm per year since 1960 (Intergovernmental Panel on Climate Change 2007).

Methane: Methane (CH₄) is a flammable gas and is the main component of natural gas. When one molecule of CH₄ is burned in the presence of oxygen, one molecule of carbon dioxide and two molecules of water are released. There are no ill health effects from CH₄. A natural source of CH₄ is from the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain CH₄, which is extracted for fuel. Other sources are from cattle, fermentation of manure, and landfills.

Nitrous oxide: Nitrous oxide (N₂O), also known as laughing gas, is a colorless greenhouse gas. Higher concentrations of N₂O can cause euphoria, dizziness, and slight hallucinations. N₂O is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (nitric acid production, nylon production, fossil fuel-fired power plants, and vehicle emissions) also contribute to its atmospheric load. It is used in racecars, rocket engines, and as an aerosol spray propellant.

Chlorofluorocarbons: Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH₄ or ethane with chlorine and/or fluorine atoms. CFCs are nonflammable, nontoxic, insoluble, and



chemically uncreative in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as cleaning solvents, refrigerants, and aerosol propellants. They destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987.

Hydrofluorocarbons: Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs for automobile air conditioners and refrigerants.

Perfluorocarbons: Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays, roughly 60 kilometers above the earth's surface are able to destroy the compounds. PFCs have long lifetimes, ranging between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. Concentrations of tetrafluoromethane in the atmosphere are over 70 parts per trillion (ppt) (Environmental Protection Agency (EPA) 2006d). The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride: Sulfur hexafluoride (SF_6) is an inorganic, colorless, odorless, nontoxic, nonflammable gas. Concentrations in the 1990s were roughly 4 ppt (EPA 2006d). SF_6 is used for insulation in electric power transmission and distribution equipment, in semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.

Worldwide Greenhouse Gas Inventory:

In 2004, total worldwide GHG emissions were estimated to be 20,135 teragram CO_2 equivalents (Tg CO_2 Eq.) (22,194,810,000 tons), excluding emissions/removals from land use, land use change, and forestry (United Nations Framework Convention on Climate Change 2006). (Note that sinks, or GHG removal processes, plays an important role in the GHG inventory as forest and other land uses absorb carbon.) In 2004, U.S. GHG emissions were 7,074.4 Tg CO_2 Eq. (7,798,111,120 tons) (EPA 2006a). In 2005, total U.S. GHG emissions were 7,260.4 Tg CO_2 Eq. (8,003,138,920 tons), a 16.3 increase from 1990 emissions, while U.S. gross domestic product increased by 55 percent over the same period (EPA 2007a). Emissions rose from 2004 to 2005, an increase of 0.8 percent. Factors causing the increase are the following: (1) strong economic growth in 2005, leading to increased demand for electricity and (2) an increase in the demand for electricity due to warmer summer conditions (EPA 2007a). However, a decrease in demand for fuels due to warmer winter conditions and higher fuel prices moderated the increase in emissions (EPA 2007a). California is a substantial contributor of GHG as it is the second largest contributor in the U.S. and the sixteenth largest in the world (California Energy Commission (CEC) 2006). In 2004, California produced 492 Tg CO_2 Eq. (542,331,600 tons) (CEC 2006), which is approximately seven percent of



U.S. emissions. The major source of GHG in California is transportation, contributing 41 percent of the State's total GHG emissions (CEC 2006). Electricity generation is the second largest source, contributing 22 percent of the State's GHG emissions.

Global Climate Change:

Global climate change (GCC), which most scientists believe is caused by GHG emissions, is a widely discussed economic, political, and scientific issue in the United States. GCC is a change in the average weather of the earth that may be measured by changes in temperature, precipitation, storms, and wind. The baseline by which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. Many recent concerns over GCC utilize this data to extrapolate a level of statistical significance specifically focusing on temperature records from the past 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

Key Legislation and Policies:

The Global warming Solutions Act of 2006, also known as Assembly Bill 32 (AB 32), was signed into law on September 27, 2006. AB 32 requires the California Resources Board (CARB) to do the following:

- By July 1, 2007, adopt a list of early action measures that can be implemented by regulation before January 2010.
- By January 1, 2008, adopt mandatory reporting requirements for significant sources.
- By January 1, 2008, establish a statewide GHG emission cap for 2020 based upon 1990 emissions levels.
- By January 1, 2009, adopt a scoping plan indicating how emission reductions will be achieved for significant GHG sources via regulations, market mechanisms, or other measures.
- By January 1, 2011, adopt regulations to achieve the maximum technologically feasible and cost effective reductions in GHG.

Greenhouse Gas Reductions from the Proposed Project

The purpose of the proposed project is to construct anaerobic digesters to produce renewable biogas from dairy waste for use as fuel in the natural gas pipeline system. An anaerobic digester is an enclosed basin or tank that is designed to facilitate the decomposition of wastewater by microbes in the absence of oxygen. The process of anaerobic decomposition results in the preferential conversion of organic compounds in the wastewater into methane (CH₄), carbon dioxide (CO₂), and water rather than intermediate metabolites (VOCs). The gas generated by this process is



known as biogas, waste gas or digester gas. In addition to CH₄ and CO₂, biogas also contains small amounts of Nitrogen (N₂), Oxygen (O₂), Hydrogen Sulfide (H₂S), and Ammonia (NH₃). Biogas will also include trace amounts of various Volatile Organic Compounds (VOCs) that remain from incomplete digestion of the volatile solids in the incoming wastewater. Because biogas is mostly composed of methane, the main component of natural gas, the gas produced in the digester can be cleaned to remove H₂S and other impurities and used as a fuel. The captured biogas can be sent to a natural gas pipeline, used by fuel cells, or combusted in a IC engine, microturbine, flare, or a boiler, where the gas can be used to generate useful heat or electrical energy.

At full operation, the project is expected to generate 405.47 MMscf of renewable biogas per year. The majority of this gas will be captured and injected into the natural gas pipeline. When this is not possible because plant breakdowns or other problems, the biogas will be sent to low-NO_x flares for combustion. The use of biogas in the natural gas pipeline will reduce emissions of greenhouse gasses by displacing fossil fuel that would have been combusted. In addition, the biogas that is injected into the natural gas pipeline will not result in additional emissions at the facility or elsewhere because it will take the place of the natural gas that would have been used.

Anaerobic digesters reduce greenhouse gas emissions because methane gas that would be released from uncontrolled lagoons or other manure storage structures is captured as biogas. Large quantities of methane are produced by anaerobic decomposition of animal waste in conventional manure storage structures. This methane is continually emitted to the atmosphere from conventional manure storage structures. Methane has twenty-one to twenty-five times the heat trapping potential of carbon dioxide.¹ So even when the captured biogas must be combusted in the low-NO_x flares, which will produce carbon dioxide, there will be a significant net reduction in the heat trapping potential of the gases that are emitted. As mentioned above, the use of biogas will also displace the combustion of natural gas, a fossil fuel. Because the carbon in biogas comes from an organic source with a short carbon cycle, it does not contribute to increased concentrations of carbon dioxide in the atmosphere. The potential reductions from this project, which were presented in the table above, only include the greenhouse gas reductions that the project will create by reducing the amount of methane currently emitted from the lagoons at each dairy. Potential greenhouse gas reductions from the displacement of fossil fuel usage have not been included in this value.

¹ The ARB, California Climate Change Portal and EPA give an estimate of 24.5 for the global warming potential of methane. (http://www.climatechange.ca.gov/glossary/letter_m.html)



Calculation of GHG Emissions Reductions from Hollandia Dairy; Cloverdale Dairy and Wreden Ranch Dairy

The lack of validated scientific information on dairy emissions results in uncertainty in characterizing the project's GHG emissions and their impact on GCC. However, the District has quantified the operational GHG emissions from the three dairies involved in this project prior to installation of the digester systems and after installation of the proposed digester systems using the available scientific methodology and information. Using CARB's emissions factors, the operational emissions of CH₄ and N₂O from the project are presented in the table below:

Pollutant	Pre-Project emissions tons/year	Post-Project emissions tons/year	Reductions from installation of Digesters
Methane (CH ₄)	4,972.8	3,379.8	(1,593.0)
CO ₂ Equivalents	104,429.7	70,975.6	(33,454.1)
Nitrous Oxide (N ₂ O)	21.8	21.8	0
CO ₂ Equivalents	6,747.4	6,747.4	0

Conclusion:

The proposed project will result in a net decrease in GHG emissions:

- 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)?***

Less than Significant Impact. The project will not significantly increase the production of any criteria pollutant as described in section b above, therefore per GAMAQI guidance, it is appropriate to conclude that the project's incremental contribution to criteria pollutant emissions is not cumulatively considerable.



d) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The District performed a Risk Management Review (RMR) analysis to determine the possible impact of the project's permitted stationary sources on the nearest sensitive receptors. Because the project consists of three different locations the closest business and residential receptor to any unit was used for the entire facility. The closest receptor was a resident 1,079 meters (3,540 feet) away and a business that was 1,597 meters (5,240 feet) away. The results of an RMR are given as prioritization scores. If a prioritization score is less than 1.0 a Health Risk Assessment (HRA) is not required for the project. An HRA identifies the project's impact to sensitive receptors from all sources, including stationary sources and mobile sources. As shown in Table 5 below, the prioritization score for this project is less than 1.0. Therefore, an HRA was not required and health impacts are expected to be less than significant.

Table 5. Health Risk Summary

Categories	Flares (Units C-7020-7-0, C-7021-9-0, and C-7066-8-0)	Boilers (Units C-7020-8-0, C-7021-10-0, and C-7066-9-0)	Project Totals	Facility Totals
Prioritization Score	0.37	0	0.37	0.37
Acute Hazard Index	NA ¹	NA ¹	NA ¹	NA ¹
Chronic Hazard Index	NA ¹	NA ¹	NA ¹	NA ¹
Maximum Exposed Individual Cancer Risk (10 ⁻⁶)	NA ¹	NA ¹	NA ¹	NA ¹
<i>T-BACT Required?</i>	NO	NO		
<i>Special Permit Conditions?</i>	NO	NO		

Since the prioritization for this project and facility is less than 1, no further analysis is necessary.

e) Create objectionable odors affecting a substantial number of people?

Less than Significant Impact. The digester is expected to reduce odors produced by the dairy due to the containment of a substantial portion of the dairy's manure in above ground tanks and higher conversion of odor producing compounds to methane. Therefore, this impact is less than significant.



IV. BIOLOGICAL RESOURCES	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
Would the Project:				
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, and regulations, or by the California Department of Fish and Game or US Fish and Wildlife Ser			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

- 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?**

Less than Significant Impact with Mitigation. A biological due diligence survey and record search was conducted along the proposed pipeline route (Michael Brandman Associates 2007). The results are summarized below.

The San Joaquin kit fox (*Vulpes macrotis mutica*) is listed as a federally endangered and state threatened species. There is a known occurrence within two miles of the



proposed gas pipeline; therefore there is moderate potential for this species to occur.

- **Mitigation Measure:** Applicant shall provide a pre-construction kit fox den survey conducted by a qualified biologist prior to ground disturbing activities.

Burrowing owl (*Athene cunicularia*) is a California species of concern that is protected under the MBTA and CFG Code. Due to the presence of potentially suitable habitat and a recorded occurrence within close proximity to the pipeline route, burrowing owl has a moderate potential to occur onsite.

- **Mitigation Measure:** Before any ground disturbance activities on the project site, a qualified biologist shall conduct a focused survey to determine the presence/absence of this species onsite. The survey shall be conducted according to the standard protocol established by CDFG and the Burrowing Owl Consortium (BOC). If burrowing owls are determined to be present on the site, mitigation for potential impacts to owls shall follow the guidelines outlined by the BOC, including passive relocation.

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?

Less than Significant Impact. The gas pipeline will be crossing Cross Creek that flows across the pipeline route near Kansas Avenue and Avenue 6. This feature may fall under the jurisdiction of United States Army Corps of Engineers (USACE), RWQCB, and/or California Department of Fish and Game (DFG). Prior to construction of the pipeline, the applicant is required to submit a Notification of Lake or Streambed Alteration (notification) to DFG. As part of this notification, a qualified biologist must determine whether or not the creek is also under federal jurisdiction and subject to federal permits (US Fish and Wildlife Service). The pipeline will be designed and engineered to minimize impacts to Cross Creek and comply with applicable regulations.

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?

Less than Significant Impact. A possible wetland feature is located east of the Cloverdale Dairy and to the north of the pipeline route. This feature will be avoided during construction.



- 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?**

No Impact. The site is not located within any wildlife or fish movement corridors and does not function as a wildlife nursery site. No impacts in this regard would occur.

- e) Conflict with any local applicable policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

No Impact. The project site consists mostly of barren habitat with some annual grassland and agricultural activities; therefore, the project will not conflict with any local policies or ordinances protecting biological resources. No impacts in this regard would occur.

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

No Impact. The project site is not located within the boundaries of any Habitat Conservation Plans (HCP), Multiple Species Habitat Conservation Plans (MSHCP) or National Community Conservation Plans (NCCPS). The site is not located within any United States Fish and Wildlife Service (USFWS) designated critical habitat (Michael Brandman Associates 2007). No impacts in this regard would occur.

V. CULTURAL RESOURCES				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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



a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. No historical resources have been identified at the subject site. The proposed project is located on land that has been farmed for many years with no historical resources present (California Historical Resources Information System Report 2007).

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant Impact. The digester will be located on a developed dairy site that was previously graded during construction of the dairy. Gas produced by the digester will be transported in an underground low-pressure gas pipeline across the dairy and along existing roads to the nearby Hollandia Dairy. Although there is a possibility of archaeological resources being uncovered during grading at sites that have been previously developed, the area being disturbed is small. Impacts in this regard would be less than significant.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact. If potentially significant archaeological resources are discovered during ground-disturbing activities associated with construction of the proposed project, all work within 100 feet of the find shall stop until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate mitigation measures in consultation with Kings County and other appropriate agencies and individuals. If significant resources are discovered, a formal evaluation using CEQA criteria will be conducted to determine if further study, test excavations, or data recovery procedures are necessary.

d) Disturb any human remains, including those interred outside of formal cemeteries?

No Impact. Human remains are not known to exist at the subject site. Standard protocol in compliance with existing regulations would require such a discovery to be immediately reported to the County Coroner. If the remains are determined to be Native American in origin, both the Native American Heritage Commission and any identified descendants shall be notified by the coroner and recommendations for treatment solicited (CEQA Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and 5097.98).



VI. GEOLOGY / SOILS				
Would the Project	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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 wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

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.*

No Impact. The potential for extensive surface rupture is considered minimal since no major faults systems are known to exist in Kings County. The nearest fault to the project site is the San Andreas Fault, approximately four miles west of the Kings County Line, or approximately 50 miles southwest of the project site. The Owens Valley Fault group on the east side of the Sierra Nevada and the White Wolf Fault to the south of Kings County pose smaller hazard sites (Kings



County General Plan, 1993). No faults are mapped on the project site. This condition precludes the possibility of exposure to fault rupture on the project site. No impacts in this regard would occur.

ii) Strong seismic ground shaking?

Less than Significant Impact. The potential for ground shaking is considered to be minimal, since no major fault systems are known to exist in Kings County. Minor surface rupture could be expected in areas of minor faulting, primarily in mountainous portions of southwestern Kings County. Compliance with California seismic design requirements would ensure that the project site would not expose persons or property to strong seismic ground shaking hazards. Impacts in this regard would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

No impact. The project is not located in a liquefaction hazard area; however, compliance with California seismic design requirements would ensure the project site would not expose persons or property to liquefaction hazards. Impacts in this regard would be less than significant.

iv) Landslides?

No Impact. The project site is not located in a landside hazard area (Kings County General Plan 1993). The site contains flat relief, which precludes the possibility of landslides onsite. No impacts in this regard would occur.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact. Construction of the proposed project would not involve ground-disturbing activities that could potentially create erosion, nor will it result in substantial loss of topsoil. The anaerobic digester components will be constructed above ground, and the minimal amount of soil displaced during the installation of the gas pipeline will be backfilled.

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?

Less than Significant Impact. The project site is located over moderately thick section of marine and continental sedimentary deposits overlying the granitic basement complex and there are no unstable geologic units or soils (e.g., artificial fill) present on the project site (Kings County General Plan 1993). In addition, the proposed project is designed in accordance with all building code requirements including those pertaining to excavations, grading, and foundations. Adherence to



building code requirements would further reduce potential risks to life and property from unstable geologic units or soils. Impacts in this regard would be less than significant.

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?*

No Impact. The digester equipment will be built upon loamy and sandy soils which are not known to be expansive soils (NRCS Soil Survey 2007 website). Clay soils, which are typically expansive, are not located on the project construction site. The project will adhere to the grading and foundation requirements of the California Buildings Standards Code (CBSC). These requirements set forth soil engineering standards that ensures building foundations are adequately supported. Adherence to CBSC standards would ensure that persons and structures are not exposed to hazards from shrinking and swelling of soils. There will not be any substantial risk to life or property.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

No Impact. The proposed project is a modification to the current waste management process and collection system of the dairy. No impacts in this regard would occur.

VII. HAZARDS & HAZARDOUS MATERIALS				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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



VII. HAZARDS & HAZARDOUS MATERIALS				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact: Methane gas (CH₄) will be produced in the anaerobic digester by natural biological processes (decomposition of manure waste) and transported through a new pipeline that will connect to existing pipelines. Under normal operating conditions, the methane gas will be transported via a 6" diameter low-pressure pipeline from Wreden Ranch and Cloverdale dairies to the gas processing plant on the Hollandia Dairy where the gas is cleaned to PUC pipeline standards. After the gas is cleaned and compressed, it will be further transported in a high-pressure pipeline along Kansas Avenue to a Southern California Gas transmission line where it will be inserted. The U.S. Department of Transportation (DOT), Office of Pipeline Safety (OPS) regulates the safety of gas transmission pipelines. All gas pipeline projects delivering gas through a distribution system must be designed and constructed to meet or exceed the Federal safety standards established in 49 Code of Federal Regulations (CFR) Part 192. These regulations include specific standards for material selection and qualification, design requirements, protection from internal, external, and atmospheric corrosion, and



worker training, safety, and qualifications specific to the location of the pipeline relative to population densities. Adhering to these guidelines and requirements will ensure that no significant hazard will be created to the public or the environment.

Hydrogen sulfide biological scrubber component: There are no hazardous materials utilized in the process. The scrubber (located at Hollandia Dairy) reduces the sulfur in the biogas through a biological process. The resulting mixture of water and dilute sulfur compounds coming off the scrubber will be mixed with irrigation water and applied to the fields for crops. Impacts in this regard would be less than significant.

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?

Less than Significant Impact. The project involves the production of methane at the digesters and its transfer to Hollandia Farms, in a low-pressure (0.5-5 PSI) pipeline approximately five (5) miles from the Cloverdale Dairy and approximately one (1) mile from Wreden Ranch, for clean up to PUC standards. The methane is then piped from Hollandia Farms to the connection tie-in point at an existing Southern California Gas pipeline. Handling methane can be hazardous due to its flammability and properties as an asphyxiant capable of reducing oxygen to dangerously low levels in the body. Compliance with existing safety standards in the construction and long-term operation of the system is expected to minimize the hazard to the public and the environment. Construction in compliance with state building codes applicable to the installation of natural gas infrastructure reduces this impact. Occupational safety standards exist in Federal and State laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA obligates many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle. For example, manufacturers are to appropriately label containers, Material Safety Data Sheets are to be available in the workplace, and employers are to properly train workers. Impacts in this regard would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. No schools are within one-quarter mile of the project site. No impacts in this regard would occur.



- d) *Be located on a site which is included on a list of hazardous materials lists compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

No Impact: Review of the list of hazardous material sites was negative. The dairy site and pipeline route is not listed as a hazardous materials site (Department of Toxic Substances Control website 2007).

- 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?***

No Impact: The nearest public airports to the project are the Hanford Municipal Airport and Corcoran Airport (approximately 9.2 miles to the slight northeast and 6.8 miles to the southeast of Cloverdale Dairy; 8.9 miles to the slight northwest and 6.2 miles to the slight southeast of Hollandia Farms; and 8.1 miles to the slight northwest and 6.8 miles to the south of Wreden Farms, respectively). These distances place the project outside of the boundaries of airport land use plans. No impacts in this regard would occur.

- f) *For a project within the vicinity of a private airstrip, would the project would the project result in a safety hazard for people residing or working the project area?***

No Impact. A private airstrip, Blair Strip, is located approximately 6.0 miles north of Cloverdale Dairy and 5.4 miles northwest of Wreden Ranch. A private airstrip, Waukena Air Strip is located approximately 1.63 miles southwest of Hollandia Farms; however this airstrip is for small crop dusting planes only and flights are seasonal. No impacts in this regard would occur.

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

No Impact. The proposed project does not propose any roadway changes that would impair or interfere with emergency response or evacuation on Kansas Avenue, 10 ½ Avenue or State Highway 43. No impacts in this regard would occur.

- 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?***

No Impact. The project site is surrounded by agricultural land uses. These land use types are not associated with wildland fires and preclude the possibility of exposure to wildland fires. No impacts in this regard would occur.



VIII. HYDROLOGY / WATER QUALITY				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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 storm water 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



a) *Violate any water quality standards or waste discharge requirements?*

Less than Significant Impact. The proposed project will be a modification to the existing wastewater discharge systems and will not discharge effluent into any body of water other than the dairies' existing settling ponds and storage lagoons and self-contained irrigation systems. The dairy will control the amount of nutrients applied to the land through mixing with fresh irrigation water and monitoring as explained in their updated Report of Waste Discharge (ROWD) and technical attachments, including the Nutrient Management Plan (NMP) prepared for the Central Valley Regional Water Quality Control Board (CVRWQCB). In addition, the CVRWQC is in the process of adopting Individual WDRs for this project, which will improve the overall environmental performance of the dairy and further assure that the impacts of the project remain less than significant.

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)?*

No Impact. The dairy will be changing from using a flush system to a vacuum system for removing dairy manure from the cow housing areas. This is expected to result in decreased water usage. The wastewater from the dairy is mixed with fresh water for irrigating the surrounding agricultural fields. The total volume of water required by the crops being grown will not change as a result of installing the digester.

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?*

No Impact. Construction of the proposed project would not involve ground-disturbing activities that could potentially create erosion, nor will installation of the digester system affect drainage patterns. No streams or rivers will be altered, and the soil disturbance will be minimal. The operation of the digesters will not cause and erosion or siltation on or off-site, as the dairy has laser-leveled fields, and irrigation tailwater and stormwaters are contained on site with the existing collection system. No impacts in this regard would occur.

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?*



No Impact. No streams or rivers will be altered, and surface runoff will continue to be collected on-site in the same manner as before the digester was installed. Stormwater runoff from corrals is conveyed to flush lanes and then to the storage lagoon. Stormwater runoff from roofs is conveyed directly to storage lagoon, and runoff from feed storage areas is conveyed to sumps and then pumped to the storage lagoon.

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?*

No Impact. The three dairy facilities currently have existing stormwater, irrigation and tailwater return systems in place. The Cloverdale Dairy lagoon system consists of 10 basins that provide a total storage capacity of approximately 65.3 million gallons (200.5 acre-ft) with a 2-foot freeboard. The Hollandia Farms lagoon system consists of 10 basins that provide a total storage capacity of approximately 54.38 million gallons (166.9 acre-ft) with a 2-foot freeboard. The Wreden Ranch lagoon system consists of a single basin that provides a total storage capacity of approximately 39.68 million gallons (121.8 acre-ft) with a 2-foot freeboard.

All irrigation and storm waters are collected on site and delivered back on the facilities' land application system. No changes to these systems are expected from installing the digester units.

Precipitation in the valley floor is rarely sufficient to cause runoff and it is not likely that storm water will leave the property. Borders around fields, adjacent roadways, and canal banks are above grade and restrain stormwater flows. Only under sever rainfall events is stormwater allowed to flow off-site. In such cases, runoff from Hollandia Farms would enter the canals and its destination would vary depending on the current canal configuration. Cross Creek runs along the eastern edge of the Hollandia land application system, but an adjacent canal prevents runoff from entering the creek. However, precipitation at the project site is rarely sufficient to cause runoff and it is not likely that storm water will leave the property.

The dairy facilities are located outside the 100-year flood zone and consequently no supplemental flood control measures are in place or necessary (LWA 2007).

f) *Otherwise substantially degrade water quality?*

Less than Significant Impact: Storage ponds and settling ponds at the Cloverdale Dairy facility have been lined with soils having clay content greater than 10 percent and were constructed according to Title 27 Standards in order to prevent wastewater from leaching to groundwater (EJS & Associates 2001).



Storage ponds and settling ponds at the Hollandia Farms facility have been lined with soils having clay content greater than 10 percent and were constructed according to Title 27 Standards in order to prevent wastewater from leaching to groundwater (California Planning & Engineering Corp. 1995). Effluent waters will be diluted with fresh water and applied to croplands in accordance with the dairy's updated Comprehensive Nutrient Management Plan. The digester process will result in a decrease in salt in terms of total dissolved solids (TDS) of approximately 24 tons/year which represents (assuming that manure solids and digester solids are exported) about one percent of the total salt applied under current operations (assuming no solids are being exported).

The storage lagoon at the Wreden Ranch facility was constructed according to Title 27 Standards with bottom and side slopes lined with on-site soils having a clay content greater than 10 percent. However, a post-construction certification report on the lagoon construction to demonstrate compliance was not required for this dairy in lieu of a monitoring well system.

Effluent water quality may be improved with the project, as the high temperature within the digesters kills many waterborne pathogens, and the overall Biological Oxygen Demand (BOD) of the water leaving the digester will be lower. Further, manure nutrients are conserved throughout the process, replacing the need for chemical fertilizers

The facilities are required to meet all rules and regulations of the CVWQCB. Effluent waters will be diluted with fresh water and applied to croplands in accordance with the dairy's updated NMP. The digester process will result in a slightly greater mass of salts in terms of TDS added to the land application system. The project however will export manure solids and digester solids. With the increase of TDS combined with management practices to minimize salt in the effluent and implementation of an NMP, the dairy will remain below the CVWQCB guidelines for non-nitrogen salt loading. Groundwater monitoring wells will be installed to detect any impacts from the lagoon and will be tested at least twice annually. Impacts in this regard would be less than significant.

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?

No Impact. The dairy facilities are located outside the 100-year flood zone, so no housing will be placed in a flood hazard area.

h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?



No Impact. The dairy facilities are located outside the 100-year flood zone, so no redirection of flood flows will occur.

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?

No Impact. The installation of the digester components will not expose people or structures to a significant risk of loss involving flooding. According to the Army Corps of Engineers inundation maps, the complete failure of Pine Flat Dam at capacity (east of the Valley floor on the Kings River) would cause floodwaters to reach Kings County within 5 hours, and floodwaters from a complete failure of the Terminus Dam (Kaweah River) would reach the County in 12 hours. However, the chances of either of these dams failing while at full capacity are considered remote. (King County General Plan 1993).

IX. LAND USE / PLANNING	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
Would the Project:				
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

a) Physically divide an established community?

No Impact. The digester site is fully contained within an existing dairy. The gas pipeline will be underground and not result in any division. No impacts in this regard would occur.

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?

No Impact. The project site is zoned AG20 and AG40 – General Agriculture. The dairy manure management system is an integral part of the agricultural use of the land. No impacts in this regard would occur.



c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The project site is actively farmed, and therefore, is not subject to the provisions of any Habitat Conservation Plans or Natural Community Conservation Plans. The pipeline route is also not in a plan area (Michael Brandman Associates 2007). No impacts in this regard would occur.

X. MINERAL RESOURCES				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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

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?

No Impact. The project site is in an existing dairy. No mineral extraction activities exist on the project site (Kings County General Plan 1993). No impacts in this regard would occur.

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?

No Impact. No mineral extraction activities occur in Kings County (Kings County General Plan 1993); therefore the project site is not designated as a locally important mineral resource recovery site. No impacts in this regard would occur.



XI. NOISE Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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	

a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. The nearest residences to the project are located approximately 3,500 feet northeast of Cloverdale Dairy, 4,900 feet northeast of Hollandia Farms, and 3,600 feet west of Wreden Ranch. The residences will be partially shielded from noise transmission by the existing corrals and milking barns. The primary existing noise sources in the project area are related to traffic on Kansas Avenue (to the north), State Route 43 (to the east), and from the operation of farm equipment at the dairy. The dairy operator currently removes manure from the free stall area with flushing. The new system will use a vacuum system that is pulled and powered by a tractor. Future noise types and volumes are going to be similar to the existing conditions, with the exception of the additional digester electric (10hp) motor and the compressor (specification calls for 85 dBa 3 feet). The compressor is contained within an enclosed area. Therefore, the increase in noise is expected to remain well below the applicable standards. Other new sources include pumps, engines, and machinery used to move the manure from its point of origin to the digester. All equipment with moving parts, except the effluent pump and the digester agitators, will be located inside an enclosed control room. The digester



agitators do not make any sound. The effluent pump is very quiet because it does not have an open pipe. There will be an increase of approximately 6 truck trips per day for the delivery of substrate to the digester and 2 employee trips per day. Trucks will be traveling at low speeds while traversing the site and would not be expected to create noise levels above those now experienced due to feed and milk transport. Therefore, the project will not substantially increase ambient noise levels in the project area and impacts in this regard would be less than significant.

b) Exposure of persons to, or generation of, excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact. Construction of the proposed project will include the installation of storage tanks that will require soil preparation to ensure a stable surface. This may cause perceptible on-site ground borne noise or vibration, but since the construction site is far from the nearest neighbor, it is highly unlikely that any vibration or noise will be noticed off-site. Activities associated with demolition, earthmoving equipment and similar construction equipment would occur on a temporary basis. Operation of the project will not involve any activity that will produce ground borne noise or vibration. Impacts in this regard would be less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. Future noise types and volumes are going to be similar to the existing conditions, with the exception of the additional digester electric (10hp) motor and the compressor (specification calls for 85 dBa 3 feet). The compressor is contained within an enclosed area. Therefore, the increase in noise is expected to remain well below the applicable Kings County noise standards. Therefore, the project will not substantially increase ambient noise levels in the project area and impacts in this regard would be less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. Noise levels associated with construction activities would be higher than the ambient noise levels in the existing project site; however, noise levels would subside once construction of the proposed project is completed. Two types of noise impacts could occur during the construction phase. First, the transport of workers and equipment to the construction site would incrementally increase noise levels along site access roadways. Even though there may be a relatively high single-event noise exposure potential with passing trucks, the increase in noise would be less than significant when averaged over a 24-hour period, and therefore, would have a less than significant impact on noise receptors along the truck route.



The second type of impact is related to noise generated by onsite construction operations. U.S. Environmental Protection Agency (EPA) noise estimations from construction are as follows:

Activity	Noise Levels
Ground Clearing	84±6 dBA
Excavations	89±6 dBA
Foundations	78±3 dBA
Erection of Structures	85±5 dBA
Finishing (i.e. paving)	89±6 dBA

Source: EPA, 1971

The nearest residences to the project are located approximately 3,500 feet northeast of Cloverdale Dairy, 4,900 feet northeast of Hollandia Farms, and 3,600 feet west of Wreden Ranch. Due to the distance to the residence, exposure to elevated noise levels from the operation of onsite construction equipment is not expected. Construction activities are carried out in discrete steps, each of which has its mix of equipment, and consequently its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Construction-related noise will result in a temporary change in ambient noise levels. Therefore, impact in this regard would be less than significant.

- 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?***

The nearest public airports to the project are the Hanford Municipal Airport and Corcoran Airport (approximately 9.2 miles to the slight northeast and 6.8 miles to the southeast of Cloverdale Dairy; 8.9 miles to the slight northwest and 6.2 miles to the slight southeast of Hollandia Farms; and 8.1 miles to the slight northwest and 6.8 miles to the south of Wreden Farms, respectively). These distances preclude the possibility of the project site being adversely exposed to aviation noise. No impacts in this regard would occur.

- 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?***



No Impact. A private airstrip, Waukena Air Strip is located approximately 11,495 feet southeast of the project; however this airstrip is for small crop dusting planes only and flights are seasonal. No impacts in this regard would occur.

XII. POPULATION / HOUSING				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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

- 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)?**

No Impact. No new homes or businesses are proposed, and no roads or infrastructure is being extended, therefore, the addition of the digesters will not induce substantial population growth.

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

No Impact. The project will occur at an existing dairy and have no impact on existing housing.

- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

No Impact. The project will occur at an existing dairy and will not displace any people. No impacts in this regard would occur.



XIII. PUBLIC SERVICES				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
a) 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:				X
i) Fire protection?			X	
ii) Police protection?				X
iii) Schools?				X
iv) Parks?				X
v) Other public facilities?				X
b) Cumulatively exceed official regional or local population Projections?				X
c) Induce substantial growth in an area either directly or indirectly (e.g., through Projects in an undeveloped area or extension of major infrastructure)?				X
d) Displace existing housing, especially affordable housing?				X

- 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?*

Less than Significant Impact. The digester and support facilities will be designed to meet the standards of the 2007 California Fire Code. All construction plans will be submitted to the Kings County Fire Marshall for review and approval. All gas pipeline projects delivering gas through a distribution system must be designed and constructed to meet or exceed the Federal safety standards established in 49 Code of Federal Regulations (CFR) Part 192. Installation of the pipeline in accordance with these standards will minimize the potential for fire. Impacts in this regard would be less than significant.



ii) Police Protection?

No Impact. Installation of a digester would not change the amount of police protection required at the existing dairy. No impacts in this regard would occur.

iii) Schools?

Less than Significant. The project will require two employees to service digesters at multiple dairies. This small increase in employees and their families will result in a commensurately small increase in public school enrollment. Impacts in this regard would be less than significant.

iv) Parks?

Less than Significant. The project will require two employees to service digesters at multiple dairies. This small increase in employees and their families will result in a commensurately small increase in park use. Impacts in this regard would be less than significant.

v) Other Public Facilities?

No Impact. Installation of a digester would not change affect other public facilities at the existing dairy. No impacts in this regard would occur.

b) Cumulatively exceed official regional or local population projections?

No Impact. Installation of a digester would not change affect population projections. No impacts in this regard would occur.

c) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?

No Impact. Installation of a digester would not cause substantial growth. No impacts in this regard would occur.

d) Displace existing housing, especially affordable housing?

No Impact. Installation of a digester will not displace housing. No impacts in this regard would occur.



XIV. RECREATION				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
a) 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) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

a) 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?

No Impact. There will be no change in the use of recreational facilities due to the installation of a digester. No impacts in this regard would occur.

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?

No Impact. The proposed project consists of installing an anaerobic digester at an existing dairy. No recreational facilities are proposed or would be required as a result of the proposed project. No impacts in this regard would occur.

XV. TRANSPORTATION / TRAFFIC				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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	



XV. TRANSPORTATION / TRAFFIC				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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

- 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)?**

Less than Significant Impact. The project will involve an additional six (6) truck loads of substrate per day. Trucks will be utilizing existing County and dairy roads and will be similar to other dairy delivery trucks.

- b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

Less than Significant Impact. The project will be constructed in a rural area with no existing level of service issues. The additional six (6) truck trips per day will not cause substantial congestion.

- c) Result in change in air traffic patterns, including either an increase in air traffic levels or a change in location that results in substantial safety risks?**



No Impact. Air traffic patterns will not be affected by the installation of the digester system. No impacts in this regard would occur.

d) *Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?*

No Impact. There will be no alterations to existing roads or intersections. The gas pipeline will cross under the road. Construction in the Caltrans right of way will require an encroachment permit. No impacts in this regard would occur.

e) *Result in inadequate emergency access?*

No Impact. There will be no change affecting emergency access. The digester components will be built within footprint of the existing dairy. No impacts in this regard would occur.

f) *Result in inadequate parking capacity?*

No Impact. Parking will be provided for employees operating and servicing the digester at existing parking areas on the dairy. The dairy has ample parking areas to accommodate the small increase in employee vehicles. No impacts in this regard would occur.

g) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?*

No Impact. Installing the digester on existing dairy property will not conflict with any adopted policies, plans or programs supporting alternative transportation.

XVI. UTILITIES / SERVICE SYSTEMS				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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



XVI. UTILITIES / SERVICE SYSTEMS				
Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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 that serves or may serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant Impact. The proposed project will be a modification to the existing wastewater discharge systems and will not discharge effluent into any body of water other than the dairies' existing settling ponds and storage lagoon and self-contained irrigation system. The dairies will control the amount of nutrients applied to the land through mixing with fresh irrigation water and monitoring as explained in their updated ROWD and technical attachments, including the NMP. Impacts in this regard are less than significant. In addition, the CVRWQCB is in the process of adopting Individual WDRs for this project, which will improve the overall environmental performance of the dairy and further assure that the impacts of the project remain less than significant.

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?



No Impact. The proposed project is a modification to the existing wastewater treatment facilities at the dairies. The digester will utilize the existing storage ponds and lagoons, which are sufficient to hold dairy waste before and after the addition of the digesters, so no new expansion or construction of the wastewater treatment facilities will be needed (LWA 2007). No impacts will occur in this regard.

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 impacts?*

No Impact. The addition of the anaerobic digester will not create a demand for new or expanding storm water drainage facilities. The storage in the lagoons and settling ponds at each facility have at least a 120-day storage capacity for liquid manure, storm water, and tailwater. Cloverdale Dairy will continue to abide by its CNMP and the ROWD permit, which has been updated to factor in the proposed digester facility. Hollandia Farms will continue to abide by its CNMP and the National Pollutant Discharge Elimination System (NPDES) permit, which has been updated to factor in the proposed digester facility.

d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Cloverdale Dairy's primary source of irrigation water is a network of canals supplied with water from an off-site well field operated by the Chamberlain Water District. Hollandia Farms and Wreden Ranch utilize water from private irrigation wells which draw water from a non-adjudicated basin. The addition of the anaerobic digester is not expected to alter the current water demands, and no new or expanded entitlements are expected.

e) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve?*

No Impact. Wastewater is handled onsite by the dairy. There would be no impacts in this regard.

f-g) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Comply with federal, state, and local statutes and regulations related to solid waste?*

Less than Significant Impact. Solid waste (manure) is applied to land for fertilizer, utilized for bedding or sold as compost. The maintenance building is not expected to produce any substantial waste products. The employees working at the maintenance building and associated office space will generate small amounts of office type waste that can be accommodated by the dairies' existing trash disposal service.



Manure that is not applied to land as fertilizer, used as animal bedding, or sold as compost must be sent to a landfill. The operation of the digester components will reduce the amount of solid waste disposed of in landfills. Therefore, this impact is considered less than significant.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
Would the Project	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
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	

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?



Less than Significant Impact with Mitigation: With the incorporation of required permits and mitigation measures as outlined in the initial study, the project will have a less than significant impact on biological and cultural resources.

- 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)?***

Less than Significant Impact. There are no significant cumulative air, noise, and traffic impacts caused by the project.

- c) ***Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?***

Less than Significant Impact. There are no environmental effects that have the potential to cause substantial adverse effects on human beings.



H. REFERENCES:

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California Historical Resources Information System Report, October 3, 2007.

California Planning & Engineering Corp. 1995. Technical Soils Report for Hollandia Ranch, May 19, 1995. Visalia, CA.

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Kings County General Plan. 1993.

Larry Walker Associates (LWA) 2007. Technical Support Document for Report of Waste Discharge.

Michael Brandman Associates 2007. Biological Due Diligence Report, October 2007.

Natural Resources Conservation Service (NRCS) Web Soil Survey 2007.
<http://websoilsurvey.nrcs.usda.gov/app/>

San Joaquin Valley Unified Air Pollution Control District, *Authority to Construct: Application Review* Applicant No. C-7066, Project No. C-1073611

San Joaquin Valley Unified Air Pollution Control District, *Authority to Construct: Application Review* Applicant No. C-7021, Project No. C-1073612

San Joaquin Valley Unified Air Pollution Control District, *Authority to Construct: Application Review* Applicant No. C-7020, Project No. C-1073613

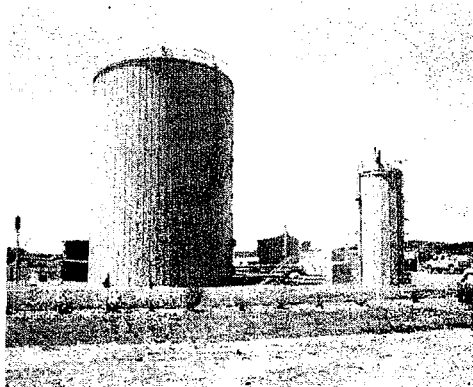


EXHIBIT 1

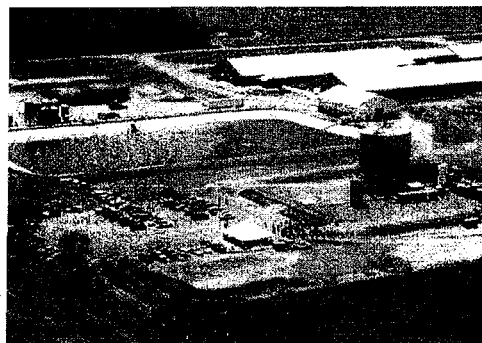
Typical Digester Appearance



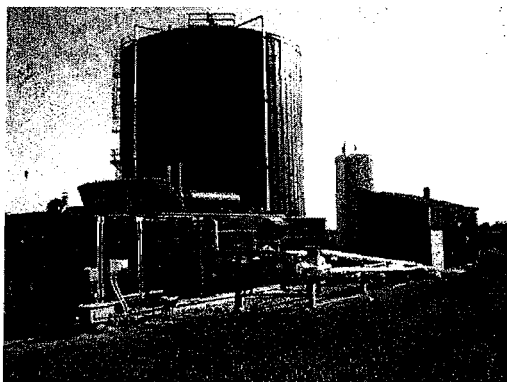
ENVIRONMENTAL POWER



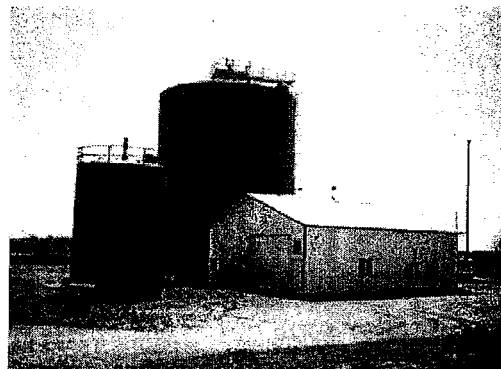
Five Star Facility



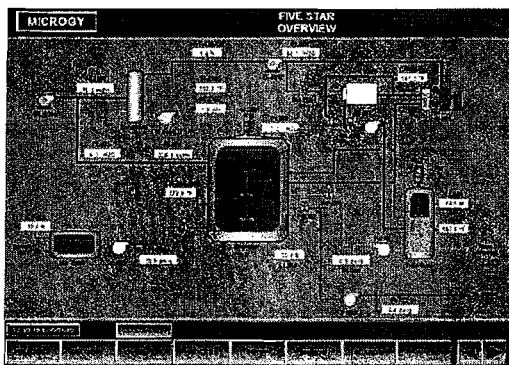
Five Star, Aerial View
(Photo by American Images, Marshfield, WI)



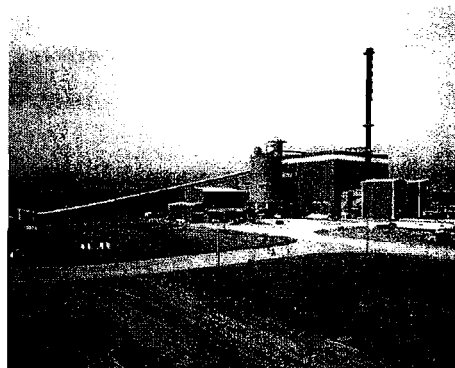
Wild Rose Facility



Norswiss Facility



Control Panel



Buzzard Power Plant

Energy that is.....BEYOND RENEWABLE™

Source: Microgy Cogeneration Systems, Inc. (2007).



Michael Brandman Associates

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Exhibit 7 Microgy Brochure B

MICROGY, INC. • WREDEN RANCH
OPERATIONAL STATEMENT:
ANAEROBIC DIGESTER INSTALLATION AT WREDEN RANCH



APPENDIX A

Response to Comments



District Response to Comments Received for the Microgy Pipeline Project for Cloverdale, Hollandia and Wreden Dairies

The following party provided written comments on the proposed Initial Study/Mitigated Negative Declaration:

- California Regional Water Quality Control Board, Central Valley Region (RWQCB)

A copy of the comment letter is incorporated into this document as attachment 1. A summary of salient comments and associated responses follow.

The respective comment letter is incorporated herein for reference as attachment 1.

California Regional Water Quality Control Board, Central Valley Region

1. **Comment:** Facility operations, and cropland and manure management have the potential to affect water quality. The discharger at each of the three dairies must comply with the requirements of the California Water Code (CWC), Title 27 of the California Code of Regulations, §22560 et seq. (Title 27), the Water Quality Control Plan for the Tulare Lake Basin, Second Edition, 1995 (Basin Plan), and the State Water Resources Control Board's Resolution 68-16 (Anti-Degradation Policy).

On 18 December 2007, we provided your agency a copy of the tentative Waste Discharge Requirements, for the Cloverdale Dairy, the Hollandia Dairy, and the Wreden Ranch Dairy, encompassing the entire area and the facilities described in your project description. The tentative Order contains protections for surface and groundwater quality, including:

- Prohibitions A.4., and A.9. prohibit discharge of wastewater to surface waters from cropland without an NPDES permit, and the direct discharge of waste water into groundwater via backflow through water supply or irrigation supply wells.
- Discharge Specifications B.1.a., B.1.b., B.1.c., and B.1.d., require the collection, treatment, storage, or disposal of wastes at the facility not result in discharge of waste constituents in a manner or place or at concentrations or in a mass, which could cause and exceedance of water quality objectives in surface water or groundwater, or create a condition of contamination or pollution of surface water or groundwater, or create a condition of nuisance, or unreasonably affect beneficial uses.
- Specification C.1., requires the application of manure and wastewater to cropland at rates reasonable for the crop, soil, climate, special local situations, management system, and type of manure.



- Interim Groundwater Limitations D.1. and D.2. require waste constituents from any treatment, storage, or disposal component associated with the facility not cause or contribute to groundwater containing constituents in excess of applicable water quality objectives or natural background, whichever is greater, and final groundwater limitations once required evaluations and monitoring are conducted as directed by the Order.
- Provision E.12 requires the submittal of a work plan for the preparation of a Best Practicable Treatment and Control technical evaluation that sets forth a schedule for a systematic and technical evaluation for each component of the facility's waste treatment and control.

Response: The tentative Order establishes additional protections for surface and groundwater quality, further supporting the District's determination that the project's potential impact on water quality would be less than significant. The RWQCB tentative Order is incorporated into the administrative record by reference herein.