

As a matter of proper business decorum, the Board of Commissioners respectfully request that all cell phones be turned off or placed on vibrate. To prevent any potential distraction of the proceeding, we request that side conversations be taken outside the meeting room.

**AGENDA**  
**SPECIAL BOARD MEETING**  
**VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY**  
**VICTORVILLE CITY HALL, CONFERENCE ROOM D**  
**14343 CIVIC DRIVE, VICTORVILLE CA 92392**

**Monday, July 27, 2020**  
**1:00 p.m.**

*VVWRA is committed to protecting public health and the environment in the Victor Valley by providing effective and fiscally responsible wastewater collection, treatment, and recycling.*

**Teleconference Notice**

*Consistent with the executive order given by Governor of the State of California and the Order of the Health Officer of the County of San Bernardino regarding COVID-19, participation by Commissioner Larry Byrd at the July 27, 2020, VVWRA Special Board meeting will be held by teleconference.*

**Call to Order**

**Cox**

**Roll Call**

**Casteel**

**Public Comments- Closed Session Agenda Items**

**Cox**

**CLOSED SESSION:** During the course of conducting the business set forth on this agenda as a regular meeting of the Board, the Chair may convene the Board in closed session to consider matters of pending real estate negotiations, pending or potential litigation, or personnel matters, pursuant to Government Code Sections 54956.8, 54956.9, 54957 or 54957.6, as noted. Reports relating to (a) purchase and sale of real property; (b) matters of pending or potential litigation; or (c) employment actions, or which are exempt from public disclosure under the California Public Records Act, may be reviewed by the Board during a permitted closed session and are not available for public inspection. At such time the Board takes final action on any of these subjects, the minutes will reflect all required disclosures of information. Closed Session is scheduled to commence at 7:30 a.m.. If the matters discussed in closed session require additional time beyond 8:00 a.m., in deference to the public, the Board may continue the Closed Session discussion after Open Session is concluded. In that case, Closed Session will resume after the Commissioners Comments section and any reportable action will be reported after the continued Closed Session has concluded and before adjournment.

**Closed Session**

**Item 1. (Gov. Code Sec. 54954.5-54956.9(d))- Flow Diversion**

**Call to Order & Pledge of Allegiance**

**Cox**

**Report From Closed Session**

**Legal**

**Public Comment (Government Code Section 54954.3)**

**Cox**

Opportunity for members of the public to directly address the Board on items of public interest within its jurisdiction. The public may also address the Board on items being considered on this agenda. VVWRA requests that all public speakers complete a speaker's card and provide it to the Secretary. Persons desiring to submit paperwork to the Board of Commissioners shall provide a copy of any paperwork to the Board Secretary for the official record. We request that remarks be limited to five minutes or less. Pursuant to Government Code Section 54954.3, if speaker is utilizing a translator, the total allotted time will be doubled.

**Possible Conflicts of Interest**

**Cox**

**Action Items**

*The Executive Leadership Team will provide brief updates on existing matters under their purview and will be available to respond to any questions thereof.*

<p><b><u>Item 2.</u> Flow Diversion Settlement</b></p>	<p><b>Poulsen</b></p>
<p style="text-align: center;"><b><u>Possible Board Action</u></b></p>	
<p><b><u>Item 3.</u> Recommendation to Approve the First Amendment to the Gas Collection Agreement</b></p> <p>It is recommended that the Board of Commissioners approve the General Manager to execute the first amendment to the Gas Collection Agreement and contract with SoCal Biomethane, LLC upon approval of the amendment by the VVWRA Attorneys.</p>	<p><b>Poulsen</b></p>
<p style="text-align: center;"><b><u>Board Action Required</u></b></p> <p style="text-align: center;">Staff Recommendation: Approve as Presented</p>	

**Adjournment**

**Cox**

The board will adjourn to a regular board meeting on August 20, 2020 at 7:30 a.m.

**American Disabilities Act Compliance Statement**  
Government Code Section 54954.2(a)



*Any request for disability-related modifications or accommodations (including auxiliary aids or services) sought to participate in the above public meeting should be directed to the VVWRA's Secretary at (760) 246-8638 at least 72 hours prior to the scheduled meeting. Requests must specify the nature of the disability and the type of accommodation requested.*

**Agenda posting**

Government Code Section 54954.2

*This agenda has been posted in the main lobby of the Authority's Administrative offices not less than 72 hours prior to the meeting date and time above. All written materials relating to each agenda item are available for public inspection in the office of the Board Secretary.*

**Agenda items received after posting**

Government Code Section 54957.5

*Materials related to an item on this agenda submitted after distribution of the agenda packet are available for public review at the VVWRA office located at, 20111 Shay Road, Victorville CA 92394. The materials will also be posted on the VVWRA website at [www.vvwra.com](http://www.vvwra.com).*

**Items Not Posted**

Government Code Section 54954.2(b)

*In the event any matter not listed on this agenda is proposed to be submitted to the Board for discussion and/or action, it will be done as an emergency item or because there is a need to take immediate action, which came to the attention of the Board subsequent to the posting of the agenda, or as set forth on a supplemental agenda posted in the manner as above, not less than 72 hours prior to the meeting date.*

**Items Continued**

Government Section 54954.2(b)(3)

*Items may be continued from this meeting without further notice to a Committee or Board meeting held within five (5) days of this meeting*

**Meeting Adjournment**

*This meeting may be adjourned to a later time and items of business from this agenda may be considered at the later meeting by Order of Adjournment and Notice*

*VVWRA's Board Meeting packets and agendas are available for review on its website at [www.vvwra.com](http://www.vvwra.com). The website is updated on Friday preceding any regularly scheduled board meeting.*



## VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY

*A Joint Powers Authority and Public Agency  
of the State of California*

*Administrative Offices*

20111 Shay Road, Victorville, CA 92394

Telephone: (760) 246-8638

### Memo

**DATE:** July 21, 2020

**TO:** VVWRA Board of Commissioners

**FROM:** Darron Poulsen, General Manager VVWRA

**RE:** Justification for Amendment to the RNG Project Contract

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This memo summarizes the RNG project, the expansion and benefit to improving infrastructure for VVWRA core operations, and the strength of the revenue streams backing the project. There is an existing agreement with SoCal Biomethane, LLC approved by the VVWRA Board on April 18, 2019. This project was started and all the work in the original scope was completed by January 2020. At this time, the project cannot move forward due to additional work needed to digester 2 that was not known at the development of the original project. To complete the desired goals of this project, digester 2 requires a new roof. Without a roof on digester 2 VVWRA would not be able to transfer materials from digesters 4 and 5 to perform the necessary 10-year maintenance. In January 2020 VVWRA did not have any approved funds to cover the cost of replacing the roof. Discussions on how to move forward with replacing the roof on digester 2 and moving the project forward took place over the next few months and a proposed amendment to the original contract was developed to resolve the concern. This solution identified in the proposed amendment to the original contract is being presented for the Board's consideration.

If an agreement cannot be made to amend the existing contract the project cannot move forward and the costs incurred by SoCal Biomethane, \$709,000, to complete the original scope of the project would have to be covered by VVWRA over a 5-year payment plan. If the project does not move forward VVWRA would have to seek other means to fund the improvements proposed to be completed by SoCal Biomethane, the roof on digester 2, piping improvements to better manage the sludge and the digester improvements to digesters 4 and 5. Without these necessary improvements it will take several years to fully fund these projects. These years will cause significant strife in the operations of the digesters and the management of the biosolids. Without the amendment to the project VVWRA does not gain any operational efficiency or capacity until the larger scoped project is completed. The risk of violations attributed to managing sludge per the requirements of existing permits will increase while we wait to fund and construct the necessary improvements, which is why staff feels this amendment is a positive project.

### Proposed Scope Changes in the Amendment to the RNG Project

The project involves improvements to anaerobic digester infrastructure that will increase capacity and process control at digester 1 – 5. SoCal Biomethane is financing the project including digester improvements as well as the biogas upgrading facility. SoCal Biomethane is taking the risk for all biogas conditioning and upgrading infrastructure without financial risk to VVWRA. There is a critical timeline on this project to meet operational and outside funding goals. It is imperative that this project start in early August in order to get necessary materials and construction completed by late October early November to allow time for digesters 4 and 5 to be taken out of service for repairs during the less critical season of the year. Additional funding sources for the project are also on a similar timeline requirement to assure revenues for the project start occurring in the spring of 2021. (More Detailed Risk Analysis: Attachment 1)

Mutual infrastructure which will benefit both VVWRA and SoCal Biomethane is estimated at \$5,709,000 in value. It is financed in large part by SoCal Biomethane with a \$1.14M contribution from VVWRA. Should the project not proceed after project completion, VVWRA has 5 years to repay this infrastructure without interest. The repayment of the costs for mutually beneficial assets over the 5-year period, should the project not proceed, would have an annual cost of \$922,000 per year if zero revenue is collected for this project. These funds, should they be necessary, will be available based on the revenue projections from the last approved rate increase. In that study revenues above operating costs will reach \$3M and connection fees \$2M, both can be used for a pay as you go capital improvement program. Should the project move forward VVWRA significantly gains critical operating efficiency and capacity with the newly installed assets which are detailed below. These assets are currently the highest priority improvements necessary at the regional plant to assure compliance with our biosolids management program.

	Original Project	Current Project
Digester 1 -3 Area Improvements	Digester 2 coating Digester 2 roof	Digester 2 coating Digester 2 roof Digester 2 new mixers New paving New TWAS lines New ADM receiving New biogas lines & flare
Digest 4 & 5 Improvements	None	New high solids mixers New biogas lines
Biogas Size	600 scfm	1,200 scfm
Revenue to VVWRA	1x	2.5x

The infrastructure improvements being made and financed by SoCal Biomethane, increases the expected revenue to the plant without capital outlay for VVWRA. The table below summarizes the enhanced revenues from the expanded project.

	Original Project	Current Project
Estimated project cost for digester improvements	\$709,000	\$5M
Estimated VVWRA revenues pre-capital repayment	\$150,000	\$450,000
Estimated VVWRA revenues post-capital repayment	\$300,000	\$1,000,000

### Revenue Strength - Renewable Natural Gas (RNG) Market

The project will generate revenues through both federal and California state credit programs. California credit program is called the Low Carbon Fuel Standard (LCFS) and is managed by California Air Resources Board. The LCFS program was put in place to reduce the carbon intensity of transportation fuels by requiring obligated parties that are mostly fossil fuel generators to produce fuels with a blend of renewable fuels or purchase credits to offset the carbon footprint. Specifically, the LCFS program calls for a reduction of at least 20% in the Carbon Intensity (CI) of the state's transportation fuels by 2030. One of the lowest carbon fuels in this program is RNG which is the clean methane produced from biogas. The market for RNG has been growing steadily as seen by the increase in RNG supply in the graph below.

Growth in Utilization of RNG Transportation Fuel (Million EGE)

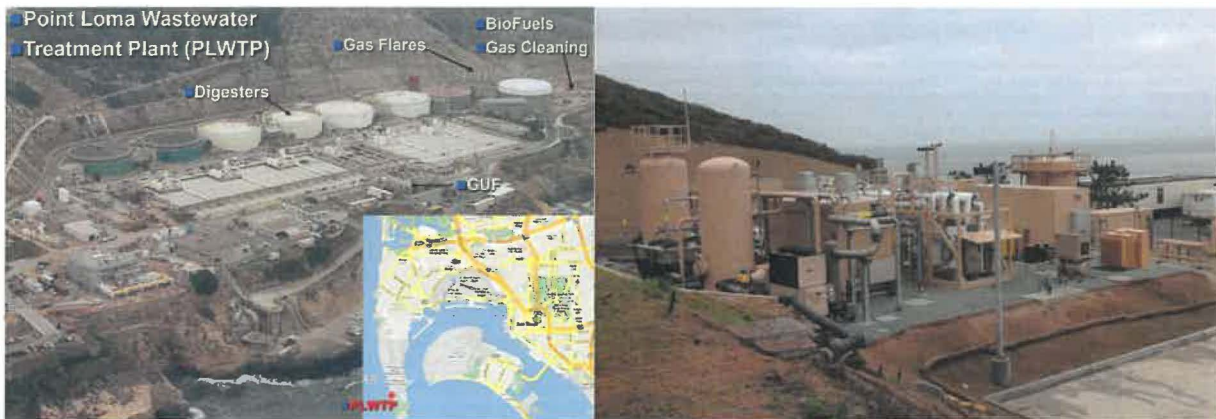


Further, the drive for lowering the carbon intensity of California transportation fuels to 20% by 2030 has increased the demand for renewable fuels and resulted in increasing value in the LCFS credit price. The graph below shows historical values of LCFS credit value with future projections. A robust increase in historical credit value followed by increased value over time underscores the project's strong financial base.



### California Projects Converting Biogas into Renewable Natural Gas

Other wastewater treatment plants in California have successfully implemented biogas to renewable natural gas conversion projects. The Point Loma Wastewater treatment facility operates a successful project since 2012 converting biogas from the digesters into pipeline quality RNG.



San Mateo Wastewater facility operates a biogas to RNG transportation fuel project since 2016. The facility provides RNG fuel for the city bus fleet.



In addition to the projects above, a number of other wastewater treatment plants are implementing or operating biogas to RNG projects including:

1. Los Angeles Sanitation District, Los Angeles, California
2. City of Phoenix, Arizona
3. City of Janesville, Wisconsin
4. City of Longmont, Colorado
5. Newton Creek Wastewater Treatment Plant, New York

### **Attachment 1 Detailed Risk Analysis**

A key component to developing the amendment to the RNG contract is the current risk VVWRA is dealing with regarding potentially not meeting permit requirements as it relates to the digestion and biosolids process. In digesters 4 and 5 staff has noticed a high volume of debris and grit in the biosolids that could prevent the material from being used for land application. The necessary maintenance to digesters 4 and 5 is on a critical path that needs to be addressed or VVWRA could face digester detention time issues which could jeopardize compliance with NPDES water quality objectives.

VVWRA has seen a substantial increase in the amount of debris (mostly cotton swab sticks, candy wrappers, and hygiene related debris) in the digester supernate, digested sludge that is dried to become biosolids. It is normal for debris like this to accumulate at the top of the digester sludge. When the accumulation of debris gets to a certain thickness it starts to get pulled out of the digester mixed with the supernate flow. This is a concern to VVWRA because an excessive amount of foreign debris in the biosolids makes them unusable for land application. In this scenario VVWRA could not utilize its agreement with Athens Services for disposal of these contaminated solids and would have to bear the financial burden of separating these solids, finding a disposal site or land fill, and paying the hauling costs to transport these solids to the



disposal site. The only way to remove this debris is to take the digester out of service and manually remove the debris. This is a common maintenance practice performed by every utility with digesters. The typical service range between cleanings is 10 years. VVWRA's digesters are at the 10- year service interval.

Operations and Maintenance staff plan to take digester 4 offline the first week in November to perform the necessary 10-year service, to resolve the debris issue and to make structural inspections of the internal walls of the digester. While the digester is down for service a high solids mixer retrofit will be performed by SoCal Biomethane that will allow for thicker sludge to be mixed in the digester in the future to help meet detention time and permit requirements. Upon completion of digester 4, digester 5 will be brought down for the same work. This scope is estimated to take up to 10 weeks per digester. Completion of this work must be completed by March 31, 2021. VVWRA's older digesters 1-3 must be completely operational by this time in order to take either digester 4 or 5 offline, as the singular capacity of digester 4 or 5 is not enough to maintain the detention time required by the EPA 503 biosolids regulations.

Per the EPA 503 biosolids regulations, VVWRA is required to maintain a detention time of at least 15 days to produce the "class A" biosolids needed for land application. Detention time is calculated by dividing the total digestion capacity by the gallons of material fed into the digesters each day. Digesters 4 and 5 have a volume of 1,200,000 gallons each, whereas digesters 1-3 have a combined volume of 990,000 gallons. By taking digester 4 or 5 out of service and putting digesters 1-3 in service our total digestion capacity is reduced by 210,000 gallons. This reduced volume combined with no way of significantly reducing the gallons being fed to the digesters each day puts VVWRA in a situation where we could very easily violate this requirement. Failing to meet the 15 day detention time requirement again would mean VVWRA could not utilize its agreement with Athens Services for disposal of these out of spec biosolids and would have to bear the financial burden of separating these solids from known in spec solids, finding a disposal site or land fill, and paying the hauling costs to transport these solids to the disposal site.

To maintain the required detention time VVWRA will have to have all the digester work completed and digesters 4 and 5 back online before March 31, 2021. This critical timing takes place when the weather starts to get hot when operators must start increasing the waste flow from the activated sludge process to ensure NPDES permit compliance. In the winter (colder) months the biology in the activated sludge system slows down. In order to maintain the same high level of treatment during this time operators keep more organisms in the system by slowing down the waste sludge pumps that remove organisms from the process and feed them to the digesters. The difference between the seasons is around 100gpm. Over the course of a day that equals 144,000 gallons less sludge sent to the digesters. Under normal operations, with both digesters 4 and 5 online, during the summer with the higher wasting VVWRA has historically seen a digester detention time under 16 days. During the winter with the reduced wasting the detention time increases to around 17 days. Numbers will be much closer to 15 days with the lower digestion capacity. If we are still operating with the lower digestion volume when the waste stream increases by 144,000gpd in April, VVWRA will likely violate the 15-day detention time required for "class A" biosolids. If we do not increase the wasting in April, to protect the detention time, we will jeopardize the entire biological treatment process by "constipating" the plant and effluent

water quality will suffer. Violations of our NPDES permit, as we know, has MMP (minimum mandatory penalties) associated with them, making this is not a viable option.

All the risks associated with amending the RNG contract to move forward and risks associated with cancelling the project at this time were carefully evaluated. The risks of not moving the project forward caused greater concerns for violations and operational issues than the risks associated with implementing a new scope and amending the project. Staff feels that this partnership has a high level of probability to be successful in allowing VVWRA to add over \$5 million in mutually beneficial assets that will improve operations and capacity without the need to further raise rates to our member agencies.



**VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY  
Board of Commissioners Staff Report**

**TO:** VVWRA Board of Commissioners

**FROM:** Darron Poulsen, General Manager

**SUBMITTED BY:** Darron Poulsen, General Manager and Brad Adams, Plant Superintendent

**DATE:** July 27, 2020

**SUBJECT:** Recommendation to approve the First Amendment to the Gas Collection Agreement

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<input checked="" type="checkbox"/> <b>For Action</b>	<input checked="" type="checkbox"/> <b>Fiscal Impact</b>	<b>\$ 1,142,995</b>
<input type="checkbox"/> <b>Information Only</b>	<input type="checkbox"/> <b>Account Codes:</b>	<b>TBD</b>
	<input checked="" type="checkbox"/> <b>Funds Budgeted/Approved</b>	

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**STAFF RECOMMENDATION**

It is recommended that the Board of Commissioners approve the General Manager to execute the first amendment to the Gas Collection Agreement and contract with SoCal Biomethane, LLC upon approval of the amendment by the VVWRA Attorneys.

**PREVIOUS ACTION(S)**

April 18, 2019, the Board of Commissioners authorized the General Manager to sign the Gas Collection Facilities Lease and Energy Storage Agreement with SoCal Biomethane, LLC.

**BACKGROUND INFORMATION**

On May 9, 2019, per the Board of Commissioners gave authority to the VVWRA General Manger to enter into an agreement with SoCal Biomethane. Within the agreement were agreed upon stipulations where by VVWRA would receive improvements to the Regional Wastewater Treatment Plant (WWTP) that included, upgrades to the digesters and improvements to the anaerobically digestible material (ADM) and fats, oil and grease (FOG) collection and processing infrastructure. All the proposed improvements were agreed upon due to their ability to compliment the operational efficiency of the SoCal Biomethane facilities. These SoCal Biomethane facilities once operational would be able to take the additional biogas from the reconditioned digesters and deliver the biogas to third parties to produce a positive revenue stream. The agreement detailed the necessary financing and cost recovery terms for SoCal Biogas to recover their capital costs associated with the WWTP improvements through an agreed upon cost sharing arrangement. Once VVWRA is able to pay back the capital investment the revenues

from the sales of the biogas would then become an additional revenue stream for the Authority that could be used to offset member agency costs for the treatment of the wastewater and also lessen the carbon footprint of the WWTP.

The rehabilitation of the digesters 1, 2, and 3 per the original contract requirements has been completed. At that point in the project two issues arose that needed resolution before the project could move forward. The first concern was the roof on digester 2 was found to be faulty and in need of replacement, which was not part of the original project scope. The second concern that was not sufficiently addressed or known was how the increased digestive material would impact the drying beds. Both of these concerns required the project to be put on hold in January 2020. The second concern was reviewed and addressed by the new pumping equipment installed at the gravity belt thickener, approved by the Board of Commissioners on February 27, 2020, that allows thicker sludge to be delivered to all 10 drying beds.

The roof to digester 2 that needed replaced posed a more complex resolution. Without a roof on digester 2 VVWRA would not be able to transfer materials from digesters 4 and 5 to perform the necessary 10 year maintenance, VVWRA did not have available funds to cover the cost of replacing the roof at that time. Discussions on how to move forward with replacing the roof on digester 2 and moving the project forward took place over the next few months and a proposed amendment to the original contract was developed to resolve the concern and is being presented in this report for the Board's consideration.

The discussion on the amendment to the original agreement was expanded beyond the replacement of the roof on digester 2 based on additional capital improvement projects that were a high priority and complimentary to the overall goals of the Gas Collection Agreement. VVWRA staff identified a number of projects in the 2020-21 Capital and Operating budgets, approved on June 18, 2020, that were needed to improve efficiency and capacity of the WWTP and were also beneficial to the gas collection and delivery project. These projects along with further improvements negotiated with SoCal Biogas were discussed to broaden the benefits of the project to the WWTP and the overall gas production of the project to form the scope of work proposed in the First Amendment of the Gas Collection Agreement, (Exhibit 1).

VVWRA has agreed to provide approved funds to the scope of work detailed in the First Amendment to the Gas Collection agreement. These available funds contributed to the project will off-set some of VVWRA's capital pay-back through the revenue sharing agreement. The total of available dollars is \$1,142,995 which will come from the following projects:

1. Capital Project – New ADM/FOG and TWAS feed lines	\$800,000
2. Capital Project – ADM/FOG Receiving Area Improvements	\$117,995
3. Operating Budget – Digester 4-5 Feed Line Modifications	\$175,000
4. Operating Budget – Gas Scrubber Media Replacement	\$50,000
TOTAL	\$1,142,995

The final scope of work per this Amendment will increase the biogas production above the plans in the original Agreement which will increase revenues. The proposed mutually beneficial improvements to the WWTP will enhance treatment operations and provide for greater capacity. The final agreed upon scope of the project includes the following WWTP upgrades:

1. Two additional liquid receiving tanks adjacent to Digester 3 plus modifications to Digesters 1,2, and 3 for feeding of this material

2. Membrane roof for Digester 2 plus PSM mixers
3. Three mixer posts and service boxes for Digesters 4 and 5
4. Grade and pave the ADM receiving area to accommodate two receiving stations and provide drainage to the adjacent Equalization Basin.
5. Additional Flare facility to accommodate up to 1200 scfm of biogas
6. New thickened waste activated sludge (TWAS) line from the existing DAF discharge pump to digesters 1, 2, 3, 4, and 5 supported on above ground pipe rack.

These improvements are being made without the need for 100% of VVWRA capital dollars; they will be paid for through the revenue sharing and once paid for will provide another revenue stream for the Authority to maintain lower wastewater treatment costs to the member agencies. For all of the reasons detailed above, it is recommended that the Board of Commissioners approve the General Manager to execute the first amendment to the Gas Collection Agreement and contract with SoCal Biomethane, LLC upon approval of the amendment by the VVWRA Attorneys.

**Attachment(s):**

**Exhibit 1 – First Amendment to Gas Collection Facilities Lease and Energy Services Agreement**

**FIRST AMENDMENT  
TO  
GAS COLLECTION FACILITIES LEASE AND ENERGY SERVICES AGREEMENT**

This First Amendment to Gas Collection Facilities Lease and Energy Services Agreement (“Amendment”), dated as of [July \_\_, 2020] (“Effective Date”) is entered into by and between SOCAL BIOMETHANE, LLC, a Delaware limited liability company (“Tenant”), and VICTOR VALLEY WASTE WATER RECLAMATION AUTHORITY, a Joint Powers Authority and a Public Agency of State of California organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (“Landlord”).

**RECITALS**

WHEREAS, Landlord and Tenant are parties to that certain Gas Collection Facilities Lease and Energy Services Agreement dated as of May 9, 2019 (“Agreement”); and

WHEREAS, Landlord and Tenant have agreed upon certain changes to the WWTP, including upgrades to the digesters and improvements in the ADM collection and processing infrastructure, all of which will complement the operational efficiency of the SoCal Biomethane Facilities by improving the digester’s capacity to process additional ADM and sustain additional biogas generation (the “WWTP Upgrades”), a description of which is attached hereto as Exhibit A; and

WHEREAS, in addition to the benefit of additional biogas production for the SoCal Biomethane Facilities, Landlord will directly benefit from the construction of the WWTP Upgrades by bolstering redundancy in WWTP operations, providing enhanced processing facilities and operational efficiency and generating increased revenue from the processing of ADM; and

WHEREAS, Landlord and Tenant have agreed upon certain additional infrastructure to improve the ability of the SoCal Biomethane Facilities to collect and deliver biogas from the digesters for sale to third parties (the “Pipeline Improvements”), a description of which is attached hereto as Exhibit B; and

WHEREAS, Tenant has agreed to perform all work related to the WWTP Upgrades in connection with its ongoing work under the Agreement on the SoCal Biomethane Facilities; and

WHEREAS, Landlord and Tenant agree that all work under the Agreement related to the Digester Coatings has been completed and the anticipated cost of the Digester Coatings was less than anticipated; and

WHEREAS, Landlord has agreed to share in the cost of the WWTP Upgrades and Landlord and Tenant have agreed to use the existing cost allocation mechanism in the Agreement to share in the cost recovery risk with respect to the agreed capital expenditures for the WWTP Upgrades and Pipeline Improvements; and

WHEREAS, the Landlord and Tenant desire to amend the Agreement to account for the financing and construction of the WWTP Upgrades;

NOW THEREFORE, in consideration of the mutual promises set forth below, recitals above, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. WWTP Upgrades. Tenant shall undertake the work necessary to design and construct the WWTP Upgrades in accordance with the terms of this Amendment and the WWTP Upgrade Documents.
2. Pipeline Improvements. Tenant shall further undertake the work necessary to design and construct the Pipeline Improvements in accordance with the terms of this Amendment and the Pipeline Improvement Documents.
3. Scope of Work and Cost of WWTP Upgrades. Within ninety (90) days of the execution of the Amendment, Tenant and Landlord will agree in writing on (i) a detailed scope of work for the WWTP Upgrades; (ii) the schedule for completion of the WWTP Upgrades; and (iii) the WWTP Upgrade Cost as set forth in Section 5(c) below. The scope of work, schedule and WWTP Upgrade Cost are collectively referred to herein as the “*WWTP Upgrade Documents*”. The WWTP Upgrades Documents will be subject to the approval of Landlord and Tenant, each in their sole discretion. The WWTP Upgrades will become the property of Landlord upon completion.
4. Scope of Work and Cost of Pipeline Improvements. Within ninety (90) days of the execution of the Amendment, Tenant and Landlord will agree in writing on (i) a detailed scope of work for the Pipeline Improvements; and (ii) the schedule for completion of the Pipeline Improvements. The scope of work and schedule are collectively referred to herein as the “*Pipeline Improvement Documents*”. The Pipeline Improvement Documents will be subject to the approval of Landlord and Tenant, each in their sole discretion
5. Financing and Cost Recovery.
  - a. In recognition of the dual benefit of the WWTP Upgrades, Landlord will contribute the sum of One Million, One Hundred Forty Two Thousand Nine Hundred Ninety Five Dollars (\$1,142,995.00) to the cost of the WWTP Upgrades (“*Landlord Contribution*”), for which Tenant shall invoice Landlord. The payment schedule for the Landlord Contribution will be as set forth in the WWTP Upgrade Documents.
  - b. Except for the Landlord Contribution, Tenant has secured the financing necessary to proceed with the construction of the WWTP Upgrades and the Pipeline Improvements in connection with its financing of the SoCal Biomethane Facilities.
  - c. Landlord and Tenant will agree on a final construction budget for the WWTP Upgrades in the same manner set forth in Section 7(c) of the Agreement (“*WWTP Upgrade Cost*”). The final actual WWTP Upgrade Cost will be determined and subject to audit in the same manner as is set forth in Section 7(c) of the Agreement.
  - d. The WWTP Upgrade Cost and the cost of the Pipeline Improvements will be added to the capital cost of the SoCal Biomethane Facilities and amortized pursuant to Section

- 4(b)(iii) as a cost item in the calculation of Net Revenue and will thereby reduce the amount of Additional Rent payable to Landlord.
- e. Upon the occurrence of a Special Termination Event or a termination of the Agreement as a result of Force Majeure pursuant to Section 34 of the Agreement, Landlord agrees to pay to Tenant the WWTP Upgrade Cost minus the sum of the Landlord Contribution and any portion of the amortized capital cost of the WWTP Upgrade Cost that has been actually recovered prior to such termination pursuant to the Net Revenue calculation set forth in Section 4(b)(iii) of the Agreement ("Residual Capital Cost"). Landlord will pay the Residual Capital Cost in equal monthly payments over a term of five (5) years from the date of termination, as Landlord's sole contribution to the stranded capital costs related to the SoCal Biomethane Facilities.
6. Event of Default. A default by Tenant in its obligations under this Amendment shall constitute an Event of Default pursuant to Section 22(a)(v) of the Agreement if not cured within the period set forth therein.
7. Special Termination Event. In addition to any other termination right set forth in the Agreement, Tenant will have the right to terminate the Agreement without cause in the following circumstances (each, a "Special Termination Event"):
  - Prior to the Commercial Operation Date, Tenant makes a reasonable determination that it is not legally or economically feasible to proceed with the SoCal Biomethane Facilities due to the occurrence of events or circumstances that are beyond the reasonable control of Tenant; or
  - At any time following the Commercial Operation Date, but not prior to the fifth (5<sup>th</sup>) anniversary of the Commercial Operation Date, Tenant makes a reasonable determination that it is no longer economically feasible to continue the operation of the SoCal Biomethane Facilities.

Tenant will give Landlord no less than ninety (90) days notice of a termination pursuant to this section.

8. Additional Provisions.

- The third sentence of Section 3 of the Agreement shall be replaced with the following:

"Tenant will have the option, in its sole discretion, to extend the Term for two additional five (5) year periods provided that there is no Event of Default continuing beyond applicable cure periods at the time of Tenant's exercise of such option."
- Landlord's contact information in Section 26 of the Agreement is amended to reflect notices should be directed to the attention of Darron Poulsen, email dpoulsen@vwwra.com.



9. Nature of Amendment. Except as expressly set forth herein, the Agreement shall remain in full force and effect. All terms defined in the Agreement shall have the same meaning when used in this Amendment. This Amendment and the Agreement shall be read together, as one document. In the event there is any inconsistency between the terms hereof and the Agreement, this Amendment shall control.
  
10. Effective Date: No Defaults. Landlord and Tenant further certify and affirm that as of the date of this Amendment, (i) there is not yet a defined Effective Date, and (ii) there exists no default by Landlord of the Agreement or Event of Default as defined in the Agreement, nor any condition, act or event which with the giving of notice or the passage of time or both would constitute any such Landlord default or Event of Default.

*[signature page follows]*

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment as of the date first set forth above.

SOCAL BIOMETHANE, LLC

a Delaware limited liability company

By: \_\_\_\_\_

Name: Arun Sharma

Title: President

VVWRA:

VICTOR VALLEY WASTEWATER RECLAMATION  
AUTHORITY

By: \_\_\_\_\_

Name: Darron Poulsen

Title: General Manager

## EXHIBIT A

## SCOPE OF WORK FOR WWTP UPGRADES

1. Two additional liquid receiving tanks adjacent to Digester 3 plus modifications to feed Digesters 1, 2 and 3.
2. Membrane roof for Digester 2 plus two PSM mixers.
3. Three mixer posts and service boxes for each of Digesters 4 and 5.
4. Grade and pave the ADM (anaerobically digestible material) receiving area to accommodate 2 truck unloading stations and provide drainage to the adjacent Equalization Basin. The paved area shall include the Third ADM storage tank.
5. Additional flare facility (third addition to existing two flares) to accommodate up to 1200 scfm of biogas production.
6. New TWAS (Thickened Waste Activated Sludge) line from the existing DAF discharge pump to digesters 1, 2, 3, 4 and 5 supported on an above ground pipe rack.

## EXHIBIT B

## SCOPE OF WORK FOR PIPELINE IMPROVEMENTS

1. New biogas collection piping and instrumentation from digesters 1, 2, 3, 4 and 5 to convey all biogas generated in the digesters to the inlet of the SoCal Biomethane system supported on an above ground pipe rack.