



Gas Sample Form No. 79-1210
Renewable Gas Interconnect Fact Sheet

Sheet 1

(N)

(N)

**Please Refer to Attached
Sample Form**

(Continued)

Advice 4366-G
Decision 20-12-031

Issued by
Robert S. Kenney
Vice President, Regulatory Affairs

Submitted January 20, 2021
Effective February 19, 2021
Resolution _____

RENEWABLE GAS INTERCONNECT FACT SHEET

Contact the Utility for additional information and submit completed forms at the following email address:

Please provide the following information regarding your potential project or expansion.

SECTION 1 - PROJECT AND CONTACT INFORMATION

COMPANY NAME: _____

COMPANY TYPE: Corporation Limited Liability Company
 General Partnership Limited Liability Partnership
 Limited Partnership Government Agency
 Other _____

COMPANY MAILING ADDRESS: _____

COMPANY TELEPHONE NUMBER: _____

COMPANY EMAIL ADDRESS: _____

COMPANY WEBSITE: _____

PROJECT NAME: _____

TAX ID: _____

BILLING ADDRESS: _____

CONTACT NAME: _____

CONTACT TITLE: _____

CONTACT TELEPHONE NUMBER: _____

CONTACT EMAIL ADDRESS: _____



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LOCATION OF PROJECT

Street address or intersection of cross-streets, city and county. If in undeveloped territory without streets, section range township, or GPS latitude/longitude coordinates:

ANTICIPATED START DATE, END DATE AND EXPECTED DURATION OF YOUR PROJECT IN YEARS

START DATE of COMMERCIAL OPERATIONS _____

END DATE of COMMERCIAL OPERATIONS: _____

EXPECTED DURATION IN YEARS: _____

FORECASTED OPERATING PROFILE

24 hours/day, 7 days/week 8 hours/day, 5 days/week

Other, please specify your forecasted working hours and days _____

Is there seasonal operation? Yes No

If yes, please explain: _____

FORECASTED MAXIMUM FLOW

Standard cubic feet per hour compliant gas delivery (Scf/h):

FORECASTED MINIMUM FLOW

Standard cubic feet per hour compliant gas delivery (Scf/h): _____



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PRESSURE REQUIREMENTS OR LIMITATIONS FOR YOUR FACILITY AND/OR EQUIPMENT

Requirements or limitations in pounds-per-square-inch gauge (psig): _____

Explain the basis for the limitation: _____

None

SOURCE OF GAS SUPPLY

Renewable Gas Yes No

Dry Gas Zone

Oil-associated

Liquefied Natural Gas

Dairy Farm

Waste Water Treatment Plant

Non-Hazardous Land Fill

Other

Additional Comments: _____

API Number (If Applicable): _____

Attach Site Drawings and/or Aerial Map of Project Site

SECTION 2 - ANTICIPATED GAS QUALITY

Please provide the list of gas constituents and compositions of the gas prior to gas-processing (raw gas) and after gas-processing (Renewable Gas Rule 29 compliant gas), if available. Analysis should include all applicable gas quality parameters in Renewable Gas Rule 29.

Analysis Date: _____					
List of Gas Constituents					
	Gas Constituent Name	Units	Expected Composition in Raw Gas	Expected Composition in Processed Gas	Notes
1	Methane	mole %			
2	Ethane	mole %			
3	Propane	mole %			
4	i-Butane	mole %			
5	n-Butane	mole %			
6	i-Pentane	mole %			
7	n-Pentane	mole %			
8	Hexane +	mole %			
9	Carbon Dioxide	mole %			
10	Nitrogen	mole %			
11	Oxygen	mole %			
12	Hydrogen Sulfide	ppm _v			
13	Total Inert Compounds	mole %			
14	Heating Value (Gross)	BTU/scf			
15	Wobbe Number				
16	Delivery Temperature	degrees F			
17	Hydrocarbon Dew Point	degrees F			
18	Water Content	lbs/MMscf			

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19	Total Sulfur (1)	grains S/100scf (ppm _v)			
20	Mercaptans (2)	ppm _v			
21	Sulfides (3)	ppm _v			
22	Tetrahydrothiophene	ppm _v			
23	Siloxanes	mg Si/m ³			
24	Ammonia	mole %			
25	Hydrogen	mole %			
26	Mercury	mg/m ³			
27	Biologicals (4)	count/scf			

(1) This includes COS and CS₂, hydrogen sulfide, mercaptans, and mono di and poly sulfides.

(2) Speciated, e.g., methyl mercaptans, ethyl mercaptans, butyl mercaptans, propyl mercaptans

(3) Speciated, carbonyl sulfide, dimethyl sulfide, dimethyl disulfide

(4) APB: Acid-producing Bacteria, SRB: Sulfate-reducing Bacteria, IOB: Iron-oxidizing Bacteria

Only complete those fields applicable to the source of raw product gas or feedstock gas for the project.

Analysis Date: _____					
List of Gas Constituents					
	Biogas Source	Gas Constituent Name	Units	Expected Composition in Raw Gas	Expected Composition in Processed Gas
21	Landfill	Arsenic	mg/m ³		
22	Landfill, Publicly Owned Treatment Works (POTW)	p-Dichlorobenzenes	ppm _v		
23	Landfill, Dairy, POTW	Ethylbenzene	ppm _v		
24	Landfill, Dairy	n-Nitroso-di-n-propylamine	ppm _v		
25	Landfill, POTW	Vinyl Chloride	ppm _v		
26	Landfill	Antimony	mg/m ³		
27	Landfill	Copper	mg/m ³		

28	Landfill	Lead	mg/m ³		
29	Landfill	Methacrolein	ppm _v		
30	Landfill, Dairy, POTW	Toluene	ppm _v		

SECTION 3 - RAW PRODUCT GAS OR FEEDSTOCK GAS SURVEY

What is the source of the gas? _____

What is the composition of the source (solids/liquids)? _____

For animal waste gas, what is the animal feed composition and what is applied (hoof and skin conditioning, cleaning), ingested or injected to the animal? Is it consistent or controlled?

What pesticides are used at the facility? _____

What chemicals are used or in contact from collecting, moving and processing of the waste?

What are the min/avg/max gas production rates (pre-processed gas) (in thousand standard cubic feet per day (MScf/d))?

PRE-PROCESSED GAS

	MScf/d Minimum	MScf/d Average	MScf/d Maximum
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

How does it vary over time? _____

What are the minimum, average and maximum gas sales rates (processed gas)?

PRE-PROCESSED GAS

	MScf/d Minimum	MScf/d Average	MScf/d Maximum
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

How does it vary over time on a daily or seasonal or ambient condition or other basis, hour by hour?

Is any part of the gas coming from another site? Yes No

If yes, please complete a Biogas Survey for each site.

If yes, list each site and the flow rates (or percentage) of the total at this meter.

Briefly describe the digestion process or attach a copy of the process flow diagram or schematic drawing showing the flow path of the gas generating equipment with the operating conditions (pressure in psig, temperature in degrees Fahrenheit, flow rate in MScf/hour or day).



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What chemicals or treatments are added to this process? _____

What process prevents bacteria and pathogens from entering the sales gas stream?

Briefly describe your gas treatment and gas processing or attach a copy of your process flow diagram or schematic drawing showing the flow path of the gas through processing equipment.

What process is used to remove CO₂ and/or H₂S, Sulfur? _____

What process is used to reduce the water content? _____

What process is used to reduce the hydrocarbon dewpoint? _____

What other solvents, solids and processes are being used on the gas stream? _____

What process is used to prevent solid/liquid carryover into the gas stream?

What process is used to remove siloxanes? _____

Have there been any contaminants measured in the gas, air/emission, solid and liquid stream at the facility?

Yes No

If yes, please list results and the test frequency.

What parameters or monitoring equipment are used to control the gas quality limits?
