





PROPOSALS AND TO WAIVE NON-MATERIAL INFORMALITY OR IRREGULARITY IN ANY RFP RECEIVED IN WHOLE OR IN PART, AS SPECIFIED IN THE SOLICITATION.

BY ORDER OF THE WILL COUNTY EXECUTIVE, LAWRENCE M. WALSH.

**INSTRUCTIONS TO VENDORS  
REQUEST FOR PROPOSAL NEW CASE MANAGEMENT SYSTEM**

**GENERAL SPECIFICATIONS:**

Vendors are invited to submit your proposal to the Request for Proposals (RFP) for the Will County Prairie View Landfill Gas Upgrading System Engineering, Procurement & Construction (EPC) for the gas upgrading, compression, and gas quality monitoring system needed to upgrade the landfill biogas to RNG suitable for injection into the natural gas pipeline

**PRE-BID CONFERENCE:**

A **Mandatory Pre-proposal** meeting will be held **10:00 A.M., Tuesday, December 10, 2019** at the Will County Office Building, 302 N. Chicago St., 2<sup>nd</sup> Floor, Joliet, IL. 60432. You must pre-register to attend this pre-bid conference by emailing [klynn@willcountyillinois.com](mailto:klynn@willcountyillinois.com), by **4:00 p.m., Friday, December 6, 2019**.

**SEALED PROPOSALS:**

Sealed proposals will be received in the Purchasing Department, 2nd floor, Will County Office Building, 302 N. Chicago St., Joliet, IL 60432, **not later than 10:00 a.m., Friday, January 10, 2020, "as so indicated by the time stamp clock of Will County"**. **PROPOSALS RECEIVED AFTER THIS TIME WILL NOT BE ACCEPTED.**

Sealed proposals will be publicly opened and read aloud by the Will County Executive or his representative at **10:10 AM, Friday, January 10, 2020** at the Will County Office Building, 302 N. Chicago Street, 2<sup>nd</sup> Floor, Joliet, IL, 60432.

Proposals must be made in accordance with the instructions contained herein.

Bid forms shall be completely filled out either typewritten or in ink and shall not be detached from this package. The **complete set of Contract Documents shall be submitted** with the proposal, with **ONE (1) ORIGINAL AND FIVE (5) COPIES, CLEARLY MARKED, and ONE (1) DIGITAL COPY.**

Proposals shall be submitted on the forms furnished by the County of Will in a sealed package, plainly marked, with the bidder's name, address, and the notation:

**SEALED PROPOSAL: 2020-60 Prairie View Landfill Gas Upgrading - Request for Proposal**

**PROPOSALS DUE: FRIDAY, JANUARY 10, 2020 - 10:00 A.M.**

Sealed proposals shall be addressed to the Will County Purchasing Department, Will County Office Building, 302 N. Chicago St., Joliet, IL 60432.

**SIGNATURE OF PROPOSALS:**

The signature on proposal documents shall be that of an authorized representative of vendor. An officer or agent of the offering vendor who is empowered to bind the vendor in a contract shall sign the proposal and any clarifications to that proposal.

Each vendor, by making and signing his proposal, represents that he has read and understands the proposal documents. **Any proposal not containing said signed documents shall be non-conforming and shall be rejected.**

**PROCEDURES:**

**BIDDING PROCEDURES:**

1. All statement of qualifications must be prepared as requested in the "Response to RFP" section and submit One (1) original and Five (5) copies, clearly marked, and One (1) digital copy.
2. A proposal is invalid if it has not been deposited at the designated location prior to the time and date for receipt of RFP indicated in the Advertisement for RFP or prior to any extension thereof issued to the vendors.
3. Unless otherwise provided in any supplement to the instructions to vendors, no vendor shall modify, withdraw or cancel his proposal, or any part thereof, for one hundred twenty (120) days after the time designated for the receipt of proposals in the Request for Proposals.
4. Changes or corrections may be made in the proposal documents after they have been issued and before proposals are received. In such cases, a written addendum describing the change or correction will be issued by the County of Will to all vendors recorded by the County of Will as having received the proposal documents and will be available for inspection wherever issued. Such addendum shall take precedence over that portion of the document concerned, and shall become part of the proposal documents. Except in unusual cases, addendum will be issued to reach the bidders at least seven (7) days prior to date established for receipt of Bids.
5. Each vendor shall carefully examine all proposal documents and all addenda thereto, and shall thoroughly familiarize himself with the detailed requirements thereof prior to submitting a proposal. Should a vendor find discrepancies or ambiguities in, or omission from documents, or should he be in doubt as to their meaning, he shall at once, and in any event not later than fourteen (14) days prior to bid due date, notify the County of Will, who will, if necessary, send written addendum to all bidders. The County of Will will not be responsible for any oral instructions and expressly disclaims any such instructions. All inquiries shall be directed to Kevin Lynn, [klynn@willcountyillinois.com](mailto:klynn@willcountyillinois.com). After Proposals are received, no allowance will be made for oversight by the vendor.

**REJECTION OF RFP'S:**

The vendor acknowledges the right of the County of Will to reject any or all proposals, to waive any non-material informality or irregularity in any proposal received, and to accept the statement of qualifications deemed most favorable to the interest of the County of Will after all have been examined and evaluated. In addition, the vendor recognizes the right of the County of Will to reject a proposal if the statement of qualifications is in any way incomplete or irregular.

**CONTRACT DURATION:**

The contract is expected to commence on or after March 2020.

**PRIME CONTRACTOR CERTIFICATION:**

Included in this packet is a prime contractor certification form. This form **must** be filled out, signed and returned with your proposal or it will not be considered.

**BID SECURITY:**

***A 10% bid bond or cashier's check***, made payable to the Will County Treasurer, shall accompany each proposal, attached to the front cover, as guarantee that if the proposal is accepted, a contract will be entered into. The Bid Bond or cashier's check shall be returned to the unsuccessful bidder after the proposal has been awarded. The successful bidder's bond or check will be returned upon delivery of his performance bond.

**PERFORMANCE BOND:**

A **Performance Bond** for the amount of the Contract will be required from the **successful bidder** and shall be valid throughout the life of the Contract. The Performance Bond will be returned at the completion of the Contract. If it is difficult to acquire a Performance Bond by the time the Contract is to commence, the County of Will will accept a letter notarized by the Insurance Carrier showing that such Bond is being processed at this time, provided that the Bond is submitted within 30 days of contract signature.

**WORDS AND FIGURES:**

Where amounts are given in both words and figures, the words shall govern. If the amount is not written in words the unit cost will take precedence over the extended price in case of a discrepancy in the multiplication.

**PAYMENT PERIOD:**

Awarded vendor, once signed contract documents are received, shall receive payments per the schedule negotiated as part of the contract. At least 25% of the value of the contract will be held by the County pending the completion and acceptable outcome of UAT (User Acceptance Testing) per the plan noted as part of the Scope of Services

**APPROPRIATION OF FUNDS:**

In the event the Will County Board or other financing body of the County fails to appropriate funds for this Agreement, the obligations of both the vendor and the county will cease immediately without any penalty or liquidated damages or any other payments.

**NON-DISCRIMINATION:**

The Contractor shall at all times observe and comply with any law, statute, regulation or the like relating in any way to civil rights including but not limited to the Public Works Employment Discrimination Act, 775 ILCS 10/0.01 et seq.

**DEFAULT:**

In case of default by the successful vendor, the County of Will may procure the articles or services from other sources and may deduct from the unpaid balance due the successful vendor any of its costs resulting from the default, or may collect against the bond or surety for excess costs so paid, and the prices paid by the County of Will shall be considered the prevailing market price at the time such purchase is made.

**SECURITY**

The Vendor represents and warrants to the County of Will that neither it nor any of its principals, shareholders, members, partners or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. The Vendor further represents and warrants to the County of Will that the Vendor and its principals, shareholders, members, partners, or affiliates, as applicable, are not directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Agreement on behalf of any person or entity named as Specially Designated National and Blocked Person. The Vendor hereby agrees to defend, indemnify and hold harmless the County of Will, the Corporate Authorities, and all County of Will elected or appointed officials, officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities, and expenses (including reasonable attorneys' fees and costs) arising from or related to any breach of the foregoing representation and warranties.

**HOLD HARMLESS CLAUSE:**

The vendor will save and hold harmless the County of Will from and against all liabilities, claims and demands of whatsoever kind or nature arising out of or connected with the performance of services by the vendor, or on behalf of the County of Will, the Corporate Authorities, and all County of Will elected or appointed officials, officers, employees, agents, representatives, engineers and attorneys, whether such injury, death, loss or damage shall have been occasioned by the negligence of the vendor, or a Subcontractor of the vendor, or their employees; or otherwise. The vendor will defend at its own expense any actions based thereon and shall pay all reasonable attorneys' fees and all other costs and expenses arising there from.

**TERMINATION:**

Either party hereto may, at any time during the term hereof, terminate the contract, with or without cause, upon thirty (30) days written notice to the other party of such termination. At the end of said thirty (30) day notice period, the contract shall be terminated.

Immediately upon the termination of the contract for any reason, all debts, obligations and liabilities theretofore accrued between the vendor and Will County will be paid, performed and discharged.

**COMPLIANCE WITH APPLICABLE LAW:**

In all aspects relative to the performance of their respective obligations under this contract, the vendor and Will County shall conduct their respective businesses in accordance with all applicable federal, state and local laws.

**PRICES:**

Prices shall remain in effect throughout the Contract.

**TAX EXEMPTION:**

The County of Will is exempt from Federal, State and Municipal Taxes.

**ILLINOIS FREEDOM OF INFORMATION ACT:**

Any and all submissions to the County of Will become the property of the County of Will and these and any late submissions will not be returned. Your proposal will be open to the public under the Illinois Freedom of Information Act (FOIA) (5 ILCS 140) and other applicable laws and rules, unless you request in your proposal that we treat certain information as exempt. We will not honor requests to exempt entire proposals. You must show the specific grounds in FOIA or other law or rule that support exempt treatment. If you request exempt treatment, you must submit an additional copy of the proposal with exempt information deleted. This copy must tell the general nature of the material removed and shall retain as much of the proposal as possible. In the event the County of Will receives a request for a document submitted, the County of Will shall provide notice to contractor as soon as practicable. Regardless, contractor will be responsible for any costs or damages associated with defending your request for exempt treatment. Furthermore, contractor warrants that County of Will's responses to requests for a document submitted that is not requested to be exempt will not violate the rights of any third party.

Please be advised that if your proposal is accepted by the County of Will all related records maintained by, provided to, or required to be provided to the County of Will during the contract duration are subject to FOIA. In the event the County of Will receives a request for a document relating to contractor, its provision of services, or the arranging for the provision of services, the County of Will shall provide notice to contractor as soon as practicable and, within the period available under FOIA, contractor may then identify those records, or portions thereof, that it in good faith believes to be exempt from production and the justification for such exemption. Regardless, contractor will be responsible for any costs or damages associated with defending the request for exempt treatment. Furthermore, contractor will warrant that County of Will's responses to requests for a document relating to contractor, its provision of services, or the arranging for the provision of services, or the arranging for the provision of services, will not violate the rights of any third party.



Please be advised also that FOIA provides that any record in the possession of a party with whom the County of Will has contracted to perform a governmental function on behalf of the County of Will, and that directly relates to the governmental function and is not otherwise exempt under FOIA is considered a public record of the County of Will for purposes of FOIA.

5 ILCS 140/7(2). As such, upon request by the County of Will (or any of its officers, agents, employees or officials), the contractor shall provide to the County of Will at no cost and within the timeframes of FOIA a copy of any "public record" as required by FOIA and in compliance with the provisions of FOIA. After request by the County of Will, contractor may then identify those records, or portions thereof, that it in good faith believes to be exempt from production and the justification for such exemption. Regardless, contractor will be responsible for any costs or damages associated with defending the request for exempt treatment.

**CHOICE OF LAW AND VENUE:**

Any agreement related to this request for proposals shall be governed by the laws of the State of Illinois without regard to conflict of law provisions. Venue for any cause of action related to this bid and the work performed in connection therewith shall be in the Twelfth Judicial Circuit, Will County, Illinois.

**AWARDING OF PROPOSAL:**

The vendor acknowledges the right of the County of Will to reject any proposals not in compliance with the RFP and the right to reject all proposals and the right to waive any non-material informalities or irregularities for any proposal received and to accept the most responsible, responsive proposal after all Proposals have been examined and evaluated.

The Proposal is expected to be approved on the February 20<sup>th</sup>, 2020 or the March 19<sup>th</sup>, 2020 meeting of the Will County Board.

**SUBMITTAL REQUIREMENTS:**

Each of the following items shall be submitted by the time mentioned herein in order that the bid will be considered:

1. 10% Bid Bond or Cashier's Check
2. Complete one (1) original and five (5) copies, clearly marked, and one (1) digital copy of all submitted materials, including interrogatories
3. Signed Copy of Prime Contractor Certification
4. Signed Bid Form
5. Signed Receipt of Addenda
6. References
7. Sample Contract

# **Will County Prairie View Landfill Gas Upgrading System Engineering, Procurement & Construction - Request for Proposal**

**Project:** *Will County Prairie View Landfill Gas Upgrading  
System Engineering, Procurement & Construction*

**Location:** **Will County Prairie View Landfill  
29755 S. Prairie View Drive, Wilmington, IL 60481**

**RFP Issue Date:** **November 21, 2019**

**Proposals Due:** **January 10,  
2020**

**Anticipated Award Date:** **March 2020**

**Work Performance Period: 2020 – 2022**

## 1.0 Introduction/Project Overview

The Prairie View Landfill biogas will be upgraded to produce renewable natural gas (RNG). The RNG will be injected into a nearby natural gas pipeline grid to be determined by Will County.

This Request for Proposal (RFP) is for the Will County Prairie View Landfill Gas Upgrading System Engineering, Procurement & Construction (EPC) for the gas upgrading, compression, and gas quality monitoring system needed to upgrade the landfill biogas to RNG suitable for injection into the natural gas pipeline. Qualified EPC Contractors (OFFERERS) for landfill gas upgrading are invited to submit offers including: Statement of Qualifications; fee structure; schedule; and, method of delivery.

Will County, Illinois (OWNER) based in Joliet, IL will own and assign an operator for the project. The successful OFFERER will operate the gas upgrading system during the first year of operations. Will County will separately contract for the year 2 and beyond operation of the project. The OWNER has designed this RFP to allow flexibility to OFFERER means and methods of project delivery in order to allow for high quality and efficient delivery of project by OFFERER. The OWNER anticipates the award of this project in March 2020 followed by OFFERER's design, permitting, procurement, construction and 1-year operations activities.

## 2.0 Background

Will County has been provided 455 acres of land by the federal government to develop into a landfill to primarily serve the waste needs of the Will County service area in a cost-effective manner. The land was part of the former Joliet Arsenal Site, located near Wilmington, just south of Joliet. The operation of the landfill was bid and awarded to Waste Management. This created a Public/Private Partnership that allows the County to provide needed local waste disposal.

The municipal solid waste (MSW) disposal site was named the Prairie View Landfill and Recycling Facility and it accepted its first load of MSW on January 19, 2004. Currently, the site takes in an average of 3,000 tons of MSW a day. As of January 1, 2019, the Illinois Environmental Protection Agency reported a remaining capacity of 41,642,937 yd<sup>3</sup>, a volume of 2,423,280 yd<sup>3</sup> as of 2018, and a life expectancy of 17.2 years to 2036.<sup>1</sup>

The landfill gas collection system is currently connected to three Gas-to-Energy (GTE) engines producing 4.8MW of electricity and two flares. The three GTE engines utilize up to 1,800 scfm of landfill biogas with the remaining biogas sent to the two flares. Initially, Will County may choose to continue to send 1,800 scfm of landfill biogas to the GTE engines and the remaining landfill gas to gas upgrading under this project. Eventually, all landfill gas currently sent to engines will be redirected under this project to gas upgrading and natural gas pipeline injection. Will County is requesting a phased approach having a basic design capacity of 5,000 scfm of landfill gas upgrading with future expansion to 7,500 scfm of landfill gas (to include the current flow to GTE engines and future landfill gas flow). The two existing Will County flares may remain in operation as integrated by OFFERER as backup to the proposed gas upgrading system.

The landfill is located at 29755 S. Prairie View Drive, Wilmington, IL 60481 and is depicted in Figures 1, 2 and 3. OFFERER shall include necessary relocations as part of the EPC contract including the diesel fueling system. Figure 3 depicts Phase 1 (5,000 SCFM landfill gas design) and Phase 2 (Expansion to 7,500 SCFM landfill gas design). The phased site use would be advantageous in allowing for existing landfill access roads to be utilized during Phase 1 gas upgrading. See Maps in Attachment 1.

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<sup>1</sup> Illinois Landfill Capacity Report, Illinois Environmental Protection Agency, September 2019

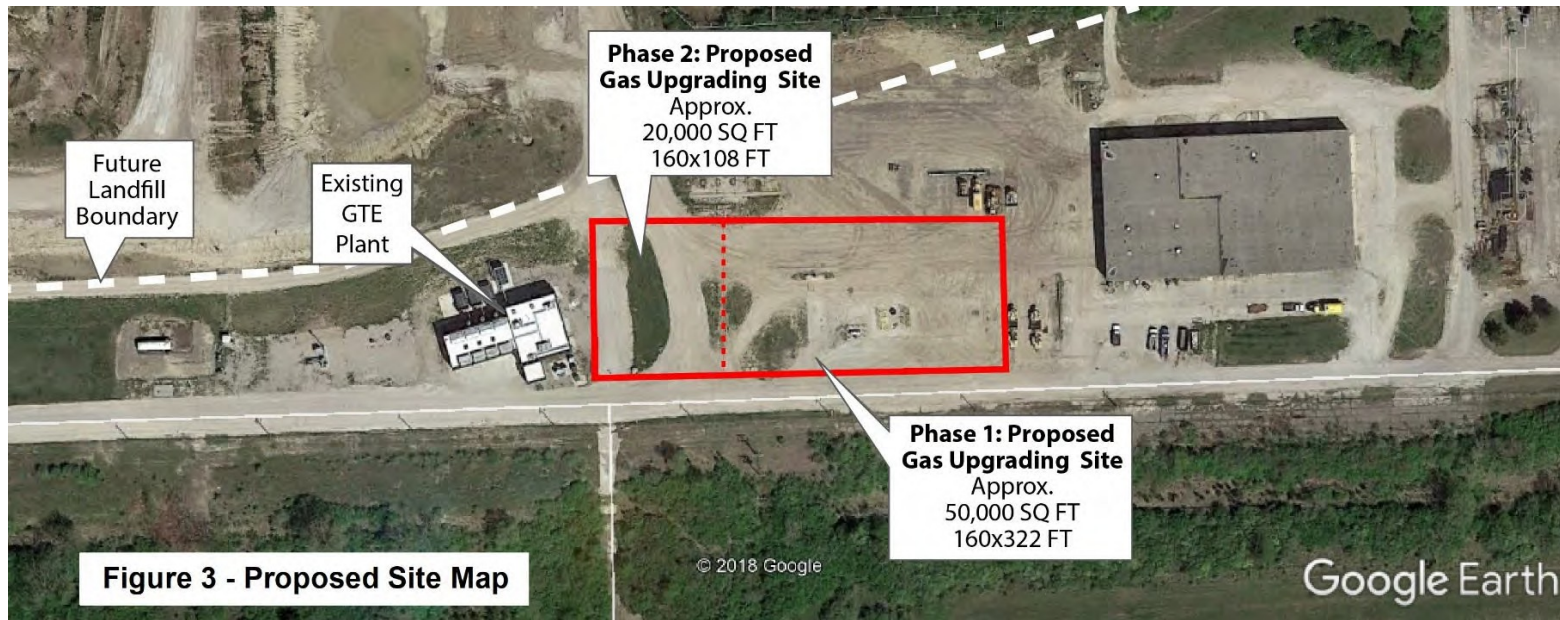
Figure 1. Vicinity and Location Map



**Figure 2. Aerial photograph of Prairie View Landfill**



**Figure 3. Proposed Site Map**



### 3.0 Responsibilities of OWNER

The OWNER's responsibilities shall include the following:

- Pipeline injection agreement with natural gas pipeline company
- Installation of pipeline injection monitoring equipment as required by the natural gas pipeline (by pipeline utility)
- Contracting for the installation of upgraded gas pipeline from the gas upgrading system to the point of pipeline injection (by pipeline utility)
- Permit holder on operational permits (OFFERER shall include permitting in OFFER with OWNER named as permit holder)
- OWNER's Quality Assurance oversight of OFFERER's construction activities
- OWNER of the landfill gas upgrading system following final acceptance
- USEPA RFS Facility Registration and Q-RIN; California LCFS Pathway Registration, Validation and Verification; and Voluntary Market quality programs as needed
- Year 2 and beyond Operation of landfill gas upgrading system following periods of training and 1-year operation by OFFERER (Operations procurement to occur at a later date.  
OFFERER shall indicate interest in bidding on Year 2 and beyond operations contract for information – Year 2 and beyond operations are not required and will not impact scoring on the EPC selection).
- Marketing of the upgraded renewable natural gas

### 4.0 Landfill Biogas Quality & Quantity

Table 1 provides gas quality process data at existing GTE engines 1, 2, and 3 for January 9, 2019 including methane, oxygen, carbon dioxide, nitrogen and BTU readings. The readings are highly consistent and the average, standard deviation, and 95% confidence level maximum and minimum are provided as the basis of design. The average process data is summarized as follows:

<u>Parameter</u>	<u>Average Value</u>
Methane:	54.06%
Oxygen:	0.41%
Carbon Dioxide:	40.03%



Nitrogen:	5.47%
Energy Content:	548.89 BTU/CF

Table 2 provides the analytical results for 3 landfill gas samples taken at Engines 1 and 2 on January 9, 2019. Results are relatively consistent and Table 2 provides the average, standard deviation, and 95%

confidence level maximum and minimum as basis of design. Average analytical data is summarized as follows:

<u>Parameter</u>	<u>Average Value</u>
Methane:	56.19 Mol%
Oxygen:	0.46 Mol%
Carbon Dioxide:	37.60 Mol%
Nitrogen:	5.62 Mol%
GHV (Dry):	567.90 BTU/CF (Ideal)
Sulfur, Total Volatile:	17 mg/kg

Table 3 provides landfill biogas flow data including:

- 2018 average monthly flow data ranging from 2,674 to 3,213 scfm
- 2019 to 2023 average monthly flow projections ranging from 3,380 to 5,900 scfm
- 2036 average monthly flow projection ranging from 6,247 to 7,506 scfm

The ultimate design flowrate for the project is 7,500 scfm of landfill gas which would generate 5,800 MMBTU/Day of RNG based upon 95% methane recovery by 2036.

The OFFERER shall provide for a system which operates at current low flow and future high flow design flow conditions including Will County's option to continue sending 1,800 scfm of biogas to the existing GTE engines.

The OFFERER's design shall address excess flow conditions using biogas storage or flare and may incorporate the two existing Will County flares into an overall integrated system.

The OFFERER may include a phased, expandable design to most economically address growth in future flow requirements. For instance, the OFFERER may provide for a basic 5,000 scfm initial construction which can be expanded to 7,500 scfm at a later date.

*Table 1. Landfill Gas CH<sub>4</sub>, O<sub>2</sub>, CO<sub>2</sub>, N<sub>2</sub>, and BTU Readings @ Engines 1-3 for 1/19/2019*

Engine#	Date	Time	CH <sub>4</sub> %	O <sub>2</sub> %	CO <sub>2</sub> %	N <sub>2</sub> %	TOTAL%	BTU/CF
1	1/19/19	8:15	54.06	0.443	40.03	5.45	99.98	548.93
1	1/19/19	8:30	54.03	0.455	40.01	5.53	100.03	548.51
1	1/19/19	8:45	53.97	0.463	39.99	5.57	99.99	547.97
1	1/19/19	9:00	53.96	0.465	39.98	5.58	99.99	547.82
1	1/19/19	9:15	53.95	0.467	39.98	5.59	99.99	547.76
1	1/19/19	9:25	53.93	0.472	39.94	5.61	99.95	547.04
1	1/19/19	9:40	53.94	0.470	39.95	5.63	99.99	547.69
1	1/19/19	9:55	53.43	0.466	39.94	5.65	99.49	547.56
1	1/19/19	10:10	53.91	0.461	39.92	5.63	99.92	547.11
1	1/19/19	10:25	53.90	0.458	39.94	5.62	99.92	546.83
1	1/19/19	10:35	53.92	0.455	39.96	5.60	99.94	547.34
1	1/19/19	10:50	53.95	0.453	39.99	5.59	99.98	547.82
1	1/19/19	11:05	53.98	0.448	39.98	5.58	99.99	548.05
1	1/19/19	11:20	54.01	0.440	39.97	5.57	99.99	548.38
1	1/19/19	11:35	54.07	0.432	39.99	5.54	100.03	548.70
2	1/19/19	12:00	54.12	0.389	40.08	5.37	99.96	542.57
2	1/19/19	12:15	54.16	0.382	40.12	5.33	99.99	549.81
2	1/19/19	12:30	54.22	0.372	40.11	5.28	99.98	550.50
2	1/19/19	12:45	54.21	0.371	40.1	5.25	99.93	550.79
2	1/19/19	13:00	54.20	0.370	40.09	5.26	99.92	550.61
2	1/19/19	13:10	54.21	0.369	40.14	5.27	99.99	550.48
2	1/19/19	13:25	54.20	0.373	40.12	5.30	99.99	550.30
2	1/19/19	13:40	54.18	0.379	40.09	5.35	100.00	550.07
2	1/19/19	13:55	54.15	0.388	40.07	5.38	99.99	549.80
2	1/19/19	14:00	54.12	0.396	40.06	5.40	99.98	549.65
2	1/19/19	14:25	54.11	0.400	40.06	5.42	99.99	549.43
2	1/19/19	14:40	54.12	0.400	40.05	5.41	99.98	549.29
2	1/19/19	14:55	54.12	0.399	40.04	5.43	99.99	549.88
2	1/19/19	15:10	54.14	0.398	40.05	5.45	100.04	549.67
2	1/19/19	15:25	54.15	0.397	40.03	5.44	100.02	549.50
3	1/19/19	15:35	54.10	0.402	40.04	5.45	99.99	549.33
3	1/19/19	15:50	54.09	0.400	40.01	5.44	99.94	549.77
3	1/19/19	16:05	54.08	0.399	40.03	5.46	99.97	549.98
3	1/19/19	16:20	54.07	0.401	40.05	5.47	99.99	549.04
3	1/19/19	16:35	54.08	0.400	40.04	5.48	100.00	549.18
3	1/19/19	16:50	54.14	0.398	40.06	5.50	100.10	548.80
3	1/19/19	17:05	54.12	0.398	40.04	5.49	100.05	549.03
3	1/19/19	17:20	54.09	0.401	40.02	5.48	99.99	549.47
3	1/19/19	17:35	54.08	0.402	40.02	5.49	99.99	549.11
3	1/19/19	17:50	54.07	0.403	40.04	5.49	100.00	548.98
3	1/19/19	18:00	54.09	0.398	40.03	5.47	99.99	549.16
3	1/19/19	18:15	54.10	0.392	40.03	5.46	99.98	549.32
3	1/19/19	18:30	54.11	0.389	40.05	5.45	100.00	549.45
3	1/19/19	18:45	54.13	0.387	40.03	5.47	100.02	549.77
3	1/19/19	19:00	54.14	0.385	40.01	5.48	100.02	549.92
<b>Average</b>			<b>54.06</b>	<b>0.41</b>	<b>40.03</b>	<b>5.47</b>	<b>99.98</b>	<b>548.89</b>
<b>Std Dev</b>			<b>0.13</b>	<b>0.03</b>	<b>0.05</b>	<b>0.11</b>		<b>1.40</b>
<b>95% Confidence Level Min</b>			<b>53.80</b>	<b>0.35</b>	<b>39.92</b>	<b>5.26</b>		<b>546.08</b>
<b>95% Confidence Level Max</b>			<b>54.33</b>	<b>0.48</b>	<b>40.13</b>	<b>5.68</b>		<b>551.70</b>

**Table 2. Analytical Data Summary LFG @ Eng#2, Eng#1, Eng#2**

Test	SampleID LFG#1 Eng#2	SampleID LFG#2 Eng#1	SampleID LFG#2 Eng#2	Units	AVE	STDEV	95% Conf Level MIN	95% Conf Level MAX
Sulfur, Total Volatile	14	22	14	mg/kg	17	5	7	26
Ultimate Gas Analysis								
Hydrogen	0.13	0.12	0.13	Mol%	0.13	0.006	0.12	0.14
Oxygen	0.43	0.51	0.45	Mol%	0.46	0.042	0.38	0.55
Nitrogen	5.59	5.89	5.37	Mol%	5.62	0.261	5.09	6.14
Carbon Dioxide	37.89	37.14	37.78	Mol%	37.60	0.405	36.79	38.41
Methane	55.96	56.34	56.27	Mol%	56.19	0.202	55.79	56.59
Ethane	<0.01	<0.01	<0.01	Mol%	<0.01			
Propane	<0.01	<0.01	<0.01	Mol%	<0.01			
Isobutane	<0.01	<0.01	<0.01	Mol%	<0.01			
n-Butane	<0.01	<0.01	<0.01	Mol%	<0.01			
Isopentane	<0.01	<0.01	<0.01	Mol%	<0.01			
n-Pentane	<0.01	<0.01	<0.01	Mol%	<0.01			
Hexanes Plus	<0.01	<0.01	<0.01	Mol%	<0.01			
Total	100.0	100.0	100.0	Mol%	100.00			
Molecular Weight	27.4	27.2	27.3	Kg/Kg-mole	27.30	0.100	27.1	27.5
Molar Mass Ratio	0.94461	0.9391	0.94275		0.94	0.003	0.93655	0.94776
Relative Density	0.94701	0.94145	0.94515		0.94	0.003	0.93888	0.95020
Compressibility Factor	0.99705	0.99709	0.99705		1.00	0.000	0.99702	0.99711
Gross Heating Value (Dry)	565.6	569.4	568.7	BTU/CF(Ideal)	567.90	2.022	563.9	571.9
Gross Heating Value (Dry)	567.3	571.1	570.4	BTU/CF(Real)	569.60	2.022	565.6	573.6
Net Heating Value (Dry)	509.3	512.7	512.1	BTU/CF(Ideal)	511.37	1.815	507.7	515.0
Net Heating Value (Dry)	510.8	514.2	513.6	BTU/CF(Real)	512.87	1.815	509.2	516.5
F Factor @ 20degC & 29.92 in.	9339	9322	9328	dscf/mmBTU	9329.67	8.622	9312	9347
Pressure Base	14.696	14.696	14.696	psia	14.70	0.000	14.696	14.696
Carbon Content	41.2	41.28	41.37	WT%	41.28	0.085	41.11	41.45
Hydrogen Content	8.26	8.36	8.32	WT%	8.31	0.050	8.21	8.41
Oxygen Content	44.82	44.29	44.8	WT%	44.64	0.300	44.04	45.24
Nitrogen Content	5.72	6.07	5.51	WT%	5.77	0.283	5.20	6.33
Sulfur Content	<0.01	<0.01	<0.01	WT%	<0.01			











RNG

- Thermal oxidizer
- All valves, piping, instrumentation, and other appurtenances necessary for a high-performing, reliable system
- Construction and oversight of all systems for a fully functioning gas upgrading system
- Process and instrumentation diagrams for all provided systems
- Dimensional drawings and weights to support foundation design
- Operation and maintenance manuals for all provided systems
- Spare parts for all provided systems
- Commissioning and startup
- Operation and maintenance for a period of 1-year following final acceptance of project by OWNER

## 8.0 OWNER's Current Working Estimate

The OWNER's Current Working Estimate (CWE) for the project capital cost is detailed as follows.

### *Capital Cost CWE*

<b>Description</b>	<b>Amount</b>
Phase 1 Capital Cost - 5,000 SCFM Biogas Upgrading, Compression and Gas Monitoring	\$30,350,000 (+10%/-20%)
Finished Gas Pipeline, Monitoring Connection and all work by OWNER	\$6,500,000 (+10%/-20%) – NOT IN EPC CONTRACT
<b>TOTAL Phase 1</b>	<b>\$36,850,000 (+10%/-20%)</b>
Adder Phase 2 Capital Cost – Expansion to 7,500 SCFM Biogas Upgrading, Compression and Gas Monitoring	\$10,460,000 (+/-20%)

The OWNER's CWE for the project O&M cost is detailed as follows.

*Operation and Maintenance Cost CWE*

<b>Description</b>	<b>Amount</b>
Phase 1 1-Year Operation and Maintenance Cost - 5,000 SCFM Biogas Upgrading, Compression and Gas Monitoring	\$3,510,000 (+10%/-20%)
Adder Phase 2 Operation and Maintenance Cost – Expansion to 7,500 SCFM Biogas Upgrading, Compression and Gas Monitoring	\$1,060,000 (+/-20%)

OFFERER's are required to provide a Firm Fixed Price Fee to complete 30% Conceptual Design and a Fee structure to complete the EPC contract.

#### 9.0 Requirements for 30% Conceptual Design

The OFFERER's 30% Conceptual design shall be of sufficient detail for the OFFERER and OWNER to agree upon a Guaranteed Maximum Price (GMP) for construction for the EPC contract.

The OFFERER's 30% Conceptual design shall be of sufficient detail to provide a GMP O&M budget for the project.

The GMP Capital and O&M pricing from the 30% Conceptual Design will be used as the basis for the EPC contract.

The OFFERER's 30% Conceptual design shall establish an EARLY FINISH and LATE FINISH dates for pipeline injection.

#### 10.0 Special Terms and Conditions Proposed by OWNER for future EPC Contract

The OWNER will base the separate gas offtake contract upon the LATE FINISH date provided by the OFFERER in the 30% Conceptual design. As a result of penalties in the gas offtake contract, TIME IS OF THE ESSENCE to reach gas injection on the future EPC contract. The OWNER will request liquidated damages in the amount of \$5,000-10,000 per day for pipeline injection beyond the established LATE FINISH date set by the EPC and OWNER in the EPC contract entered into after 30% conceptual design.

Subsequent Approved Value Engineering Proposals under the future EPC Contract will be split 25% to EPC and 75% to Will County.

Performance guarantee based on either percent run-time or minimum cleaning specifications. Bid and performance bonding will be required for this project.

Insurance for the EPC contract will name Will County as additional insured and will be included in the following types and minimum coverages:

Professional Liability Insurance, \$4M minimum

Workers Compensation Insurance, as required

Employer's Liability Insurance, \$500K Commercial

General Liability Insurance, \$4M Commercial Auto

Liability Insurance, \$1M

## 11.0 Procurement Milestones and Schedule

A mandatory preproposal meeting will be held as follows:

Time & Date: 10:00 am CST on Tuesday, December 10, 2019

Location: Will County Offices  
302 N. Chicago Street  
Joliet, IL 60432

The preproposal meeting will allow for introduction from Will County followed by an opportunity for questions and a site visit to the location of the gas upgrading project site.

The OFFERER may be called upon for interview beginning the week of 1/20/2020. Interviews will be conducted at the Joliet, IL offices of Will County and are preferred. A face to face interview may also be completed via video conferencing. The OFFERER will be allowed to submit and provide a presentation of up to 20 project slides as part of the interview process.

The OWNER may request a site visit to past project sites successfully completed by the OFFERER. These site visits will be optional for both OWNER and OFFERER attendance.

The following procurement schedule applies to this RFP.

<u>Procurement Milestones</u>	<u>Date</u>
RFP Issue Date	November 21, 2019
Preproposal meeting	December 10, 2019
Submittal of written questions	December 13, 2019
Addendum/Response to questions	December 20, 2019
Proposals due no later than	January 10, 2020
Interviews at Will County, Joliet, IL	Begin week of 1/20/2020
Site visits (OWNER/OFFERER OPTION)	Feb 2020
Contract Award	Mar 2020

## 12.0 Response Requirements

Submit proposals to Will County:

ATTN: Will County Purchasing Director

Address: 302 N. Chicago St.  
Joliet, IL 60432

Email: klynn@willcountyillinois.com

Part 1 - Statement of Qualifications including (25%):

1. Basic company information. Identification of teaming partnerships, including subcontractors.
2. Company qualifications and experience in providing similar equipment to what is required. Be specific and identify projects, size, dates, and results.
3. Installation list at landfills within the United States or Canada.
4. Ability to achieve performance requirements. Be specific and include real performance data from operating facilities.
5. Key personnel working on the project with resumes and experience on similar projects.
6. Gas upgrading technology selection.
7. Guaranteed methane recovery rate percentage.
8. Ability/interest in performing Year 2 and beyond operations under separate contract. (NOTE to OFFERER: This would NOT be a part of scoring in this RFP).
9. Project Spotlight(s) featuring past project having the greatest similarity and scope to the Will County project including references.
10. Proposed site visit location for similar project.
11. Experience in writing permit applications and securing permits from the IEPA, USEPA and other applicable regulatory agencies. NOTE: This may be subcontracted to a qualified consultant. If subcontracted, you must identify said consultant in your response.

*The OWNER will evaluate Part 1 with special emphasis on the successful performance of similar past projects. The OWNER may request an interview of references and a site visit to similar project.*

Part 2 – Proposed Fee Structure including (25%):

1. Firm fixed price fee to complete 30% Conceptual Design.
2. Proposed fee structure to complete the Permitting, Engineering, Procurement, and Construction of gas upgrading, compression, 1-year O&M, and monitoring project. See the RFP response bid sheet included as Attachment 5. The OFFERER may use the provided response sheet or develop their own preferred fee structure. The fee structure should incentivize the OFFERER to save on

the overall costs of the project through efficiencies and value engineering. The proposed fee structure should provide the following:

- a. EPC labor fee
  - b. EPC % markup on subcontractors
  - c. EPC % markup on equipment
  - d. EPC 1-year O&M cost
3. Proposed methods for cost control and reduction below the CWE.
  4. Estimated project cost based upon past performance of similar work. Address both initial (5,000 scfm) and expanded (7,500 scfm) design capacity as needed.
  5. Estimated project 1<sup>st</sup> year O&M based upon past performance of similar work. Include initial (5,000 scfm) and ultimate (7,500 scfm) design capacity.
  6. Plans for adherence to Will County Prevailing Wage Rates. (see attachment 7)

*The OWNER will evaluate Part 2 total OFFERER cost and fee, CWE operating cost, and Part 1 OFFERER guaranteed methane recovery rate and expected value of RNG revenue in evaluation of offers.*

*Part 3 – Proposed Project Schedule including (25%):*

1. Project schedule including activities, activity duration, and completion milestones (The successful EPC contractor is required to provide regular (monthly minimum) updates to Will County on progress).
2. Proposed project duration from Notice to Proceed to submittal of 30% Conceptual Design.
3. Proposed future project duration from Notice to Proceed with EPC project to LATE FINISH for pipeline injection.

*The OWNER will evaluate Part 3 as to the value of early or on-time delivery with respect to anticipated project revenue.*

*Part 4 – Proposed Method of Delivery including (25%):*

1. Design activities.
2. Air permitting activities and schedule for air permit with respect to other EPC activities.
3. Procurement Activities.
4. Construction Activities, onsite vs. offsite, shop locations.
5. Measures to achieve cost reduction.
6. Quality Control/Assurance processes.
7. Methods for payment application.
8. Methods for scheduling.
9. Guarantees. (Ability to secure Performance Bonds for design/construction/deliverables)
10. Adequate Insurance to cover all work and adequately protect the County and landfill operator
11. Any proposed special terms and conditions.
12. Subcontracting.
13. Scheduling.
14. Final acceptance testing.
15. Training.
16. 1<sup>st</sup> year Operations and maintenance.
17. Technical support during Year 2 and beyond operations.
18. Project references for completion of similar project delivery.

*The OWNER will evaluate Part 4 with emphasis on proven methods of project delivery.*

### 13.0 Evaluation Criteria

OFFERER responses will be scored based upon the following major criteria:

Part 1 - Statement of Qualifications (25 points)

Part 2 – Proposed Fee Structure (25 points)

Part 3 – Proposed Project Schedule (25 points)

Part 4 – Proposed Method of Delivery (25 points)

TOTAL: 100 points

The emphasis of the OWNER’s evaluation is highlighted in *italics* in the previous section.

### 14.0 Proprietary Information

All restrictions on the use of data contained within a proposal and all confidential information must be clearly marked within the proposal.

### 15.0 Prevailing Wage Rates for Will County, IL

Onsite work shall be governed by prevailing wage rates for Will County, IL included in Attachment 7.

### 16.0 Other Proposals

OWNER will consider alternative proposals during the evaluation period which will be reviewed and scored using the evaluation criteria if the vendor follows the submission process and submits the required documentation outlined in this request. Teaming arrangements will be considered but the lead company should be identified in the response.

### 17.0 Questions

Questions should be directed to the Will County Procurement Officer in writing at the email address provided in Section 12.


### 18.0 Confidentiality

The information contained with this RFP and responses by the vendor are for the confidential use of EcoEngineers and OWNER in evaluation and implementation of the project.

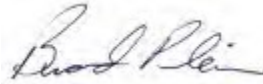


All questions related to this RFP should be addressed to the Will County Purchasing Director. Sincerely,

Jim Ramm, P.E.  
Directory of Engineering



Brad Pleima, P.E.  
Senior Engineer



Attachments:

- 1 Site Maps
- 2 Process Data on Landfill Gas Measured 1.9.2019
- 3 Analytical Results of 3 landfill gas samples taken  
1.9.2019
- 4 Midwestern Gas Transmission Company Part 8 - Gas Quality  
Specs
- 5 RFP Response Proposal Sheet
- 6 Letter from People's Gas
- 7 Will County, IL Prevailing Wage Rates

Attachment 1

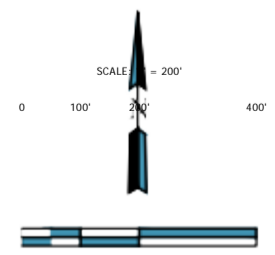
Site Maps



**KEY**

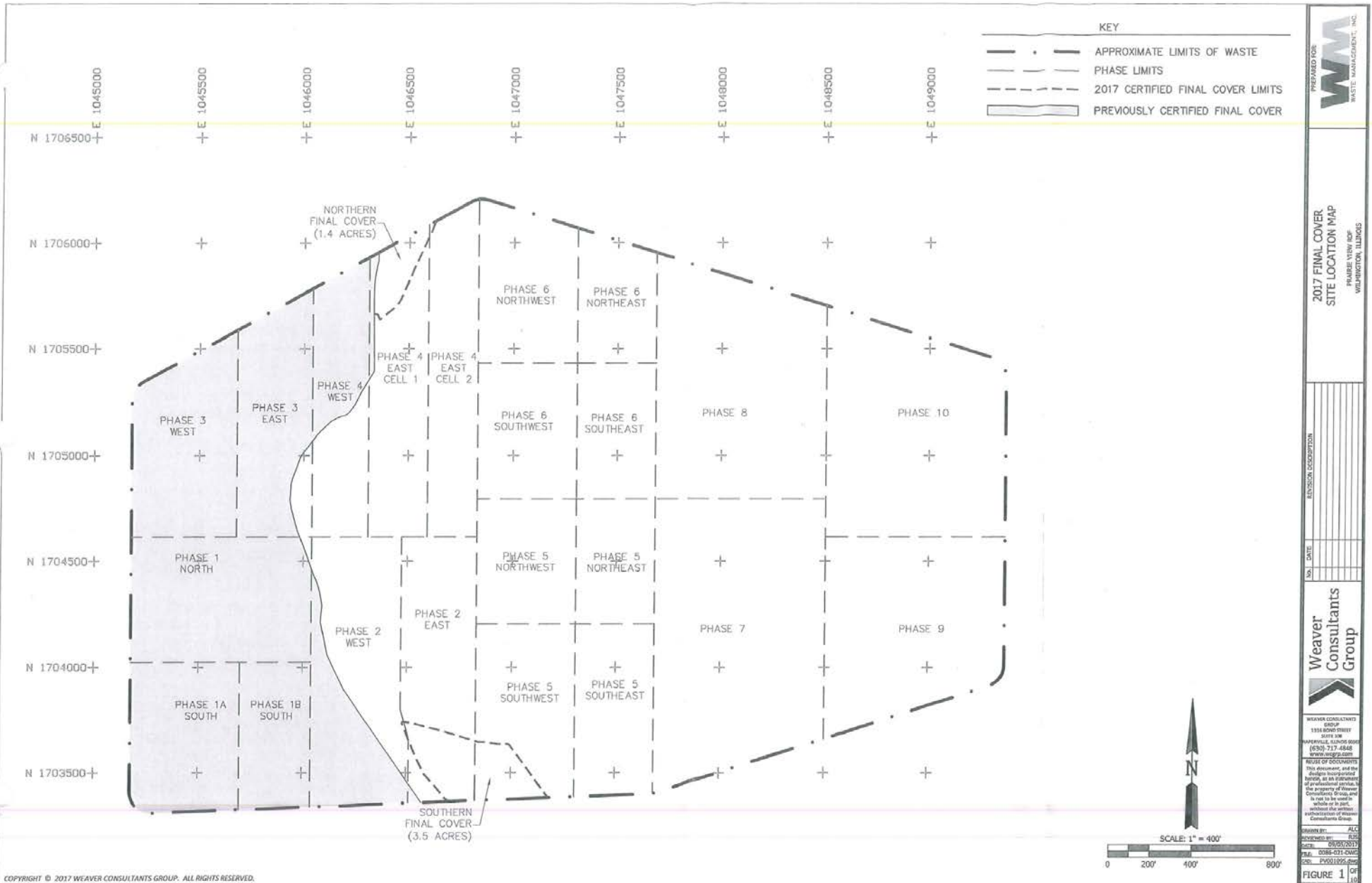
	APPROXIMATE FACILITY BOUNDARY
	APPROXIMATE LIMITS OF WASTE
	PHASE LIMITS
	EXISTING PERFORATED HORIZONTAL COLLECTOR PIPING
	EXISTING LANDFILL GAS PIPING
	EXISTING 2" AIR SUPPLY PIPING
	PREVIOUSLY CERTIFIED FINAL COVER AREA
	EXISTING CMP ROAD CROSSING
	EXISTING LANDFILL GAS WELL
	ABANDONED LANDFILL GAS WELL
	EXISTING HORIZONTAL COLLECTOR
	ABANDONED HORIZONTAL COLLECTOR WELLHEAD
	EXISTING ROCK COLUMN
	EXISTING FLANGE
	EXISTING VALVE
	EXISTING KNOCKOUT
	EXISTING PUMPING STATION
	LEACHATE SUMP RISER
	EXISTING ELECTRICAL CONDUIT/COMMUNICATIONS LINE STICK-UP
	EXISTING LEACHATE FORCEMAIN CLEANOUT RISER
	EXISTING AIR SUPPLY RISER STICK-UP
	EXISTING LEACHATE FORCEMAIN RISER
	EXISTING HEADER RISER

- NOTES:**
1. CONTOURS SHOWN ARE FROM APRIL 15, 2017 AERIAL SURVEY PERFORMED BY WEAVER CONSULTANTS GROUP.
  2. ELEVATIONS ARE USGS MEAN SEA LEVEL DATUM.
  3. HORIZONTAL DATUM IS BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM. VERTICAL DATUM IS BASED ON USGS MEAN SEA LEVEL.
  4. FACILITY AND PROPERTY SURVEYS PERFORMED BY AREA SURVEY CORP. ORLAND PARK ILLINOIS, AUGUST 4, 1998.



REVISION DESCRIPTION	DATE





2017 FINAL COVER  
SITE LOCATION MAP  
WEAVER CONSULTANTS GROUP  
WILMINGTON, ILLINOIS

REVISION DESCRIPTION

NO. DATE

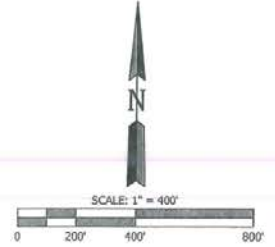
**Weaver Consultants Group**



WEAVER CONSULTANTS GROUP  
1914 BOND STREET  
SUITE 508  
WAPPAWATON, ILLINOIS 60488  
(630) 717-4848  
WWW.WCG.COM

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DRAWN BY: ALC  
CHECKED BY: RJS  
DATE: 01/25/2017  
P.L.: 0086-021-DWG  
JOB: PW001095-001



Attachment 2

Process Data on Landfill Gas Measured 1.9.2019

WMRE-Prarieview  
 Wilmington, IL

## ENGINE PROCESS DATA

Engine #: W18100M Engine #1  
 Engine SN: G2500455 Date: 1/9/19  
 Hours: 60,487.23 Observer: AM

Time	KW	MAP	.MAT	Fuel Flow	Air Flow	A/F	BHP	CH4	O2	CO2	N2	BTU
8 <sup>15</sup>	1619	45.54	127.4	520	4353	8°	N/A	54.06	.443	40.05	5.45	548.93
8 <sup>30</sup>	1633	45.33	127.6	513	4325			54.03	.455	40.01	5.53	548.51
8 <sup>45</sup>	1615	45.25	127.4	515	4316			53.97	.463	39.99	5.57	547.97
9 <sup>00</sup>	1608	45.57	127.4	518	4303			53.96	.465	39.98	5.58	547.82
9 <sup>15</sup>	1621	45.19	127.2	517	4329	↓	↓	53.95	.467	39.96	5.59	547.76
9 <sup>25</sup>	1607	45.34	127.4	522	4347	8°	N/A	53.93	.472	39.94	5.61	547.04
9 <sup>40</sup>	1615	45.47	127.4	515	4300			53.94	.470	39.95	5.63	547.69
9 <sup>55</sup>	1632	45.02	127.9	513	4328			53.93	.466	39.94	5.65	547.56
10 <sup>10</sup>	1616	45.25	127.7	510	4367			53.91	.461	39.92	5.63	547.11
10 <sup>25</sup>	1621	45.92	127.9	509	4356	↓	↓	53.90	.458	39.94	5.62	546.83
10 <sup>35</sup>	1625	45.40	127.9	506	4322	8°	N/A	53.92	.455	39.96	5.60	547.34
10 <sup>50</sup>	1636	45.69	127.8	516	4305			53.95	.453	39.99	5.59	547.82
11 <sup>05</sup>	1618	45.07	127.4	513	4330			53.98	.448	39.98	5.58	548.05
11 <sup>20</sup>	1623	45.25	127.2	516	4309			54.01	.440	39.97	5.57	548.38
11 <sup>35</sup>	1609	45.11	127.0	514	4315	↓	↓	54.07	.432	39.99	5.54	548.70

Engine SN: G2500455

Hours: 60,487.23

Cyls Cyl #: 2465

WMRE- Prairieview  
Wilmington, IL

## ENGINE PROCESS DATA

Engine # ENGINE #2  
Engine SN: \_\_\_\_\_  
Hours: \_\_\_\_\_

Date: 1/9/19  
Observer: AM

Time	KW	MAP	.MAT	Fuel Flow	Air Flow	A/F	BHP	CH4	O2	CO2	N2	BTU
12 <sup>00</sup>	1609	45.62	126.0	512	N/A	8°	N/A	54.12	.389	40.08	5.37	549.57
12 <sup>15</sup>	1618	45.79	126.2	513				54.16	.382	40.12	5.33	549.81
12 <sup>30</sup>	1604	45.88	126.4	510				54.22	.372	40.11	5.28	550.50
12 <sup>45</sup>	1615	45.53	126.2	511				54.21	.371	40.10	5.25	550.79
13 <sup>00</sup>	1618	45.64	126.0	514	↓	↓	↓	54.20	.370	40.09	5.26	550.61
13 <sup>10</sup>	1640	46.79	126.7	521	N/A	8°	N/A	54.21	.369	40.14	5.27	550.48
13 <sup>25</sup>	1624	46.51	126.5	520				54.20	.373	40.12	5.30	550.30
13 <sup>40</sup>	1637	46.68	126.7	522				54.18	.379	40.09	5.35	550.07
13 <sup>55</sup>	1634	46.57	127.0	521				54.15	.388	40.07	5.38	549.80
14 <sup>10</sup>	1643	46.65	127.4	519	↓	↓	↓	54.12	.396	40.06	5.40	549.65
14 <sup>25</sup>	1629	46.23	128.0	519	N/A	8°	N/A	54.11	.400	40.06	5.42	549.43
14 <sup>40</sup>	1610	46.39	128.3	518				54.12	.400	40.05	5.41	549.29
14 <sup>55</sup>	1623	46.17	127.8	515				54.12	.399	40.04	5.43	549.88
15 <sup>10</sup>	1635	45.94	127.2	517				54.14	.398	40.05	5.45	549.67
15 <sup>25</sup>	1622	46.53	127.2	518	↓	↓	↓	54.15	.397	40.03	5.44	549.50

ENGINE SN: GZ500470

HRS: 60,752.10

LMS Cyl Hr: 2382



LE- Prairieview  
Mington, IL

## ENGINE PROCESS DATA

Engine # ENGINE # 3  
 Engine SN: G2500471 Date: 1/9/19  
 Hours: 60,856.92 Observer: AM

Time	KW	MAP	.MAT	Fuel Flow	Air Flow	A/F	BHP	CH4	O2	CO2	N2	BTU
15 <sup>35</sup>	1619	45.31	125.1	507	N/A	8°	N/A	54.10	.402	40.04	5.45	549.33
15 <sup>50</sup>	1624	44.86	124.9	506				54.09	.400	40.01	5.44	549.77
16 <sup>05</sup>	1608	44.70	125.1	508				54.08	.399	40.03	5.46	549.98
16 <sup>20</sup>	1617	44.92	125.2	504				54.07	.401	40.05	5.47	549.09
16 <sup>35</sup>	1635	45.36	125.0	506	↓	↓	↓	54.08	.400	40.04	5.48	549.18
16 <sup>50</sup>	1629	45.58	124.9	508	N/A	8°	N/A	54.14	.398	40.06	5.50	548.80
17 <sup>05</sup>	1640	45.24	125.2	507				54.14	.398	40.04	5.49	549.03
17 <sup>20</sup>	1622	45.41	125.1	509				54.09	.401	40.02	5.48	549.47
17 <sup>35</sup>	1634	45.56	125.2	505				54.08	.402	40.02	5.49	549.11
17 <sup>50</sup>	1618	45.20	125.4	503	↓	↓	↓	54.07	.403	40.04	5.49	548.98
18 <sup>00</sup>	1605	44.91	124.9	506	N/A	8°	N/A	54.09	.398	40.03	5.47	549.16
18 <sup>15</sup>	1622	44.35	124.4	505				54.10	.392	40.03	5.46	549.32
18 <sup>30</sup>	1609	44.86	124.0	503				54.11	.389	40.05	5.45	549.45
18 <sup>45</sup>	1633	45.27	124.7	506				54.13	.387	40.03	5.47	549.77
19 <sup>00</sup>	1626	45.40	125.1	508	↓	↓	↓	54.14	.385	40.01	5.48	549.92

Engine SN: G2500471

Hours: 60,856.92

Gas Cyl #: #2377

Attachment 3

Analytical Results of 3 Landfill Gas Samples Taken 1.9.2019



**Saybolt**

A CGII tmUTDIIFIS tDI11'AIIT  
RMC Environmental Inc  
Rachel Chlcobmw 1t.1.

## Saybolt Petroleum Services

*A Core Laboratories  
Company*

201 Deerwood Glen Dr  
Deer Park, TX 77536  
2H I-47K-1300

Report Number : IJ071- 15314

Date Reported. 1/22/2019

Date Received 1115/2019

9226 N 2nd Street  
Machesney Park, IL 61115

## Analytical Report

Sample No.: 7661110      Sample ID LFG# J Eng#2      \_\_\_\_\_      Date Sampled 1/9/2019 8:30:00 AM

Test	Result	Units	Method	Date	Analyst
Sulfur, Total Volatile Ultimate Gas Analysis	14	mg/kg	ASTM D-6667	1/16/2019	CB
Hydrogen	0.13	Mol%	ASTM D-19 45	1/16/2019	KTN
Oxygen	0.43	Mol %			
Nitrogen	5.59	Mol%			
Carbon Dioxide	37.89	Mol%			
Methane	55.96	Mol %			
Ethane	<0.01	Mol%			
Propane	<0.01	Mol%)			
Isobutane	<0.01	Mol%			
n-Butane	<0.01	Mol%)			
Isopentane	<0.01	Mol%			
n-Pentane	<0.01	Mol%)			
Hexanes Plus	<0.01	Mol%			
Total	100.00	Mol %			
Molecular Weight	27.4	Ky Kg-molc	ASTM D-3588		
Molar Mass Ratio	0.94461				
Relative Density	0.94701				
Compressibility Factor	0.99705				
Gross Heating Value (Dry)	565.6	BTU/CF (Ideal)			
Gross Heating Value (Dry)	567.3	BTU/CF (Real)			
Net Heating Value (Dry)	509.3	81 U/CF (Ideal)			
Net Heating Value (Dry)	510.8	BTU/CF (Real)			
Factor @ 20°C & 29.92 in.	9339	dscf/mmBTU			
Pressure Base	14.696	psia			
Carbon Content	41.20	WT%	ASTM D-194 5		
Hydrogen Content	8.26	WT%			
Oxygen Content	44.82	WT%			
Nitrogen Content	5.12	wi -o/o			
Sulfur Content	<0.01	WT%			





**Saybolt**

A CORP. LAJDIAMBIU WIPA111  
RMC Environmental Inc  
Rachel Chleborowicz  
9226 N 2nd Street  
Machesney Park, IL 61115

## Saybolt Petroleum Services

*A Core Laboratories Company*

201 Urwood Glen Dr  
Deerfield, TX 77536  
281-478-1300

Report Number 13071-153,11  
Date Reported 1/22/2019  
Date Received 1/15/2019

## Analytical Report

Sample No.: 7661 J 11	SumJ>le JD LFG# 2 Eng# 1	J>:1tcSnmplcd 1/9/21119 12:00:00 PM				
Tcsl	Result	Units	Method	Date	Analyst	
Sulfur, Total Volatile	22	mg/kg	ASTM D-6667	1/16/2019	CB	
<b>Ultimuc Gas Analysis</b>						
Hydrogen	0.12	Mol%	ASTM D-1945	1/16/2019	KTN	
<b>Oxygen</b>	D.51	Mol%				
<b>Nitrogen</b>	<b>5.89</b>	Mol%				
Carbon Dioxide	37.14	Mol%				
Methane	56.34	Mol%				
Ethane	<0.01	Mol%				
Propane	<0.01	Mol%				
Isobutane	<0.01	Mol%				
n-Butane	<0.01	Mol%				
Isopentane	<0.01	Mol%				
n-Pentane	<0.01	Mol%				
Hexanes Plus	<0.01	Mol%				
Total	100.00	Mol%				
Molecular Weight	27.2	Kg/Kg-mole	ASTM D-3588			
Molar Mass Ratio	0.93910					
Relative Density	0.94145					
Compressibility Factor	0.99709					
Gross Heating Value (Dry)	569.4	BTU/CF (Ideal)				
Gross Heating Value (Dry)	571.1	BTU/CF (Real)				
Net Heating Value (Dry)	512.7	BTU/CF (Ideal)				
Net Heating Value (Dry)	514.2	BTU/CF (Real)				
Factor @ 20°C & 29.92 mmHg	9322	psi				
Pressure Base	14.696	psi				
Carbon Content	41.28	Wt %	ASTM D-1945			
Hydrogen Content	8.36	WT%				
<b>Oxygen Content</b>	44.29	WT%				
Nitrogen Content	6.07	Wf %				
Sulfur Content	<0.01	WT %				

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Page 2 orJ



Cecile Cogden  
Laboratory Supervisor

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conditions



**RMC  
Environmental  
L, Inc.**

**Chain of Custody Record**

9226 Nonh 2nd Sucet  
Machesney Park, IL 61115  
Direct IIS-378.6150 EFAX BIS-425-1 102

Client Contact		Project Manager:: Rachel Chleborowicz				Site Contact:			DATE: 1/10/19			COC No:			
RMC Environmental, Inc.		Td/Fu: 815-378-6150				Lab Contact:			Carrier: FEDEX			- I 0Y I COCs			
9226 North 2nd Street		Analysis Turnaround Time										Job No: 2019-10919			
Machesney Park, IL 61115		Calendar( C) or Work Days (W)										SOG No.			
815-376-6150		TAT If diff=1 mom B dow ---													
815425-1102		D 2 weeks													
ProjKt Name: WMRE-Prarlevlew		D 1 week													
Site: Wilmington, IL		D 2 days													
PO#		D 1 day													
Sample Identification		Sample Date	Sample Time	Cy!#	Matrb	lot Cont.							Sample Specific Notes:		
Plant # 1 Engine #2 - Fuel Sample		1/9/2019	830-11	2465	LFO	1	jc	jc	jc						
Plant #2- Engine# 1• Fuel Sample		1/9/2019	12-15:00	2381	LFG	1	x	x	x						
Plant #2- Engine #2- Fuel Sample		1/9/2019	6:00-19:0	1377	LFG	1	x	jc	x						
N															
Pracnation Used: 1• Ice, 2., HCl; 3• H?S04; 4..JINOJ; 5'-NaOH; 6- Other															
Possible Hazard Idmilitcatio,i													Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Ho;;zrd <input type="checkbox"/> Flom111able <input type="checkbox"/> Skin Irrflall <input type="checkbox"/> Pol.tanB <input type="checkbox"/> UnbiawnD													<input type="checkbox"/> Ret11m Ta Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive Far Months		
Special Instructions/QC luquin:ments & Comments: Coated Gas Bombs For Landfill Gu															
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time: f I		7.1			
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:					

Attachment 4

Midwestern Gas Transmission Company Part 8 – Gas Quality Specs

***Midwestern Gas Transmission Company Part 8,  
Section 2 FERC Gas Tariff Gas Quality and Pressure  
Volume No. 1 v. 4.0.0 superseding v. 3.0.0***

Issued: November 15, 2018  
Effective: December 15, 2018

**2. GAS QUALITY AND**

**PRESSURE**

**2.1 Standards**

The provisions set forth below shall apply to all gas delivered to Company by Customer:

(a) All gas shall have a Total Heating Value of not less than nine hundred sixty-seven (967) Btu's per cubic foot, and not more than eleven hundred (1100) Btu's per cubic foot.

(b) All gas shall be commercially free (at prevailing pressure and temperature in Company's pipeline) from objectionable odors, dust, hydrocarbon liquids, water and any other substance that might become separated from the gas in Company's facilities, and Customer shall furnish, install, maintain and operate such drips, separators, heaters, and other mechanical devices as may be necessary to effect compliance with such requirements (after having secured the prior approval of Company as to the design and construction of such facilities, which approval shall not be unreasonably withheld).

(c) All gas shall not contain more than twenty (20) grains of total sulphur, nor more than one fourth (1/4) of one grain of hydrogen sulphide per one hundred (100) cubic feet.

(d) All gas shall not contain more than two-tenths of one percent (0.2%) by quantity of oxygen and Customer shall make every reasonable effort to keep the gas free of oxygen.

(e) All gas shall not contain more than four percent (4%) by quantity of a combined total of carbon dioxide and nitrogen components; provided however, that the total carbon dioxide content shall not exceed three percent (3%) by quantity.

(f) The temperature of all gas shall not exceed one hundred twenty degrees (120°) Fahrenheit.

(g) All gas shall have been dehydrated by Customer for removal of entrained water present therein in a vapor state and in no event contain more than seven (7) pounds of entrained water per

million cubic feet; at a pressure base of fourteen and seventy-three hundredths (14.73) pounds per square inch and a temperature of sixty degrees (60°) Fahrenheit as determined by dew-point apparatus in accordance with procedures and equipment selected by Company on a reasonable basis.

### **2.2 Prior Approval of Gas Quality Facilities**

The design and construction of any facilities to be installed by any party, in order to comply with the quality specifications in Subsection 2.1 above, shall be approved by Company prior to such facilities being placed in service; such approval not to be unreasonably withheld.

### **2.3 Gas Quality Testing**

Tests to determine sulphur, hydrogen sulphide, oxygen, carbon dioxide and nitrogen content shall be made by approved standard methods in general use in the gas industry.

### **2.4 Refusal of Out of Quality Specification Gas**

As to gas which fails to meet the quality specifications set out in Subsection 2.1 above, or, if applicable, the quality specifications set out in the transportation agreement or applicable Rate Schedule, Company shall have the right to refuse to accept delivery of such gas and in the event Customer does not correct the quality deficiency within 48 hours Company may terminate all receipts under the transportation agreement involving the deficient gas. Nothing in this Section 2 shall limit Company's right to waive any quality specifications set forth in this Section 2, provided that Company's acceptance of non-conforming gas will not in the sole judgment of Company adversely impact Company's pipeline facilities, operations or deliveries. Company's decision to accept non-conforming gas shall be exercised on a not unduly discriminatory basis taking into account such factors including, but not limited to, the degree to which gas does not meet the quality specifications, prevailing operating conditions, and whether and to what extent Customer pairs nominations of non-conforming gas with nominations of gas meeting the quality specifications such that the Customer's combined nominations of gas can be blended to meet the quality specifications. Company's exercise of a waiver of any quality specifications shall not operate or be construed as a future waiver of the quality specifications, whether of a like or of a different character.

### **2.5 Reimbursement of Equipment or Repair Costs**

Notwithstanding the exercise by Company of the options in Subsection 2.4 above, Customer shall use its best efforts to correct any quality deficiency in the gas tendered for transportation. Further notwithstanding Company's election under Subsection 2.4 above, Customer shall reimburse Company for all expenses incurred in repairing damages to Company's facilities resulting from deliveries of gas which do not conform to the quality specifications set forth in Subsection 2.1 above. Company shall have the right to collect from all Customers delivering gas to Company at a common Receipt Point their pro rata share of the cost of any additional gas analysis and quality control equipment which Company, at its reasonable discretion, determines is required to be installed at such Receipt Point to monitor the quality of gas delivered. With respect to Customer subject to Rate Schedule(s) FT-A, FT-B, FT-C, FT-D, FT-GS, and/or IT, the collection shall be by means of an Incidental Charge.

## **2.6 Separation, Dehydration and Processing**

Company at its reasonable discretion may require that some or all of the gas to be transported be processed to remove liquid and liquefiable hydrocarbons prior to delivery to Company or may require evidence that satisfactory arrangements have been made for the removal of liquid and liquefiable hydrocarbons at a separation and dehydration and/or processing plant on Company's system. In the event separation and dehydration and/or processing is to occur after delivery of transportation gas to Company, Company and Customer shall determine a mutually agreeable charge for the transportation of liquid and liquefiable hydrocarbons.

## **2.7 Transfer Pressure**

Customer shall deliver gas to Company at the pressure required from time to time to enable the gas to enter Company's facilities at the Receipt Points, but the pressure of gas delivered into Company's system shall not exceed Company's maximum allowable operating pressure. Company shall deliver gas to Customer or Customer's designee at Company's line pressure existing at the Delivery Point(s), provided that the maximum pressure shall be Company's line pressure at the Point(s) of Delivery and the minimum pressure shall be 100 pounds per square inch gauge.

## **2.8 Posting of Gas Quality Data**

### **2.8.1 Required Posting**

Company shall provide on its Informational Postings Web Site daily average gas quality information for prior Gas Day(s), to the extent available, for location(s) that are representative of mainline gas flow. [4.3.90] The following are examples of gas quality attributes that could be included in the posting for the applicable Gas Day(s) and location(s) [4.3.90]:

- Heating Value
- Hydrocarbon Components (% of C1 - Cnn)
- Specific Gravity
- Water
- Nitrogen
- Carbon Dioxide
- Oxygen
- Hydrogen
- Helium
- Total Sulfur
- Hydrogen Sulfide
- Carbonyl Sulfide
- Mercaptans
- Mercury and/or other contaminants being measured
- Other pertinent gas quality information that is specified in Subsection 2.1 above of the General Terms and Conditions of Company's FERC Gas Tariff.

Data provided pursuant to NAESB WGQ Standard No. 4.3.90 shall be made available on

Company's Informational Postings Web Site for the most recent three-month period. Beyond the initial three-month period, the historical data shall be made available offline in accordance with regulatory requirements. [4.3.91] The information available for the identified location(s) shall be provided in a downloadable format. [4.3.90] Data provided pursuant to NAESB Standard No. 4.3.90 shall be provided in a tabular downloadable file as described by Company. The first row of the file shall contain the column headers and data shall begin on the second row of the file. In addition, one of the columns shall contain the applicable Gas Day. [4.3.92] Company shall provide on its Informational Postings Web Site a link to the natural gas quality provisions within the General Terms and Conditions of Company's FERC Gas Tariff. [4.3.89]

#### 2.8.2 Discretionary Posting

For any location(s), Company may, at its discretion, elect to provide gas quality information in addition to that specified in NAESB WGQ Standard No. 4.3.90. Company may choose how to provide the information. [4.1.40]

#### 2.8.3 Compliance with Gas Quality Requirements

In any event, compliance with gas quality requirements is in accordance with Subsection 2.1 of the General Terms and Conditions of Company's FERC Gas Tariff.

Attachment 5 RFP

Response Sheet

**Bid Let:** 11-21-19  
**Due:** 01-10-20, 10:00 a.m.  
**Open:** 01-10-20, 10:10 a.m.

**PROPOSAL FORM  
COUNTY OF WILL  
PURCHASING DEPARTMENT  
302 N. CHICAGO ST.  
JOLIET, IL. 60432**

**CONTRACT FOR  
#2020-Prairie View  
Landfill Gas Upgrading**

VENDOR NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_ FEIN # \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

CONTACT \_\_\_\_\_

PHONE \_\_\_\_\_ FAX \_\_\_\_\_ EMAIL \_\_\_\_\_

***THIS IS NOT AN ORDER***

<b>Agency Name and</b>	<b>WILL COUNTY</b>
<b>Delivery Address:</b>	<b>302 N CHICAGO STREET, JOLIET, IL 60432</b>
<b>For additional</b>	<b>KEVIN LYNN, PURCHASING DIRECTION</b>
<b>information contact:</b>	<b><a href="mailto:klynn@willcountyillinois.com">klynn@willcountyillinois.com</a></b>

DESCRIPTION	GRAND TOTAL
30% Conceptual Design Fee- Firm Fixed Price	\$
EPC Labor Fee- Estimated Not to Exceed (Labor fee for engineering, procurement and construction)	\$
EPC 1 <sup>st</sup> Year O&M Labor Fee- Estimated Not to Exceed (Labor fee for engineering, procurement and construction)	\$
EPC % Markup on Subcontractors & Equipment	FEE AS %
EPC Guaranteed Methane Recovery Rate	%
EPC Guaranteed Methane Uptime Percentage	%
Days from Notice to Proceed to Submittal of 30% Conceptual Design	DAYS:
Days from Notice to Proceed with Future EPC to Pipeline Injection	DAYS:

Signed By: \_\_\_\_\_ Title: \_\_\_\_\_



Attachment 6 Letter

From People's Gas

September 26, 2019

Eco Engineers  
Joe Cooney  
300 E. Locust Street Des  
Moines, IA 50309

RE: Response to your Request to Inject Gas into the Peoples Gas Piping System Dear Joe,

Thank you for taking the time to talk about your proposal today. As discussed, the WEC Energy Group has extensively reviewed and carefully considered the issue of biogas injection into its pipelines. At this time the Corporation is not accepting any proposals to inject biogas into any of its gas pipes.

The tariffs for the operating gas companies within WEC are set up for a distribution company, not a wholesale transmission company. Due to this, significant changes would be required to accommodate your request. The current Gas Supply Plan for Peoples Gas meets the needs of its customers therefore there is limited incentive to invest in changes necessary to allow the alternate gas supply you are proposing.

If you would like to discuss further, please feel free to contact me at 414-221-4578 or [dan.sande@we-energies.com](mailto:dan.sande@we-energies.com).

Sincerely,

Dan Sande, P.E.  
Manager – Gas & Electric Policy



Attachment 7

Will County, IL Prevailing Wage Rates

**PRIME CONTRACTOR CERTIFICATION:**

The undersigned hereby certifies that \_\_\_\_\_

Name of Company/Bidder

is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of the Criminal Code of 1961.

\_\_\_\_\_  
Name of Representative

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Note: A person who makes a false certificate commits a Class 3 Felony.

Sections 33E-3 and 33E-4 provide as follows:

**33E-3. Bid-rigging.** A person commits the offense of bid-rigging when he knowingly agrees with any person who is, or but for such agreement would be, a competitor of such person concerning any bid submitted or not submitted by such person or another to a unit of State or local government when with the intent that the bid submitted or not submitted will result in the award of a Contract to such person or another and he either (1) provides such person or receives from another information concerning the price or other material term or terms of the bid which would otherwise not be disclosed to a competitor in an independent non-collusive submission of bids or (2) submits a bid that is of such a price or other material term or terms that he does not intend the bid to be accepted.

Bid-rigging is a Class 3 felony. Any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from Contracting with any unit of State or local government. No corporation shall be barred from Contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to Contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation as provided in paragraph (2) of subsection (a) of Section 5-4 of this Code.

**33E-4 Bid rotating.** A person commits the offense of bid rotating when, pursuant to any collusive scheme or agreement with another, he engages in a pattern over time (which, for the purposes of this Section, shall include at least 3 Contract bids within a period of 10 years, the most recent of which occurs after the effective date of this amendatory Act of 1988) of submitting sealed bids to units of State or local government with the intent that the award of such bids rotates, or is distributed among, persons or business entities which submit bids on a substantial number of the same Contracts. Bid rotating is a Class 2 felony. Any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from Contracting with any unit of State or local government. No corporation shall be barred from Contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to Contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation as provided in paragraph (2) of subsection (a) of Section 5-4 of this Code.

**Bid Let:** 11-21-20  
**Due:** 01-10-20, 10:00 a.m.  
**Open:** 01-10-20, 10:10 a.m.

**Receipt of Addenda Form:**  
**COUNTY OF WILL**  
**PURCHASING DEPARTMENT**  
**302 N. CHICAGO ST.**  
**JOLIET, IL. 60432**

**CONTRACT FOR**  
**#2020-60 Prairie View**  
**Landfill Gas Upgrading**

VENDOR NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_ FEIN # \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

CONTACT \_\_\_\_\_

PHONE \_\_\_\_\_

FAX \_\_\_\_\_ EMAIL \_\_\_\_\_

ADDENDUM RECEIPT: Receipt of the following Addendum to the Bidding Documents is hereby acknowledged:

No. \_\_\_\_\_, dated \_\_\_\_\_, signed \_\_\_\_\_

ADDENDUM RECEIPT: Receipt of the following Addendum to the Bidding Documents is hereby acknowledged:

No. \_\_\_\_\_, dated \_\_\_\_\_, signed \_\_\_\_\_

ADDENDUM RECEIPT: Receipt of the following Addendum to the Bidding Documents is hereby acknowledged:

No. \_\_\_\_\_, dated \_\_\_\_\_, signed \_\_\_\_\_

ADDENDUM RECEIPT: Receipt of the following Addendum to the Bidding Documents is hereby acknowledged:

No. \_\_\_\_\_, dated \_\_\_\_\_, signed \_\_\_\_\_

**LATE BIDS CANNOT BE ACCEPTED!**

**Vendor Return Address:**

**SEALED BID DOCUMENT**

**BID #:** 2020-60 PRAIRIE VIEW LANDFILL GAS UPGRADING  
**DUE DATE:** 01/10/2020  
**DUE:** 10:00 A.M.

**DATED MATERIAL-DELIVER IMMEDIATELY**

**WILL COUNTY PURCHASING DEPARTMENT  
302 N. CHICAGO ST., 2<sup>ND</sup> FLOOR  
JOLIET, IL 60432**

PLEASE  
CUT OUT AND AFFIX THIS BID LABEL (ABOVE) TO  
THE OUTERMOST ENVELOPE OF YOUR SEALED BID TO  
HELP ENSURE PROPER DELIVERY!

**LATE BIDS CANNOT BE ACCEPTED!**