GUIDANCE DOCUMENT FOR CEQA REVIEW OF MUNICIPAL ORGANIC WASTE ANAEROBIC DIGESTER FACILITIES IN CALIFORNIA

Using the Program EIR

Prepared for the
California Department of Resources
Recycling and Recovery (CalRecycle)

August 2011

ESA

GUIDANCE DOCUMENT FOR CALIFORNIA ENVIRONMENTAL QUALITY ACT REVIEW OF MUNICIPAL ORGANIC WASTE ANAEROBIC DIGESTER FACILITIES IN CALIFORNIA

Using the Program Environmental Impact Report

Prepared for the
California Department of Resources Recycling and Recovery (CalRecycle)

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Guidance Document for CEQA Review

Acronyms

AD	Anaerobic Digestion or Digester. In the Program EIR, AD is used as the acronym in referring to the Anaerobic Digester Facilities (AD Facilities) and the Anaerobic Digestion Initiative (AD Initiative).
AD Facilities	Anaerobic Digester Facilities
AD Initiative	Anaerobic Digestion Initiative
BMP	Best Management Practice
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
MMRP	Mitigation Monitoring and Reporting Plan
TAG	Technical Advisory Group (see member's list Page 14-3 in the PEIR)

GUIDANCE DOCUMENT

Overview of the Guidance Document

This user's manual is intended to assist local agencies throughout California in evaluating applications to operate Anaerobic Digester facilities (AD Facilities).

- The Program EIR is a programmatic review that will expedite future site-specific environmental review by lead agencies with discretion to approve AD facilities, pursuant to CEQA.
- Program EIR reduces the need for duplicative review of general environmental impacts, cumulative impacts, and broad alternatives thus expediting the local CEQA review for site-specific projects.
- The Program EIR contains information from a variety of sources that has been organized according to the requirements for CEQA documents. While lead agencies and consultants may have limited knowledge of AD facilities, the Program EIR benefitted from the considerable integrated waste management and conversion technology knowledge of a Technical Advisory Group (TAG) that provided input throughout the development of the Program EIR.
- The Program EIR contains technical information developed based on current operating projects provided by the TAG which comprised of a broad spectrum of individuals interested in AD facilities from: universities, local governments, advocacy/environmental groups, solid waste industries, federal, state and regional agencies, and utilities. The Program EIR contains potential mitigation measure approaches for the potentially significant impact identified in the Program EIR that can be utilized by local agencies in addressing potential environmental impacts.
- The Program EIR contains a number of commonly utilized design and operational practices, best management practices (BMPs), that could be included as aspects of a proposed project.

The remainder of this guidance document includes:

- Overview of the Program EIR;
- Using the Program EIR for Local Projects;
- Local Project consistency with the Program EIR;
- Mitigation Monitoring and Reporting Plan (MMRP); and
- Appendices.

Overview of the Program EIR

In June 2011, the California Department of Resources Recycling and Recovery (CalRecycle) adopted the Anaerobic Digestion Initiative (AD Initiative) (see Appendix A), a comprehensive program to foster the development of anaerobic digestion facilities (AD facilities) which convert organic solid wastes into sources of energy and can produce valuable compost feedstocks, soil amendments and other products. A statewide Program Environmental Impact Report (Program EIR) was prepared for the AD Initiative, evaluating impacts of the development of AD facilities and requiring mitigation to reduce significant impacts to a less-than significant level, and the EIR was certified by CalRecycle. The Program EIR and associated documents can be found and downloaded at:

http://www.calrecycle.ca.gov/SWFacilities/Compostables/AnaerobicDig/

The Program EIR determined that on a programmatic level all the impacts of AD facilities could be mitigated to a less-than-significant level with implementation of the mitigation measures. Individual project could result in localized impacts that would need to be analyzed in a tiered CEQA document.

Using the Program EIR for Local Projects

Program EIR Advantages

The advantages of using a program EIR are listed in the CEQA Guidelines §15168(b), which states that a Program EIR can:

- Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;
- Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis;
- Avoid duplicative reconsideration of basic policy considerations;
- Allow the lead agency to consider broad policy alternatives and programwide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts; and
- Allow reduction in paperwork.

Tiering

Tiering refers to using the analysis of general matters contained in a broader EIR with later EIRs and negative declarations on a narrower project; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific tot the later project (CEQA Guidelines §15168(b)).

An agency should limit the EIR or negative declaration on the later project to effects which (CEQA Guidelines, §15152 subd. (d)):

- Were not examined as significant effects on the environment in the prior EIR; or
- Are susceptible to substantial reduction or avoidance by the choice of specific revision in the project, by the imposition of conditions, or other means.

When tiering is used, the later EIRs or negative declarations shall refer to the prior Program EIR and state where a copy of the prior Program EIR may be examined. The later EIR or negative declaration should state that the lead agency is using the tiering concept and that it is being tiered with the earlier Program EIR. (CEQA Guidelines §15152(g))

Scope of Future CEQA Documents (Subjects that can be Excluded)

Where a lead agency has prepared and certified a first tier EIR for a policy, plan, program, or ordinance, the scope of later EIRs or negative declarations can be limited as follows. By statute (Public Resources Code, §21094, subd. (a)), the analysis need not "examine" those significant effects of the later projects that:

- Have already been mitigated or avoided as part of the prior project approval, as evidenced in the findings adopted for the prior project; or
- Were examined at a sufficient level of detail in the prior EIR that they can be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.

If there are no potential new effects, due either to the specifics of the project and its location, or other changes to the project or its circumstances (as described in Section 15162 of the CEQA Guidelines), the lead agency may find that the later project is within the scope of the program EIR, and no further documentation is needed (CEQA Guidelines Section 15168(c)(2)). For future AD Facility project, total reliance on the Project EIR is not likely, because the Program EIR did not analyze site specific impacts at any locations.

Scope of Future CEQA Documents (Subjects to Include)

When considering the potential effects of a later project, the local lead agency should consider if the effects in question were "examined at a sufficient level of detail in the prior" EIR. The agency need not generate additional information to devise necessary means to avoid or mitigate them, and such effect need not be addressed in the later environmental document. On the other hand, if the agency needs additional information to formulate the necessary revisions, conditions, or measures, then the effects should be addressed. It is up to the later project to decide how much site or project specific information is necessary to determine if additional measures are necessary (Guide to CEQA, 2007).

Subdivision (c) of section 15168 provides that, where the subsequent activities involved site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR. Some lead agencies find it useful to modify CEQA Guidelines Appendix G (the Environmental Checklist Form) by adding an extra column for impacts adequately addressed in the Program EIR, and explaining their reasoning in the response.

If it cannot be clearly demonstrated that the project falls within the scope of the Program EIR without additional analysis, it will be necessary to prepare a subsequent (tiered) negative declaration/mitigated negative declaration or EIR. Subdivision (f) of section 15152 provides that "a later EIR shall be required when the initial study or other analysis finds that the later project may cause significant effects on the environment that were not adequately addressed in the prior EIR. A negative declaration shall be required when the provisions of Section 15070 are met."

When tiering, Program EIR mitigation measures should be incorporated unless subsequent analysis shows those measures should be modified to fit the particular circumstances. Keep in mind, however, that some program-level mitigation measures are designed to address cumulative, rather than project-specific, impacts. Care should be taken when modifying or eliminating those measures in a tiered document.

Cover the Local Issues.

Local issues may or may not reflect the same issues covered in the Program EIR. However, just because a resource area was not covered in the Program EIR does not mean that it will not need to be analyzed in the local project document. The local lead agency must exercise its judgment.

Specific Local Issues (what was not looked at in the Program EIR)

Resource areas that were dismissed as potential impacts at the program level are as follows: agricultural and forest resources, biological resources, cultural resources, geology, soils and seismicity, land us and land use planning, mineral resources, population and housing, and recreation. The NOP dismissed potential impacts in these resource areas as they are not anticipated to have potentially significant impacts at the program level, although they could require evaluation for individual projects due to the potential for local effects. These issues should be considered locally when determining the scope of tiered CEQA documents.

Review Impacts considered in the Program EIR and Mitigation Measures in the Program EIR

The Program EIR provides mitigation measures for seven resources topics (see Appendix A). Local lead agencies would be required to analyze the following resource areas in light of the Program EIR and the project-specific circumstances: air quality and greenhouse gases, hydrology, noise, public services and utilities, transportation, aesthetics, and hazards and hazardous materials. This list is not to be considered exhaustive since the local project may require other resource areas on a project-by-project basis (as listed above in "Specific Local Issues").

Consider Best Management Practices (BMPs) identified in the Program EIR

Appendix B is a list of the BMPs that were assumed to be part of the program in the Program EIR and therefore do not appear in the mitigation measures of the Program EIR. Local projects will need to be consistent in applying these BMPs (or equivalent measures) as applicable for tiered CEQA documents.

Cumulative Impacts

While the Program EIR resource sections analyze the impacts of AD facility development located at permitted solid waste facilities and within industrially zoned areas, the cumulative analysis also considers the impacts from other closely related, past, present, and reasonable foreseeable probably future projects throughout California. The appropriate geographic scope for cumulative impacts analysis associated with resource areas ranges from site-specific to statewide. Local AD Facility Project will need to consider potential site-specific cumulative impacts.

Alternatives

The Program EIR considered various technology alternatives to AD Facilities and found none to be environmentally superior to the proposed project. Any tiered EIRs could rely upon that determination (unless there are unusual local considerations). However, tiered EIRs may still need to consider potential alternatives that would lessen potentially significant site-specific impacts.

Local Project consistency with the Program EIR

Local AD Facility projects that are consistent with the Program EIR may be limited to site-specific issues not disclosed in the Program EIR. Local AD project would be consistent with the Program EIR if they are consistent with the facilities analyzed in the Program EIR.

AD Facilities included in the scope: In-vessel AD facilities which are located at existing or new permitted solid waste facilities or stand-alone AD facilities in areas zoned for industrial or solid waste handling activities.

There are several variations of in-vessel digester technologies. The Program EIR allows for flexibility in technology choices at the local level, as different in-vessel technologies have the same general processes. The Program EIR applies both to low-solids/wet systems and high-solids/dry systems.

Feedstock materials included in the scope: Food waste, green material and mixed solid waste. The food and green material categories are intended to be inclusive and not limited by current regulatory definitions or collection methods — "food" includes cannery waste; meat; poultry; fish; cheese waste; food processing waste; fats, oils and greases (FOG); etc., and "green material" includes urban, agricultural, crop residues, contaminated green materials (containing inorganic material), etc. Use of manure is consistent as nitrogen nutrient amendment material for the purpose of increasing the growth of microorganisms and digester efficiency, but not as a primary waste stream to be evaluated.

The following projects would not be consistent with the Program EIR.

AD Facilities not included in the scope: Dairy manure digesters, dairy manure co-digesters, wastewater treatment plant digesters, and in-ground digester cell technology (as described in Chapter 13 of the Program EIR).

Feedstock materials not included in the scope: Biosolids, untreated septage, waste co-digested with biosolids at wastewater treatment plants or dairy manure co-digesters, and hazardous waste. Unprocessed mammalian tissue (i.e., dead cows, carcasses, etc.) is also not included in the scope of this Program EIR.

Mitigation Monitoring and Reporting Plan (MMRP)

California Public Resources Code §21081.6(a)(1) requires public agencies, as part of the certification of an EIR, to prepare and adopt a reporting or monitoring program in order to mitigate or avoid significant effects on the environment. This program should be structured to ensure that changes to the project that the lead agency has adopted to mitigate or avoid significant environmental impacts are carried out during project implementation. CalRecycle adopted a Mitigation Monitoring and Reporting Plan (MMRP) as part of the approval of the AD Initiative. The MMRP for the Program EIR is attached as Appendix C in this document and can be found online at:

http://www.calrecycle.ca.gov/SWFacilities/Compostables/AnaerobicDig/

The MMRP should be a helpful guide for local jurisdictions that need to adopt an MMRP as part of the approval of a local AD facility.

References

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CalRecycle. 2011. *Statewide Anaerobic Digester Facilities for the Treatment of Municipal Organic Solid Waste*, Final Program Environmental Impact Report. June 2011.

Remy, Thomas, Moose and Manley. 2007, Guide to CEQA, 2006 [11th] edition.

State of California, *California Environmental Quality Act*, Public Resources Code, Division 13, Sections 21000 through 21177, as of Jan. 1, 2011.

State of California, Guidelines for California Environmental Quality Act, California Code of Regulations, Title 14, Chapter 3, Sections 15000 through 15387, as of Jan. 1, 2011.

Appendix A
Anaerobic Digestion Initiative

APPENDIX A
The Anaerobic Digestion Initiative

Under its Strategic Directive 6.1, CalRecycle seeks to reduce by 50 percent the amount of organic waste disposed in the state's landfills by 2020. In addition to helping conserve limited landfill capacity, this CalRecycle policy recognizes that organic wastes are a resource, not just solid wastes that must be disposed. Organic wastes have an energy value that can be captured and utilized and are also a necessary component of compost, soil amendments, and other useful products. Directive 6.1 also encompasses one of CalRecycle's actions to help California significantly reduce its generation of greenhouse gases. Under the state's *Climate Change Scoping Plan* (CARB, 2008), CalRecycle is responsible for taking actions to reduce the emission of methane, a potent greenhouse gas, from landfills. AD facilities utilize organic wastes as a feedstock from which to produce biogas (which is captured and contains a high percentage of methane). Typically the methane gas produced by the anaerobic digestion process is converted to liquefied natural gas (LNG), compressed natural gas (CNG), or electricity (using internal combustion engines or fuel cells) for on-site energy needs and export to the energy grid (CARB, 2008). The development of AD facilities is one of CalRecycle's charges under the AB 32 Climate Change Scoping Plan. The AB 32 Climate Change Scoping Plan estimates that AD facilities in California could prevent methane emissions from landfills at a level of 2 million metric tons of carbon dioxide equivalents (CO_2e) per year by the year 2020 (CARB, 2008). Anaerobic digestion also can contribute to meeting the state's Renewable Portfolio Standard and Low Carbon Fuel Standard. To assist in achieving those objectives, CalRecycle intends to adopt the AD Initiative, a comprehensive program to foster the development of AD facilities to convert organic solid wastes into sources of energy, valuable compost feedstocks, soil amendments, and other products.

The AD Initiative consists of CalRecycle's adoption of a policy and a series of discrete actions to implement the policy, together with additional actions that will be developed and implemented in the future:

- It is the policy of CalRecycle to encourage the development of AD facilities in California as an alternative to the landfill disposal of organic solid waste. Specifically, as an initial measure, CalRecycle will encourage the establishment of in-vessel digesters located at existing or new solid waste facilities and in areas zoned for industrial or solid waste handling activities.
- CalRecycle shall, not later than Jan. 1, 2012, establish programs to implement the above policy, including without limitation:
    - Provide research grants, loans, and contracts (dependent on funding availability) to develop AD facilities and for activities that advance the state of knowledge about anaerobic digestion and its applications and the uses of products and by-products, including anaerobic digestion demonstration projects that use the organic fraction of municipal solid waste as a feedstock.

- Develop guidance publications to assist operators who seek to establish AD facilities.
- Develop guidance publications to assist LEAs and other local and regional government agencies that permit and regulate AD facilities, specifically guidance for co-location at solid waste facilities.
- Draft revised regulations for aspects of specific design, operation and permitting of AD facilities within the authority and responsibility of CalRecycle.
- Promote anaerobic digestion through CalRecycle's participation with the California Energy Commission in implementing AB 118 (Alternative and Renewable Fuel and Vehicle Technology Program), the Bioenergy Interagency Working Group, and with the Air Resources Board in implementing the Anaerobic Digestion and Low Carbon Fuel Standard measures in the AB 32 Climate Change Scoping Plan.
- Work with the California Pollution Control Financing Authority and California Alternative Energy and Advanced Transportation Financing Authority to help anaerobic digestion project proposals obtain funding.
- Participate on technical workgroups convened by the Climate Action Reserve to develop or modify protocols, such as the Organic Waste Digestion Project Protocol, for projects that divert and anaerobically digest organic waste that otherwise would have gone to solid waste landfills.

AD Initiative Objectives

The AD Initiative has several objectives including the following:

- Assist in meeting CalRecycle Strategic Directive 6.1: Reduce the amount of organics in the waste stream by 50 percent by 2020.
- Support Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, greenhouse gas reduction measures related to the use of anaerobic digestion:
    - Measures E-3. Achieve a 33 percent renewable energy mix by 2020. (Anaerobic digestion facilities produce biogas, which is a renewable energy source.)
    - RW-3. High Recycling/Zero Waste. (Anaerobic digestion is one of five subcategories listed under this measure.)
- Assist local governments and state agencies (both lead and responsible agencies) by providing program-level analyses that will identify potential environmental effects of AD facilities and discuss mitigation measures or best management practices that can reduce or eliminate the environmental effects.

Appendix B
Program EIR Mitigation Measures – Table 1-1 from the Final EIR

ESA

TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
5. Air Quality and Greenhouse Gas			
Impact 5.1: Construction and operations of AD facilities within California would result in emissions of criteria air pollutants at levels that could substantially contribute to a potential violation of applicable air quality standards or to nonattainment conditions.	**Measure 5.1a:** Applicants shall prepare and submit an Air Quality Technical Report as part of the environmental assessments for the development of future AD facilities on a specific project-by-project basis. The technical report shall include an analysis of potential air quality impacts for all steps of the project (including a screening level analysis to determine if construction and operation [for all on-site processes, including any end-use and disposal methods] related criteria air pollutant emissions would exceed applicable air district thresholds, as well as greenhouse gas (GHG) emissions and any health risk associated with toxic air contaminants (TACs) from all AD facility sources) and reduction measures. Preparation of the technical report should be coordinated with the appropriate air district and shall identify compliance with all applicable New Source Review and Best Available Control Technology (BACT) requirements. The technical report shall identify all project emissions from permitted (stationary) and non-permitted (mobile and area) sources and mitigation measures (as appropriate) designed to reduce significant emissions to below the applicable air district thresholds of significance, and if these thresholds cannot be met with mitigation, then the individual AD facility project could require additional CEQA review or additional mitigation measures. **Measure 5.1b:** Applicants shall require construction contractors and system operators to implement the following Best Management Practices (BMPs) as applicable during construction and operations: • Facilities shall be required to comply with the rules and regulations from the applicable Air Quality Management District (AQMD) or Air Pollution Control District (APCD). • Facilities shall require substrate unloading and pre-processing activities to occur indoors within enclosed, negative pressure buildings. Collected foul air (including volatile organic compounds (VOCs) off-gassed from undigested substrates) should be treated via biofilter or air scrubbing system. • Use equipment meeting, at a minimum, Tier II emission standards. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, §2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site. • Maintain all equipment in proper working condition according to manufacturer's specifications. • Use electric equipment when possible. For projects that are unable to use internal combustion engines due to air district regulations (i.e., NOx emission limits), other options for generating renewable energy from biogas should be considered. Other options that should be evaluated for using biogas or biomethane as an energy source include: use as a transportation fuel (compressed biomethane), use in fuel cells to generate clean electricity, use for on-site heating, or injection of biomethane into the utility gas pipeline system. If there are other lower NOx alternative technologies available at the time of AD facility development, these should be considered as well during the facility design process.	S	LSM

LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact S – Significant

TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
Impact 5.2: Operation of AD facilities in California could create objectionable odors affecting a substantial number of people.	**Measure 5.2a:** Applicants for the development of AD facilities shall comply with appropriate local land use plans, policies, and regulations, including applicable setbacks and buffer areas from sensitive land uses for potentially odoriferous processes. **Measure 5.2b:** If an AD facility handles compostable material and is classified as a compostable material handling facility, the facility must develop an Odor Impact Minimization Plan (OIMP) pursuant to 14 CCR 17863.4. Otherwise, applicants shall develop and implement an Odor Management Plan (OMP) that incorporates equivalent odor reduction controls for digester operations and is consistent with local air district odor management requirements. These plans shall identify and describe potential odor sources, as well as identify the potential, intensity, and frequency of odor from these likely sources. In addition, the plans will specify odor control technologies and management practices that if implemented, would mitigate odors associated with the majority of facilities to less than significant. However, less or more control measures may be required for individual projects. Odor control strategies and management practices that can be incorporated into these plans include, but are not limited to, the following: - Require substrate haulage to the AD facility within covered, liquid leak-proof containers. - Establish time limit for on-site retention of undigested substrates (i.e., feedstocks should be processed and placed into the portion of the system where liquid discharge and air emissions can be controlled within 24 or 48 hours of receipt). - Provide enclosed, negative pressure buildings for indoor receiving and pre-processing. Treat collected foul air in a biofilter or air scrubbing system. - Establish contingency plans for operating downtime (e.g., equipment malfunction, power outage). - Manage delivery schedule to facilitate prompt handling of odorous substrates. - Handle fresh unstable digestate within enclosed building, or mix with green waste and incorporate into a composting operation within the same business day, and/or directly pump to covered, liquid leak-proof containers for transportation. - Protocol for monitoring and recording odor events. - Protocol for reporting and responding to odor events.	S	LSM
Impact 5.3: Construction and operation of AD facilities in California could lead to increases in chronic exposure of sensitive receptors in the vicinity to certain toxic air contaminants from stationary and mobile sources.	**Measure 5.3a:** Implement Mitigation Measures 5.1a and 5.1b. **Measure 5.3b:** Based on the Air Quality Technical Report (specified in Measure 5.1a), if the health risk is determined to be significant on a project-by-project basis with diesel particulate matter (DPM) as a major contributor, then the applicants shall implement control measures such that the AD facility health risk would be below the applicable air district threshold, which may include implementation of one or more of the following requirements, where feasible and appropriate: • Use either new diesel engines that are designed to minimize DPM emissions (usually through the use of catalyzed particulate filters in the exhaust) or retrofit older engines with catalyzed	S	LSM

LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact S – Significant

TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	particulate filters (which will reduce DPM emissions by 85%); • Use electric equipment to be powered from the grid, which would eliminate local combustion emissions; • Use alternative fuels, such as compressed natural gas (CNG) or liquefied natural gas (LNG). **Measure 5.3c:** Hydrogen sulfide (H2S) contained in the biogas shall be scrubbed (i.e., via iron sponge or other technology) before emission to air can occur.		
Impact 5.4: Development of AD facilities in California could increase GHG emissions.	**Measure 5.4:** Implement Mitigation Measure 5.1a.	NI	NI
Impact 5.5: Development of AD facilities in California, together with anticipated cumulative development in the area, would contribute to regional criteria pollutants.	**Measure 5.5:** Implement Mitigation Measures 5.1a and 5.1b.	S	LSM
6. Hydrology			
Impact 6.1: Construction of AD Facilities could generate loose, erodible soils and other water quality pollutants that may impair water quality.	None required.	LS	LS
Impact 6.2: The operation of AD facilities could adversely affect surface and groundwater quality.	**Measure 6.2a:** During pre-processing, all water that contacts digester feedstock, including stormwater from feedstock handling and storage facilities and water from equipment washdown and feedstock wetting, shall be contained until appropriately disposed or utilized. Best Management Practices (BMPs) may be used to reduce loading of sediment, nutrients, trash, organic matter, and other pollutants. These BMPs may include, but are not limited to, trash grates and filters, oil-water separators, mechanical filters such as sand filters, vegetated swales, engineered wastewater treatment wetlands, settling ponds, and other facilities to reduce the potential loading of pollutants into surface waters or groundwater. All discharges of stormwater are prohibited unless covered under the General Industrial Stormwater Permit, other National Pollutant Discharge Elimination System (NPDES) permit, or are exempted from NPDES permitting requirements. The NPDES permits will generally require implementation of management measures to achieve a performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT), as appropriate. The General Industrial Stormwater Permit also requires the development of a storm water pollution prevention plan (SWPPP) and a monitoring plan, in compliance with permit requirements.[1] Other liquid and solid wastes may only be discharged pursuant to an NPDES permit or waste discharge requirement (WDR) order. **Measure 6.2b**: In order to minimize the amount of fugitive trash or feedstock released to surface waters, the following measures shall be implemented. When feasible, the project proponent shall preferentially select feedstocks that contain minimal amounts of trash that could become entrained in surface water, either via direct contact with stormwater flows or via other accidental release, such as due to wind. Processing of such feedstocks may, however, be unavoidable, such as in support of an AD facility that processes MSW. Therefore, the project applicant shall ensure that (1) drainage from all feedstock loading, unloading,	S	LSM

1 For more information, please refer to: http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml

LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact S – Significant

TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance: Before Mitigation	Impact Significance: After Mitigation
	and storage areas is contained onsite or treated to remove trash and stray feedstock, and sediment prior to release as permitted; (2) in all feedstock loading and unloading areas, and all areas where feedstock is moved by front loaders or other uncovered or uncontained transport machinery, the applicant shall ensure that mechanical sweeping and/or equivalent trash control operational procedures are performed at least daily, during operations; and (3) the facility operator shall train all employees involved in feedstock handling so as to discourage, avoid, and minimize the release of feedstock or trash during operations. **Measure 6.2c**: In order to minimize water quality degradation associated with accidental spills at AD facilities, the applicant for individual projects that would be implemented under the Program EIR shall require project proponents to complete and adhere to the requirements of a Spill Prevention, Control, and Countermeasure (SPCC) Plan, which is based on the federal SPCC rule. Notification of the SPCC Plan shall be provided to the local Certified Unified Program Agency (CUPA). The SPCC Plan shall contain measures to prevent, contain, and otherwise minimize potential spills of pollutants during facility operation, in accordance with U.S. EPA requirements. For individual projects that would utilize wet digestion systems, in which processing and holding tanks would contain the (aqueous) digestion reaction and liquid digestate containing fats and oils, the SPCC Plan shall provide for installation and monitoring of secondary containment and/or leak detection systems to ensure that AD liquids are not accidentally discharged to navigable waters or adjoining shorelines. Monitoring of these systems shall be in accordance with SPCC Plan requirements. **Measure 6.2d:** Any proposed discharge to a pond for an individual project would require the project applicant to acquire WDRs from the appropriate regional board. The project applicant shall ensure that all ponds and discharges to such ponds adhere to all requirements under applicable WDRs. The need for pond liners in order to protect groundwater quality would be assessed during the regional board's review of the project, and requirements for pond liners would be included in the WDRs, as warranted. If appropriate, the WDRs would impose requirements for Class II surface impoundments as presented in Title 27 of the California Code of Regulations. Requirements include, but are not limited to, groundwater monitoring, double liner systems with leachate collection, water balance, a preliminary closure plan for clean closure, seismic analysis, and financial assurances. Compliance with WDRs may require the installation of facilities such as tanks and containers to store and process the digestate, the use of filter presses, and implementation of other water quality protection practices. **Measure 6.2e**: This measure would reduce potential for the movement of nutrients and other pollutants to groundwater and surface water for individual projects that would employ land application for liquid digestate or residual solids. The operators of individual projects implemented under this Program EIR shall ensure that land application of liquid digestate and/or residual solids adheres to all requirements of applicable WDRs. WDR requirements include but are not limited to, groundwater monitoring, completion of an anti-degradation analysis, and in some cases best practicable treatment and control to achieve salinity reduction in materials prior to discharge to land. WDRs would be issued by the appropriate regional board, and would consider site-specific conditions and waste characteristics, in order to determine applicable control measures and procedures that protect water quality.		

LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact S – Significant

TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	Measure 6.2f: This measure would reduce the potential for water quality degradation from projects that include discharge of liquid digestate to surface waters. The applicant for individual projects implemented under this Program EIR shall ensure that the discharge of liquid digestate to surface waters adheres to all NPDES permitting recommendations and requirements, as established by the appropriate regional board. Specific measures may include, but are not limited to, limitations on discharge volumes, seasonal discharge restrictions, limitations on loading rates and/or concentrations of specific constituents, and other facility-specific water quality control measures designed to protect receiving water quality and preserve beneficial uses identified in Basin Plans.		
Impact 6.3: AD facilities could be exposed to flooding hazards.	**Measure 6.3:** Individual applicants seeking coverage under this Program EIR shall ensure that, for their proposed AD facilities including pre-processing areas, feedstock storage areas, and digestate handling facilities, are protected from FEMA-defined 100-year flood events. Design measures may include, but are not limited to: facility siting, access placement, grading, elevated foundations, and site protection such as installation of levees or other protective features.	S	LSM
Impact 6.4: Construction of AD facilities could change drainage and flooding patterns	**Measure 6.4:** In order to ensure that the AD facilities would not result in detrimental increases in stormwater flow or flooding on site or downstream, the Applicant for each AD facility project shall prepare a comprehensive drainage plan (prior to construction) and implement the plan during construction. The comprehensive drainage plan shall include engineered stormwater retention facility designs, such as retention basins, flood control channels, storm drainage facilities, and other features as needed to ensure that, at a minimum, no net increase in stormwater discharge would occur during a 10-year, 24-hour storm event, as a result of project implementation. Project related increases in stormwater flows shall be assessed based on proposed changes in impervious surface coverage on site, as well as proposed grading and related changes in site topography.	S	LSM
Impact 6.5: AD facilities could require additional water supplies resulting in depletion of available water supplies.	None required.	LS	LS
Impact 6.6: AD facilities could become inundated as a result of seiche, tsunami, or mudflow.	**Measure 6.6:** To ensure that proposed AD facilities would not incur impacts associated with seiche, tsunami, or mudflow, the applicant for each individual project shall ensure that all facilities are located outside of potential risk areas for seiche, tsunami, and mudflow. In the event that a proposed facility would be sited within a potential risk area for one of these hazards, the facility shall be raised above projected maximum base inundation elevations, or shall be protected from inundation by the installation of berms, levees, or other protective facilities.	S	LSM
Impact 6.7: AD facilities could contribute to cumulative impacts to water quality.	**Measure 6.7:** Implement Mitigation Measures 6.2 (a-f) and 6.3.	S	LSM

LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact S – Significant

TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
7. Noise			
Impact 7.1: Construction of AD facilities could temporarily increase noise levels at nearby sensitive receptor locations or result in noise levels in excess of standards in local general plans, noise ordinances, or other applicable standards.	**Measure 7.1a:** Construction activities shall be limited to the hours between 7 a.m. and 7 p.m., Monday through Saturday, or an alternative schedule established by the local jurisdiction, or other limits to construction hours normally enforced by the local jurisdiction (see Measure 7.1d below). **Measure 7.1b:** Construction equipment noise shall be minimized by muffling and shielding intakes and exhaust on construction equipment to a level no less effective than the manufacture's specifications, and by shrouding or shielding impact tools. **Measure 7.1c:** Construction contractors within 750 feet of sensitive receptors shall locate fixed construction equipment, such as compressors and generators, and construction staging areas as far as possible from nearby sensitive receptors. **Measure 7.1d**: Construction contractors shall comply with all local noise ordinances and regulations and other measures deemed necessary by the Lead Agency.	S	LSM
Impact 7.2: Noise from operation of AD facilities could substantially increase ambient noise levels at nearby land uses or result in noise levels in excess of standards in local general plans, local noise ordinances, or other applicable standards.	**Measure 7.2:** AD facilities located within 2,000 feet of a sensitive receptor shall conduct a site specific noise study. If operational sound levels would exceed local regulations, or 45 dBA at a sensitive receptor (if no regulations are available), additional sound-proofing such as enclosures, muffling, shielding, or other attenuation measures shall be installed to meet the required sound level.	S	LSM
Impact 7.3: AD facility operational activities associated with transportation would not increase ambient noise levels at nearby land uses.	None required.	LS	LS
Impact 7.4: Development of AD facilities could result in a cumulative increase in noise levels.	**Measure 7.4:** Implement Mitigation Measures 7.1a through 7.1d and Measure 7.2.	S	LSM
8. Public Services and Utilities			
Impact 8.1: The project could substantially increase demands on fire protection services.	**Measure 8.1:** Implement Mitigation Measures 10.1b, 10.3c, and 11.4a.	S	LSM
Impact 8.2: The project could potentially exceed wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB).	**Measure 8.2a:** Implement Mitigation Measure 8.3b if the operator does not have an existing agreement, such as for co-located facilities. **Measure 8.2b:** In addition to an agreement for service, coordination with the wastewater treatment provider would be needed to determine if pre-treatment would be required to meet the RWQCB requirements for the existing wastewater treatment facility.	S	LSM

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TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
Impact 8.3: The project could result in significant environmental effects from the construction and operation of new water and wastewater treatment facilities or expansion of existing facilities.	**Measure 8.3a:** If the project proposes to obtain water from a water supplier (municipal system or other public water entity), the developer would enter into an agreement for service with the supplier. **Measure 8.3b**: If the project proposes to obtain wastewater service from a wastewater treatment provider (municipal or other public entity), the developer would enter into an agreement for service with the provider. **Measure 8.3c:** Alternate water sources, such as non-potable and recycled water, shall be used during the pre-processing and AD process phases where needed and as available.	S	LSM
Impact 8.4: The project would not result in significant environmental effects from the construction of new stormwater treatment facilities or expansion of existing facilities.	None required.	LS	LS
Impact 8.5: The project would not require significant levels of new or expanded water supply resources or entitlements.	None required.	LS	LS
Impact 8.6: The project could result in exceeding the capacity of a wastewater treatment provider.	**Measure 8.6:** If the project proposes to obtain wastewater service from a wastewater treatment provider (municipal or other public entity), implement Mitigation Measure 8.3b.	S	LSM
Impact 8.7: The project could result in the construction of new energy supplies and could require additional energy infrastructure.	**Measure 8.7:** Projects requiring off-site energy infrastructure must complete CEQA review for the proposed energy improvements as a separate project. Infrastructure improvements may qualify as a categorical exemption pursuant to CEQA.	S	LSM
Impact 8.8: Development of AD facilities would not contribute to cumulative impacts to public services and utilities.	None required.	LS	LS
9. Transportation			
Impact 9.1: Construction of AD facilities would intermittently and temporarily increase traffic congestion due to vehicle trips generated by construction workers and construction vehicles on area roadways.	**Measure 9.1:** The contractor(s) will obtain any necessary road encroachment permits prior to installation of pipelines within the existing roadway right-of-way. As part of the road encroachment permit process, the contractor(s) will submit a traffic safety / traffic management plan (for work in the public right-of-way) to the agencies having jurisdiction over the affected roads. Elements of the plan will likely include, but are not necessarily limited to, the following: • Develop circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible. Use flaggers and/or signage to guide vehicles through and/or around the construction zone. • To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours. • Limit lane closures during peak traffic hours to the extent possible. Restore roads and streets to normal operation by covering trenches with steel plates outside of allowed working hours or when work is not in progress. • Limit, where possible, the pipeline construction work zone to a width that, at a minimum, maintains alternate one-way traffic flow past the construction zone. • Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions. Use flaggers	S	LSM

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TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	and/or signage to safely direct traffic through construction work zones. • Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities. • Coordinate with the local public transit providers so that bus routes or bus stops in work zones can be temporarily relocated as the service provider deems necessary.		
Impact 9.2: AD facility operations would not substantially increase on-going (operational) traffic volumes on roadways serving the facilities.	**Measure 9.2:** Measures will be imposed by applicable local agencies, as needed, to address site-specific significant traffic impacts identified during subsequent facility-specific analyses, implementation of which would reduce those impacts to a less-than-significant level.	S	LSM
Impact 9.3: AD facilities could potentially cause traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways, and could increase traffic hazards due to possible road wear or to accidental spills of digestate (liquids and solids).	**Measure 9.3a:** Implement Measure 9.1, which stipulates actions required of the contractor(s) to reduce potential traffic safety impacts to a less-than-significant level. **Measure 9.3b:** Prior to construction, the contractor(s), in cooperation with the agencies having jurisdiction over the affected roadways, will survey and describe the pre-construction roadway conditions on rural roadways and residential streets. Within 30 days after construction is completed, the affected agencies will survey these same roadways and residential streets in order to identify any damage that has occurred. Roads damaged by construction will be repaired to a structural condition equal to the condition that existed prior to construction activity. **Measure 9.3c:** Prior to initiation of project operations, the project sponsor(s) will submit a Spill Prevention Plan to the appropriate local agency. The Spill Prevention Plan will include, among other provisions, a requirement that each truck driver know how to carry out the emergency measures described in the Spill Prevention Plan (therefore reducing roadway hazards if an accidental spill were to occur).	S	LSM
Impact 9.4: AD facilities could intermittently and temporarily impede access to local streets or adjacent uses (including access for emergency vehicles), as well as disruption to bicycle/pedestrian access and circulation.	**Measure 9.4:** Implement Measure 9.1, which stipulates actions required of the contractor(s) to reduce potential access impacts to a less-than-significant level.	S	LSM
Impact 9.5: The project could contribute to cumulative impacts to traffic and transportation (traffic congestion, traffic safety, and emergency vehicle access).	**Measure 9.5a:** Prior to construction, the project sponsor will coordinate with the appropriate local government departments, Caltrans, and utility districts and agencies regarding the timing of construction projects that would occur near AD project sites. Specific measures to mitigate potential significant impacts will be determined as part of the interagency coordination, and could include measures such as employing flaggers during key construction periods, designating alternate haul routes, and providing more outreach and community noticing. **Measure 9.5b:** Implement Mitigation Measure 9.2. **Measure 9.5c:** Implement Mitigation Measures 9.1, 9.3b and 9.3c.	S	LSM

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TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
10. Aesthetics			
Impact 10.1: AD facilities could have adverse effects on a scenic vista and/or scenic resources.	**Measure 10.1a:** Avoid siting AD facilities near scenic vistas and corridors designated within an applicable land use plan and the State Scenic Highway Program. **Measure 10.1b**: Landscaping and/or vegetated berms should be used to minimize views of facilities from sensitive views.	S	LSM
Impact 10.2: AD facilities could degrade the existing visual character/quality of the site and its surroundings.	**Measure 10.2a:** Implement Mitigation Measures 10.1a and 10.1b. **Measure 10.2b:** Facilities using truck tippers or other un-enclosed unloading should consider using litter fences to manage blowing litter. Facilities should educate haulers delivering materials to the AD facility through literature, web links, or provide training on the acceptance of waste at the facilities to minimize litter. Facility operators should develop a protocol to identify feedstocks that are severely contaminated with potential litter and reject unacceptable loads. **Measure 10.2c:** Clean-up crews can be used as necessary to control litter. **Measure 10.2d:** Feedstocks and digestate byproducts should be stored in enclosed facilities or processed in a timely manner to prevent visibly deteriorated site conditions. **Measure 10.2e:** Project operators should consider enclosure of pre-processing operations if it provides an aesthetic and/or noise attenuating benefit.	S	LSM
Impact 10.3: AD facilities could create a new source of light or glare with adverse affects to daytime and/or nighttime views.	**Measure 10.3a:** Implement 10.1b. **Measure 10.3b:** Any lighting (portable or permanent) should be hooded and directed onto the project site. This would reduce effects to nighttime skies from uplighting, reduce glare, and prevent light from spilling onto adjoining properties and roads. **Measure 10.3c:** Flares may be enclosed to reduce the visibility of flames during operation.	S	LSM
Impact 10.4: The project could result in cumulative impacts to visual resources.	**Measure 10.4:** Implement Mitigation Measures 10.1a, 10.1b, 10.2a, 10.2b, 10.2c, 10.2d, 10.2e, 10.3a, 10.3b, and 10.3c.	S	LSM
11. Hazards and Hazardous Materials			
Impact 11.1: Construction of AD facilities could result in the potential exposure of construction workers, the public and the environment to preexisting soil and/or groundwater contamination.	**Mitigation Measure 11.1:** Prior to final project design and any earth disturbing activities, the applicant or agency(ies) responsible shall conduct a Phase I Environmental Site Assessment (ESA). The Phase I ESA shall be prepared by a Registered Environmental Assessor (REA) or other qualified professional to assess the potential for contaminated soil or groundwater conditions at the project site; specifically in the area proposed for construction of AD facilities. The Phase I ESA shall include a review of appropriate federal, State and local hazardous materials databases to identify hazardous waste sites at on-site and off-site locations within a one quarter mile radius of the project location. This Phase I ESA shall also include a review of existing and past land uses through aerial photographs, historical records, interviews of owners and/or operators of the property, observations during a reconnaissance site visit, and review of other relevant existing information that could identify the potential existence of contaminated soil or groundwater. If no contaminated soil or groundwater is identified or if the Phase I ESA does not recommend any further investigation then the project applicant or agency(ies) responsible shall proceed with final project design and	S	LSM

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TABLE 1-1 (REVISED)
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	construction. OR If existing soil or groundwater contamination is identified, and if the Phase I ESA recommends further review, the applicant or agency(ies) responsible shall retain a REA to conduct follow-up sampling to characterize the contamination and to identify any required remediation that shall be conducted consistent with applicable regulations prior to any earth disturbing activities. The environmental professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations at the proposed construction site, and recommendations for appropriate handling of any contaminated materials during construction.		
Impact 11.2: Transportation, use, disposal or accidental spill of hazardous materials during construction of AD facilities would not result in the potential exposure of construction workers, the public and the environment to hazardous materials.	None required.	LS	LS
Impact 11.3: Transportation, use, disposal or accidental spill of hazardous materials during the operation and maintenance of AD facilities would not result in potential harmful exposures of the public or the environment to hazardous materials.	**Mitigation Measure 11.3:** Implement Mitigation Measures 5.1a and 6.2a-f.	S	LSM
Impact 11.4: Operation of AD facilities could increase the risk of fire hazards due to the potential release of biogas.	**Mitigation Measure 11.4a:** Prior to project approval, AD facility operators shall prepare and implement a Fire Safety Plan that outlines fire hazards, describes facility operations procedures to prevent ignition of fires, requires regular inspection of fire suppression systems, and provides for worker training in safety procedures as well as protocols for responding to fire incidents. The Fire Safety Plan shall be reviewed and approved by the local fire enforcement agency. **Mitigation Measure 11.4b**: Implement Mitigation Measure 11.5.	S	LSM
Impact 11.5: AD facilities could be located within one quarter mile of a school resulting in potential hazards associated with accidental release of hazardous materials, including biogas.	**Mitigation Measure 11.5:** AD facilities shall be sited at least one quarter mile from existing or proposed schools, daycare facilities, hospitals and other sensitive land uses.	LS	LS
Impact 11.6: AD facility operations could generate vectors (flies, mosquitoes, rodents, etc.) exceeding regulatory agency thresholds for the presence of vectors.	None required.	LS	LS
Impact 11.7: AD facilities could be located within five miles of a public airport or private airstrip and create an aviation hazard.	**Mitigation Measure 11.7:** For any AD facility proposed within 5 statute miles of an airport's air operations area, the operator will notify the Federal Aviation Administration (FAA) Regional Airports Division office and the airport operator of the proposed facility as early in the process as possible. AD facilities with any open air (outdoor) activities must receive an FAA Determination of No Hazard prior to project approval.	S	LSM
Impact 11.8: Development of AD facilities could contribute to cumulative impacts related to hazardous materials.	**Mitigation Measure 11.8:** Implement Mitigation Measures 11.1, 11.4, 11.5, and 11.7.	LS	LS

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Appendix C
Best Management Practices (BMPs) Assumed in the Program EIR

ESA

APPENDIX C
Best Management Practices (BMPs) Assumed in the Program EIR

In addition to the mitigation measures in the Program EIR, there were also some BMPs assumed as part of the setting for Environmental Resource Chapters in the Program EIR. Local project need to incorporate these measures (or equivalent measures) for the tiered document to be consistent with the Program EIR.

Water Quality

- Construct physical barriers to prevent erosion and sedimentation, including setbacks and buffers, rooftop and impervious surface disconnection, rain gardens and cisterns, and other installations (page 6-13);
- Construct and maintain sedimentation basins (page 6-13 of the Program EIR);
- Limit construction work during storm events (page 6-13 of the Program EIR);
- Use swales and mechanical or chemical means of stormwater treatment during construction, including vegetated swales, bioretention cells, chemical treatments, and mechanical stormwater filters (page 6-13 of the Program EIR); and
- Implement spill control, sediment control, and pollution control training. (page 6-13 of the Program EIR).

Hazardous Materials

- To avoid hazardous materials transport from the facility (page 11-14 of the Program EIR):
    - Install sediment barriers such as silt fence and fiber rolls along perimeter of construction area;
    - Maintain equipment and vehicles used for construction;
    - Develop and implement a spill prevention and cleanup plan; and
    - Provide hazardous waste training for construction workers.
- Sort mixed solid wastes prior to delivery to remove any household hazardous wastes (page 11-14 of the Program EIR).
- Segregate and sample hazardous wastes and appropriately dispose at licensed landfill facilities (page 11-14 of the Program EIR).
- Store hazardous materials in containers according to the manufacturer's guidelines and label appropriately (page 11-14 of the Program EIR).

- Retain the Material Safety Data Sheet for each chemical (page 11-14 of the Program EIR).
- Inform workers of the hazards associated with the materials they handle and maintain records documenting training (page 11-14 of the Program EIR).
- To control vector populations, implement best management practices such as enclosing waste storage areas within a building; routine cleaning; insect traps, rodent control services, and chemical treatment; and minimize stagnant waters (page 11-18 of the Program EIR).

Appendix D
Mitigation Monitoring and Reporting Plan (MMRP) for the Program EIR

ESA

Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
5. Air Quality and Greenhouse Gas				
Impact 5.1: Construction and operations of AD facilities within California would result in emissions of criteria air pollutants at levels that could substantially contribute to a potential violation of applicable air quality standards or to nonattainment conditions.	**Measure 5.1a:** Applicants shall prepare and submit an Air Quality Technical Report as part of the environmental assessments for the development of future AD facilities on a specific project-by-project basis. The technical report shall include an analysis of potential air quality impacts for all steps of the project (including a screening level analysis to determine if construction and operation [for all on-site processes, including any end-use and disposal methods] related criteria air pollutant emissions would exceed applicable air district thresholds, as well as greenhouse gas (GHG) emissions and any health risk associated with toxic air contaminants (TACs) from all AD facility sources) and reduction measures. Preparation of the technical report should be coordinated with the appropriate air district and shall identify compliance with all applicable New Source Review and Best Available Control Technology (BACT) requirements. The technical report shall identify all project emissions from permitted (stationary) and non-permitted (mobile and area) sources and mitigation measures (as appropriate) designed to reduce significant emissions to below the applicable air district thresholds of significance, and if these thresholds cannot be met with mitigation, then the individual AD facility project could require additional CEQA review or additional mitigation measures.	Project Applicant Local Lead Agency	Submit Air Quality Technical Report. Review and acceptance of Air Quality Technical Report.	Local CEQA Review Local CEQA Review
	Measure 5.1b: Applicants shall require construction contractors and system operators to implement the following Best Management Practices (BMPs) as applicable during construction and operations: • Facilities shall be required to comply with the rules and regulations from the applicable Air Quality Management District (AQMD) or Air Pollution Control District (APCD). • Facilities shall require substrate unloading and pre-processing activities to occur indoors within enclosed, negative pressure buildings. Collected foul air (including volatile organic compounds (VOCs) off-gassed from undigested substrates) should be treated via biofilter or air scrubbing system. • Use equipment meeting, at a minimum, Tier II emission standards. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, §2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site. • Maintain all equipment in proper working condition according to manufacturer's specifications. • Use electric equipment when possible.	Project Applicant/ Operator Construction Contractor Local Air District	Implement BMPs during construction and operations. Enforce construction and operation air quality rules and regulations and compliance.	Construction and Operations Construction and Operations

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Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
	For projects that are unable to use internal combustion engines due to air district regulations (i.e., NOx emission limits), other options for generating renewable energy from biogas should be considered. Other options that should be evaluated for using biogas or biomethane as an energy source include: use as a transportation fuel (compressed biomethane), use in fuel cells to generate clean electricity, use for on-site heating, or injection of biomethane into the utility gas pipeline system. If there are other lower NOx alternative technologies available at the time of AD facility development, these should be considered as well during the facility design process.			
Impact 5.2: Operation of AD facilities in California could create objectionable odors affecting a substantial number of people.	**Measure 5.2a:** Applicants for the development of AD facilities shall comply with appropriate local land use plans, policies, and regulations, including applicable setbacks and buffer areas from sensitive land uses for potentially odoriferous processes.	Project Applicant	Comply with local land use plans, policies and regulations related to odor and sensitive receptors.	Local CEQA Review
	Measure 5.2b: If an AD facility handles compostable material and is classified as a compostable material handling facility, the facility must develop an Odor Impact Minimization Plan (OIMP) pursuant to 14 CCR 17863.4. Otherwise, applicants shall develop and implement an Odor Management Plan (OMP) that incorporates equivalent odor reduction controls for digester operations and is consistent with local air district odor management requirements. These plans shall identify and describe potential odor sources, as well as identify the potential, intensity, and frequency of odor from these likely sources. In addition, the plans will specify odor control technologies and management practices that if implemented, would mitigate odors associated with the majority of facilities to less than significant. However, less or more control measures may be required for individual projects. Odor control strategies and management practices that can be incorporated into these plans include, but are not limited to, the following: - Require substrate haulage to the AD facility within covered, liquid leak-proof containers. - Establish time limit for on-site retention of undigested substrates (i.e., feedstocks should be processed and placed into the portion of the system where liquid discharge and air emissions can be controlled within 24 or 48 hours of receipt). - Provide enclosed, negative pressure buildings for indoor receiving and pre-processing. Treat collected foul air in a biofilter or air scrubbing system. - Establish contingency plans for operating downtime (e.g., equipment malfunction, power outage).	Project Applicant/ Operator LEA (composting permit) and/or Local Air District (other facilities)	Develop and implement an OIMP or Odor Management Plan. Enforce OIMP or Odor Management Plan.	Operations Operations

LEA – Local Enforcement Agency

Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
	- Manage delivery schedule to facilitate prompt handling of odorous substrates. - Handle fresh unstable digestate within enclosed building, or mix with green waste and incorporate into a composting operation within the same business day, and/or directly pump to covered, liquid leak-proof containers for transportation. - Protocol for monitoring and recording odor events. - Protocol for reporting and responding to odor events.			
Impact 5.3: Construction and operation of AD facilities in California could lead to increases in chronic exposure of sensitive receptors in the vicinity to certain toxic air contaminants from stationary and mobile sources.	**Measure 5.3a:** Implement Mitigation Measures 5.1a and 5.1b.	See Mitigation Measures 5.1a and 5.1b		
	Measure 5.3b: Based on the Air Quality Technical Report (specified in Measure 5.1a), if the health risk is determined to be significant on a project-by-project basis with diesel particulate matter (DPM) as a major contributor, then the applicants shall implement control measures such that the AD facility health risk would be below the applicable air district threshold, which may include implementation of one or more of the following requirements, where feasible and appropriate: • Use either new diesel engines that are designed to minimize DPM emissions (usually through the use of catalyzed particulate filters in the exhaust) or retrofit older engines with catalyzed particulate filters (which will reduce DPM emissions by 85%); • Use electric equipment to be powered from the grid, which would eliminate local combustion emissions; Use alternative fuels, such as compressed natural gas (CNG) or liquefied natural gas (LNG).	Project Applicant/ Operator	Implement measures to reduce DPM.	Local CEQA Review/during Operations
	Measure 5.3c: Hydrogen sulfide (H2S) contained in the biogas shall be scrubbed (i.e., via iron sponge or other technology) before emission to air can occur.	Operator	Scrub H_2S as required.	Operations
Impact 5.4: Development of AD facilities in California could increase GHG emissions.	**Measure 5.4:** Implement Mitigation Measure 5.1a.	See Mitigation Measure 5.1a		
Impact 5.5: Development of AD facilities in California, together with anticipated cumulative development in the area, would contribute to regional criteria pollutants.	**Measure 5.5:** Implement Mitigation Measures 5.1a and 5.1b.	See Mitigation Measures 5.1a and 5.1b		

LEA – Local Enforcement Agency

Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
6. Hydrology and Water Quality				
Impact 6.2: The operation of AD facilities could adversely affect surface and groundwater quality.	**Measure 6.2a:** During pre-processing, all water that contacts digester feedstock, including stormwater from feedstock handling and storage facilities and water from equipment washdown and feedstock wetting, shall be contained until appropriately disposed or utilized. Best Management Practices (BMPs) may be used to reduce loading of sediment, nutrients, trash, organic matter, and other pollutants. These BMPs may include, but are not limited to, trash grates and filters, oil-water separators, mechanical filters such as sand filters, vegetated swales, engineered wastewater treatment wetlands, settling ponds, and other facilities to reduce the potential loading of pollutants into surface waters or groundwater. All discharges of stormwater are prohibited unless covered under the General Industrial Stormwater Permit, other National Pollutant Discharge Elimination System (NPDES) permit, or are exempted from NPDES permitting requirements. The NPDES permits will generally require implementation of management measures to achieve a performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT), as appropriate. The General Industrial Stormwater Permit also requires the development of a storm water pollution prevention plan (SWPPP) and a monitoring plan, in compliance with permit requirements.[1] Other liquid and solid wastes may only be discharged pursuant to an NPDES permit or waste discharge requirement (WDR) order.	Operator Regional Water Quality Control Board	Contain water during pre-processing activities. Enforce water quality regulations.	Operations Operations
	Measure 6.2b: In order to minimize the amount of fugitive trash or feedstock released to surface waters, the following measures shall be implemented. When feasible, the project proponent shall preferentially select feedstocks that contain minimal amounts of trash that could become entrained in surface water, either via direct contact with stormwater flows or via other accidental release, such as due to wind. Processing of such feedstocks may, however, be unavoidable, such as in support of an AD facility that processes MSW. Therefore, the project applicant shall ensure that (1) drainage from all feedstock loading, unloading, and storage areas is contained onsite or treated to remove trash and stray feedstock, and sediment prior to release as permitted; (2) in all feedstock loading and unloading areas, and all areas where feedstock is moved by front loaders or other uncovered or uncontained transport machinery, the applicant shall ensure that mechanical sweeping and/or equivalent trash control operational procedures are performed at least daily, during operations; and (3) the facility operator shall train all employees involved in feedstock handling so as to discourage, avoid, and minimize the release of feedstock or trash during operations.	Project Applicant/ Operator Regional Water Quality Control Board	Implement measures to minimize fugitive trash/feedstock release to surface waters. Enforce water quality regulations.	Operations Operations

1 For more information, please refer to: http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml

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Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
	Measure 6.2c: In order to minimize water quality degradation associated with accidental spills at AD facilities, the applicant for individual projects that would be implemented under the Program EIR shall require project proponents to complete and adhere to the requirements of a Spill Prevention, Control, and Countermeasure (SPCC) Plan, which is based on the federal SPCC rule. Notification of the SPCC Plan shall be provided to the local Certified Unified Program Agency (CUPA). The SPCC Plan shall contain measures to prevent, contain, and otherwise minimize potential spills of pollutants during facility operation, in accordance with U.S. EPA requirements. For individual projects that would utilize wet digestion systems, in which processing and holding tanks would contain the (aqueous) digestion reaction and liquid digestate containing fats and oils, the SPCC Plan shall provide for installation and monitoring of secondary containment and/or leak detection systems to ensure that AD liquids are not accidentally discharged to navigable waters or adjoining shorelines. Monitoring of these systems shall be in accordance with SPCC Plan requirements.	Project Applicant/ Operator Local Lead Agency CUPA	Complete and adhere to SPCC Plan. Review and accept SPCC Plan. Review implementation of SPCC Plan.	Operations Local CEQA Review Prior to/during Operations
	Measure 6.2d: Any proposed discharge to a pond for an individual project would require the project applicant to acquire WDRs from the appropriate regional board. The project applicant shall ensure that all ponds and discharges to such ponds adhere to all requirements under applicable WDRs. The need for pond liners in order to protect groundwater quality would be assessed during the regional board's review of the project, and requirements for pond liners would be included in the WDRs, as warranted. If appropriate, the WDRs would impose requirements for Class II surface impoundments as presented in Title 27 of the California Code of Regulations. Requirements include, but are not limited to, groundwater monitoring, double liner systems with leachate collection, water balance, a preliminary closure plan for clean closure, seismic analysis, and financial assurances. Compliance with WDRs may require the installation of facilities such as tanks and containers to store and process the digestate, the use of filter presses, and implementation of other water quality protection practices.	Project Applicant/ Operator Regional Water Quality Control Board	Adhere to applicable WDRs for ponds or discharges to ponds. Enforce WDRs for ponds or discharges to ponds.	Prior to/during Operations Prior to/during Operations
	Measure 6.2e: This measure would reduce potential for the movement of nutrients and other pollutants to groundwater and surface water for individual projects that would employ land application for liquid digestate or residual solids. The operators of individual projects implemented under this Program EIR shall ensure that land application of liquid digestate and/or residual solids adheres to all requirements of applicable WDRs. WDR requirements include but are not limited to, groundwater monitoring, completion of an anti-degradation analysis, and in some cases best practicable treatment and control to achieve salinity reduction in materials prior to discharge to land. WDRs would be issued by the appropriate regional board, and would consider site-specific conditions and waste characteristics, in order to determine applicable control measures and procedures that	Project Applicant/ Operator Regional Water Quality Control Board	Adhere to requirements of WDRs for land application of liquid digestate and/or residual solids. Issue and enforce WDRs for land application of liquid digestate and/or residual solids.	Operations Prior to/during Operations

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Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
	protect water quality.			
	Measure 6.2f: This measure would reduce the potential for water quality degradation from projects that include discharge of liquid digestate to surface waters. The applicant for individual projects implemented under this Program EIR shall ensure that the discharge of liquid digestate to surface waters adheres to all NPDES permitting recommendations and requirements, as established by the appropriate regional board. Specific measures may include, but are not limited to, limitations on discharge volumes, seasonal discharge restrictions, limitations on loading rates and/or concentrations of specific constituents, and other facility-specific water quality control measures designed to protect receiving water quality and preserve beneficial uses identified in Basin Plans.	Project Applicant/ Operator Regional Water Quality Control Board	Adhere to NPDES permitting recommendations and requirements for discharge of liquid digestate to surface waters. Approve and enforce NPDES permits	Operations Prior to/during Operations
Impact 6.3: AD facilities could be exposed to flooding hazards.	**Measure 6.3:** Individual applicants seeking coverage under this Program EIR shall ensure that, for their proposed AD facilities including pre-processing areas, feedstock storage areas, and digestate handling facilities, are protected from FEMA-defined 100-year flood events. Design measures may include, but are not limited to: facility siting, access placement, grading, elevated foundations, and site protection such as installation of levees or other protective features.	Project applicant	Ensure facilities are protected from FEMA-defined 100-year flood events.	Local CEQA Review
Impact 6.4: Construction of AD facilities could change drainage and flooding patterns	**Measure 6.4:** In order to ensure that the AD facilities would not result in detrimental increases in stormwater flow or flooding on site or downstream, the Applicant for each AD facility project shall prepare a comprehensive drainage plan (prior to construction) and implement the plan during construction. The comprehensive drainage plan shall include engineered stormwater retention facility designs, such as retention basins, flood control channels, storm drainage facilities, and other features as needed to ensure that, at a minimum, no net increase in stormwater discharge would occur during a 10-year, 24-hour storm event, as a result of project implementation. Project related increases in stormwater flows shall be assessed based on proposed changes in impervious surface coverage on site, as well as proposed grading and related changes in site topography.	Project Applicant Local Lead Agency	Prepare and implement a comprehensive drainage plan. Review and acceptance of comprehensive drainage plan.	Local CEQA Review/during Construction Local CEQA Review
Impact 6.6: AD facilities could become inundated as a result of seiche, tsunami, or mudflow.	**Measure 6.6:** To ensure that proposed AD facilities would not incur impacts associated with seiche, tsunami, or mudflow, the applicant for each individual project shall ensure that all facilities are located outside of potential risk areas for seiche, tsunami, and mudflow. In the event that a proposed facility would be sited within a potential risk area for one of these hazards, the facility shall be raised above projected maximum base inundation elevations, or shall be protected from inundation by the installation of berms, levees, or other protective facilities.	Project Applicant Local Lead Agency	Ensure facilities are located outside of potential risk areas for seiche, tsunami and mudflow. Approve siting of facilities with respect to risk areas for seiche, tsunami and mudflow.	Local CEQA Review Local CEQA Review
Impact 6.7: AD facilities could contribute to	**Measure 6.7:** Implement Mitigation Measures 6.2 (a-f) and 6.3.	See Mitigation Measures 6.2 (a-f) and 6.3		

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Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
cumulative impacts to water quality.				
7. Noise				
Impact 7.1: Construction of AD facilities could temporarily increase noise levels at nearby sensitive receptor locations or result in noise levels in excess of standards in local general plans, noise ordinances, or other applicable standards.	**Measure 7.1a:** Construction activities shall be limited to the hours between 7 a.m. and 7 p.m., Monday through Saturday, or an alternative schedule established by the local jurisdiction, or other limits to construction hours normally enforced by the local jurisdiction (see Measure 7.1d below).	Construction Contractor Local Lead Agency	Limit construction hours as indicated by local jurisdiction. Enforce construction hour limits.	Construction Construction
	Measure 7.1b: Construction equipment noise shall be minimized by muffling and shielding intakes and exhaust on construction equipment to a level no less effective than the manufacture's specifications, and by shrouding or shielding impact tools.	Construction Contractor / Local Lead Agency	Minimize construction equipment noise.	Construction
	Measure 7.1c: Construction contractors within 750 feet of sensitive receptors shall locate fixed construction equipment, such as compressors and generators, and construction staging areas as far as possible from nearby sensitive receptors.	Construction Contractor / Local Lead Agency	Locate applicable construction equipment away from sensitive receptors.	Construction
	Measure 7.1d: Construction contractors shall comply with all local noise ordinances and regulations and other measures deemed necessary by the Lead Agency.	Construction Contractor Local Lead Agency	Comply with local noise ordinances and regulations. Enforce local noise ordinances and regulations.	Construction Construction
Impact 7.2: Noise from operation of AD facilities could substantially increase ambient noise levels at nearby land uses or result in noise levels in excess of standards in local general plans, local noise ordinances, or other applicable standards.	**Measure 7.2:** AD facilities located within 2,000 feet of a sensitive receptor shall conduct a site specific noise study. If operational sound levels would exceed local regulations, or 45 dBA at a sensitive receptor (if no regulations are available), additional sound-proofing such as enclosures, muffling, shielding, or other attenuation measures shall be installed to meet the required sound level.	Project Applicant/ Operator	Conduct site specific noise study and implement recommendations.	Prior to /during Operation
Impact 7.4: Development of AD facilities could result in a cumulative increase in noise levels.	**Measure 7.4:** Implement Mitigation Measures 7.1a through 7.1d and Measure 7.2.	See Mitigation Measures 7.1a through 7.1d and Measure 7.2.		
8. Public Services and Utilities				
Impact 8.1: The project could substantially increase demands on fire protection services	**Mitigation Measure 8.1:** Implement Mitigation Measures 10.1b, 10.3c, and 11.4a.	See Mitigation Measures 10.1b, 10.3c, and 11.4a.		
Impact 8.2: The project could potentially exceed wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB).	**Measure 8.2a:** Implement Mitigation Measure 8.3b if the operator does not have an existing agreement, such as for co-located facilities.	See Mitigation Measure 8.3b		
	Measure 8.2b: In addition to an agreement for service, coordination with the wastewater treatment provider would be needed to determine if pre-treatment would be required to meet the RWQCB requirements for the	Project Applicant/ Operator	Coordinate with wastewater treatment provider.	Prior to Operation

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Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
	existing wastewater treatment facility.			
Impact 8.3: The project could result in significant environmental effects from the construction and operation of new water and wastewater treatment facilities or expansion of existing facilities.	**Measure 8.3a:** If the project proposes to obtain water from a water supplier (municipal system or other public water entity), the developer would enter into an agreement for service with the supplier.	Project Applicant/ Operator	Enter into service agreement with water supplier.	Prior to Operation
	Measure 8.3b: If the project proposes to obtain wastewater service from a wastewater treatment provider (municipal or other public entity), the developer would enter into an agreement for service with the provider.	Project Applicant/ Operator	Enter into service agreement with wastewater supplier.	Prior to Operation
	Measure 8.3c: Alternate water sources, such as non-potable and recycled water, shall be used during the pre-processing and AD process phases where needed and as available.	Project Applicant/ Operator	Development and use of non-potable and recycled water sources during AD pre-processing and process phases.	Prior to/during Operation
Impact 8.6: The project could result in exceeding the capacity of a wastewater treatment provider.	**Measure 8.6:** If the project proposes to obtain wastewater service from a wastewater treatment provider (municipal or other public entity), implement Mitigation Measure 8.3b.	See Mitigation Measure 8.3b		
Impact 8.7: The project could result in the construction of new energy supplies and could require additional energy infrastructure.	**Measure 8.7:** Projects requiring off-site energy infrastructure must complete CEQA review for the proposed energy improvements as a separate project. Infrastructure improvements may qualify as a categorical exemption pursuant to CEQA.	Project Applicant/Lead Agency	Complete CEQA for off-site energy improvements if applicable.	Local CEQA Review
9. Transportation				
Impact 9.1: Construction of AD facilities would intermittently and temporarily increase traffic congestion due to vehicle trips generated by construction workers and construction vehicles on area roadways.	**Measure 9.1:** The contractor(s) will obtain any necessary road encroachment permits prior to installation of pipelines within the existing roadway right-of-way. As part of the road encroachment permit process, the contractor(s) will submit a traffic safety / traffic management plan (for work in the public right-of-way) to the agencies having jurisdiction over the affected roads. Elements of the plan will likely include, but are not necessarily limited to, the following: • Develop circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible. Use flaggers and/or signage to guide vehicles through and/or around the construction zone. • To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours. • Limit lane closures during peak traffic hours to the extent possible. Restore roads and streets to normal operation by covering trenches with steel plates outside of allowed working hours or when work is not in progress. • Limit, where possible, the pipeline construction work zone to a width that, at a minimum, maintains alternate one-way traffic	Construction Contractor Local Lead Agency(s)	Submit application for roadway encroachment permits. Prepare and submit traffic safety/traffic management plan. Review and approval of roadway encroachment permits and traffic safety/traffic management plan.	Prior to construction Prior to construction

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Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
	flow past the construction zone. • Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions. Use flaggers and/or signage to safely direct traffic through construction work zones. • Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities. • Coordinate with the local public transit providers so that bus routes or bus stops in work zones can be temporarily relocated as the service provider deems necessary.			
Impact 9.2: AD facility operations would not substantially increase on-going (operational) traffic volumes on roadways serving the facilities.	**Measure 9.2:** Measures will be imposed by applicable local agencies, as needed, to address site-specific significant traffic impacts identified during subsequent facility-specific analyses, implementation of which would reduce those impacts to a less-than-significant level.	Project Applicant Local Lead Agency	Implement traffic mitigation measures. Enforce traffic mitigation measures.	Ongoing Ongoing
Impact 9.3: AD facilities could potentially cause traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways, and could increase traffic hazards due to possible road wear or to accidental spills of digestate (liquids and solids).	**Measure 9.3a:** Implement Measure 9.1, which stipulates actions required of the contractor(s) to reduce potential traffic safety impacts to a less-than-significant level.	See Mitigation Measure 9.1		
	Measure 9.3b: Prior to construction, the contractor(s), in cooperation with the agencies having jurisdiction over the affected roadways, will survey and describe the pre-construction roadway conditions on rural roadways and residential streets. Within 30 days after construction is completed, the affected agencies will survey these same roadways and residential streets in order to identify any damage that has occurred. Roads damaged by construction will be repaired to a structural condition equal to the condition that existed prior to construction activity.	Construction Contractor Construction Contractor Local Lead Agency	Survey and document pre-construction roadway condition. Identify any damage to roadway from construction. Review and approve pre-construction and post-construction roadway damage analysis.	Prior to Construction Following Construction Prior to and during Construction
	Measure 9.3c: Prior to initiation of project operations, the project sponsor(s) will submit a Spill Prevention Plan to the appropriate local agency. The Spill Prevention Plan will include, among other provisions, a requirement that each truck driver know how to carry out the emergency measures described in the Spill Prevention Plan (therefore reducing roadway hazards if an accidental spill were to occur).	Project Applicant/ Operator Local Lead Agency	Prepare and submit a Spill Prevention Plan. Review and approve Spill Prevention Plan.	Prior to Operations Prior to Operations
Impact 9.4: AD facilities could intermittently and temporarily impede access to local streets or adjacent uses (including access for emergency vehicles),	**Measure 9.4:** Implement Measure 9.1, which stipulates actions required of the contractor(s) to reduce potential access impacts to a less-than-significant level.	See Mitigation Measure 9.1		

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Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
as well as disruption to bicycle/pedestrian access and circulation.				
Impact 9.5: The project could contribute to cumulative impacts to traffic and transportation (traffic congestion, traffic safety, and emergency vehicle access).	**Measure 9.5a:** Prior to construction, the project sponsor will coordinate with the appropriate local government departments, Caltrans, and utility districts and agencies regarding the timing of construction projects that would occur near AD project sites. Specific measures to mitigate potential significant impacts will be determined as part of the interagency coordination, and could include measures such as employing flaggers during key construction periods, designating alternate haul routes, and providing more outreach and community noticing.	Project Applicant/ Construction Contractor	Coordinate with local agencies, State agencies and utility districts regarding construction.	Prior to construction
	Measure 9.5b: Implement Mitigation Measure 9.2.	See Mitigation Measure 9.2		
	Measure 9.5c: Implement Mitigation Measures 9.1, 9.3b and 9.3c.	See Mitigation Measure 9.1, 9.3b and 9.3c		
10. Aesthetics				
Impact 10.1: AD facilities could have adverse effects on a scenic vista and/or scenic resources.	**Measure 10.1a:** Avoid siting AD facilities near scenic vistas and corridors designated within an applicable land use plan and the State Scenic Highway Program.	Project Applicant	Avoid siting project near scenic vistas or corridors.	Local CEQA Review
	Measure 10.1b: Landscaping and/or vegetated berms should be used to minimize views of facilities from sensitive views.	Project Applicant/ Operator	Plan, develop and maintain landscaping/vegetated berms for sensitive views.	Ongoing
Impact 10.2: AD facilities could degrade the existing visual character/quality of the site and its surroundings.	**Measure 10.2a:** Implement Mitigation Measures 10.1a and 10.1b.	See Mitigation Measures 10.1a and 10.1b		
	Measure 10.2b: Facilities using truck tippers or other un-enclosed unloading should consider using litter fences to manage blowing litter. Facilities should educate haulers delivering materials to the AD facility through literature, web links, or provide training on the acceptance of waste at the facilities to minimize litter. Facility operators should develop a protocol to identify feedstocks that are severely contaminated with potential litter and reject unacceptable loads.	Operator LEA	Implement measures to reduce litter. Enforce litter reduction measures.	Operations Operations
	Measure 10.2c: Clean-up crews can be used as necessary to control litter.	Operator LEA	Implement measures to reduce litter. Enforce litter reduction measures.	Operations Operations
	Measure 10.2d: Feedstocks and digestate byproducts should be stored in enclosed facilities or processed in a timely manner to prevent visibly deteriorated site conditions.	Operator LEA	Store of feedstocks and digestate byproducts in enclosed facilities or process in a timely manner. Enforce storage measures.	Operations Operations
	Measure 10.2e: Project operators should consider enclosure of pre-processing operations if it provides an aesthetic and/or noise attenuating benefit.	Operator	Consider additional pre-processing measures.	Ongoing

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Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
Impact 10.3: AD facilities could create a new source of light or glare with adverse affects to daytime and/or nighttime views.	**Measure 10.3a:** Implement 10.1b.	See Mitigation Measure 10.1b		
	Measure 10.3b: Any lighting (portable or permanent) should be hooded and directed onto the project site. This would reduce effects to nighttime skies from uplighting, reduce glare, and prevent light from spilling onto adjoining properties and roads.	Operator	Use hooded and directed lighting on site.	Operations
	Measure 10.3c: Flares may be enclosed to reduce the visibility of flames during operation.	Operator	Consider use of enclosed flares.	Operations
Impact 10.4: The project could result in cumulative impacts to visual resources.	**Measure 10.4:** Implement Mitigation Measures 10.1a, 10.1b, 10.2a, 10.2b, 10.2c, 10.2d, 10.2e, 10.3a, 10.3b, and 10.3c.	See Mitigation Measures 10.1a, 10.1b, 10.2a, 10.2b, 10.2c, 10.2d, 10.2e, 10.3a, 10.3b, and 10.3c.		
11. Hazards and Hazardous Materials				
Impact 11.1: Construction of AD facilities could result in the potential exposure of construction workers, the public and the environment to preexisting soil and/or groundwater contamination.	**Mitigation Measure 11.1:** Prior to final project design and any earth disturbing activities, the applicant or agency(ies) responsible shall conduct a Phase I Environmental Site Assessment (ESA). The Phase I ESA shall be prepared by a Registered Environmental Assessor (REA) or other qualified professional to assess the potential for contaminated soil or groundwater conditions at the project site; specifically in the area proposed for construction of AD facilities. The Phase I ESA shall include a review of appropriate federal, State and local hazardous materials databases to identify hazardous waste sites at on-site and off-site locations within a one quarter mile radius of the project location. This Phase I ESA shall also include a review of existing and past land uses through aerial photographs, historical records, interviews of owners and/or operators of the property, observations during a reconnaissance site visit, and review of other relevant existing information that could identify the potential existence of contaminated soil or groundwater. If no contaminated soil or groundwater is identified or if the Phase I ESA does not recommend any further investigation then the project applicant or agency(ies) responsible shall proceed with final project design and construction. OR If existing soil or groundwater contamination is identified, and if the Phase I ESA recommends further review, the applicant or agency(ies) responsible shall retain a REA to conduct follow-up sampling to characterize the contamination and to identify any required remediation that shall be conducted consistent with applicable regulations prior to any earth disturbing activities. The environmental professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations at the proposed construction site, and recommendations	Project Applicant Project Applicant Local Lead Agency	Conduct Phase I ESA. If applicable, conduct sampling and prepare report with summary and recommendations for contaminants. Integrate recommendations into project mitigation. Review Phase I and follow-up report (if applicable).	Local CEQA review Local CEQA review Local CEQA review

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Impact	Mitigation Measure	Responsibility for Compliance	Method for Compliance	Timing of Compliance
	for appropriate handling of any contaminated materials during construction.			
Impact 11.3: Transportation, use, disposal or accidental spill of hazardous materials during the operation and maintenance of AD facilities would not result in potential harmful exposures of the public or the environment to hazardous materials.	**Mitigation Measure 11.3:** Implement Mitigation Measures 5.1a and 6.2a-f.			
Impact 11.4: Operation of AD facilities could increase the risk of fire hazards due to the potential release of biogas.	**Mitigation Measure 11.4a:** Prior to project approval, AD facility operators shall prepare and implement a Fire Safety Plan that outlines fire hazards, describes facility operations procedures to prevent ignition of fires, requires regular inspection of fire suppression systems, and provides for worker training in safety procedures as well as protocols for responding to fire incidents. The Fire Safety Plan shall be reviewed and approved by the local fire enforcement agency.	Project Applicant	Prepare a Fire Safety Plan.	Local CEQA Review
		Local Fire Agency/LEA	Review and approve Fire Safety Plan.	Local CEQA Review
		Operator	Implement Fire Safety Plan.	Operations
	Mitigation Measure 11.4b: Implement Mitigation Measure 11.5.	See Mitigation Measure 11.5		
Impact 11.5: AD facilities could be located within one quarter mile of a school resulting in potential hazards associated with accidental release of hazardous materials, including biogas.	**Mitigation Measure 11.5:** AD facilities shall be sited at least one quarter mile from existing or proposed schools, daycare facilities, hospitals and other sensitive land uses.	Project applicant	Site facilities at least one quarter mile from existing or proposed schools, daycare facilities, hospitals and other sensitive land uses.	Local CEQA Review
Impact 11.7: AD facilities could be located within five miles of a public airport or private airstrip and create an aviation hazard.	**Mitigation Measure 11.7:** For any AD facility proposed within 5 statute miles of an airport's air operations area, the operator will notify the Federal Aviation Administration (FAA) Regional Airports Division office and the airport operator of the proposed facility as early in the process as possible. AD facilities with any open air (outdoor) activities must receive an FAA Determination of No Hazard prior to project approval.	Project applicant/ Operator	Notify FAA if applicable.	Local CEQA Review
		FAA	Review project and issue an FAA Determination of No Hazard.	Prior to Project Approval
Impact 11.8: Development of AD facilities could contribute to cumulative impacts related to hazardous materials.	**Mitigation Measure 11.8:** Implement Mitigation Measures 11.1, 11.4, 11.5, and 11.7.	See Mitigation Measures 11.1, 11.4, 11.5, and 11.7		

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