REGIONAL REVIEW FINDING

Atlanta Regional Commission • 40 Courtland Street NE, Atlanta, Georgia 30303 • ph: 404.463.3100 • fax:404.463.3105 • www.atlantaregional.com

DATE: May 22 2013 **ARC REVIEW CODE**: R1305061

TO: Mayor Randal Mills
ATTN TO: Marvin Flannigan, Director of Planning and Inspection Services
FROM: Douglas R. Hooker, Executive Director
RE: Development of Regional Impact Review

The Atlanta Regional Commission (ARC) has completed regional review of the following Development of Regional Impact (DRI). Below is the ARC finding. The Atlanta Regional Commission reviewed the DRI with regard to conflicts to regional plans, goals, and policies and impacts it might have on the activities, plans, goals, and policies of other local jurisdictions and state, federal, and other agencies. The finding does not address whether the DRI is or is not in the best interest of the local government.

Name of Proposal: **Conyers ReNewable Power**
Submitting Local Government: City of Conyers
Review Type: Development of Regional Impact **Date Opened**: May 6 2013 **Date Closed:** May 22 2013

Description: This project is a proposed Anaerobic Digestion Plan, located on 8 acres in the City of Conyers along old Covington Road. The facility will process pre and post-consumer waste and recycle the material into biogas.

FINDING: After reviewing the information submitted for the review, and the comments received from affected agencies, the Atlanta Regional Commission finding is that the DRI is in the best interest of the Region, and therefore, of the State.

Comments: Regional Context:
According to the ARC Unified Growth Policy Map (UGPM) and the Regional Development Guide (RDG), the proposed Conyers ReNewable Power is located within the Developing Suburbs area of the region.

The RDG states that Developing Suburbs are areas in the region where suburban development has occurred and the conventional development pattern is present but not set. These areas are characterized by limited commercial and residential development. These areas represent the extent of the urban service area, and the region's first attempts at suburban smart growth can be found in these areas. The region should strive to develop these areas in a more sustainable way than the existing development model. To this end, there is a need for additional preservation of critical environmental locations, as well as agricultural and forest uses adjacent to rural areas.

Limited existing infrastructure in these areas will constrain the amount of additional growth that is possible. Some transportation improvements may be needed within these developing suburbs, but care should be taken not to spur unwanted growth.

Comments:
The proposed development is located in an area that is rapidly changing and is becoming dominated by industrial uses. It is important to promote compatible uses where possible, as well as identify and mitigate potential land use conflicts as the area continues to develop.

The applicant has indicated that a majority of the truck trips bringing material to the site will come from a neighboring property via direct driveway access between the two sites. This direct access limits the amount of truck trips using the surrounding road network, thus limiting the traffic impacts.

See additional comments from ARC environmental staff

THE FOLLOWING LOCAL GOVERNMENTS AND AGENCIES RECEIVED NOTICE OF THIS REVIEW:

ARC LAND USE PLANNING
ARC DATA RESEARCH
GEORGIA DEPARTMENT OF NATURAL RESOURCES
ROCKDALE COUNTY
ARC TRANSPORTATION PLANNING
ARC AGING DIVISION
GEORGIA DEPARTMENT OF TRANSPORTATION
ARC ENVIRONMENTAL PLANNING
GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS
GEORGIA REGIONAL TRANSPORTATION AUTHORITY

If you have any questions regarding this review, Please contact Jon Tuley at (404) 463-3307 or jtuley@atlantaregional.com. This finding will be published to the ARC website.

The ARC review website is located at: http://www.atlantaregional.com/land-use/planreviews.

CONYERS RENEWABLE POWER WASTE TREATMENT FACILITY DRI
City of Conyers
Natural Resources Division Review Comments
April 30, 2013

Watershed Protection and Stream Buffers

The property is located in the Yellow River watershed, which is not a water supply watershed for any jurisdiction in the Atlanta Region or the Metropolitan North Georgia Water Planning District. The USGS coverage for the project area shows no streams on or adjacent to the project site. Any unmapped streams on the property may be subject to the City of Conyers Stream Buffer Ordinance, which requires a 75-foot buffer along both banks of affected streams. Any state waters on the property are subject to the State 25-foot Erosion and Sedimentation Act buffer.

Stormwater / Water Quality

The project should adequately address the impacts of the proposed development on stormwater runoff and downstream water quality. During construction, the project should conform to the relevant state and federal erosion and sedimentation control requirements. After construction, water quality will be impacted due to polluted stormwater runoff. ARC has estimated the amount of pollutants produced after the construction of the entire proposed project as presented on the submitted site plan. These estimates are based on some simplifying assumptions for typical pollutant loading factors (lbs/ac/yr). The loading factors are based on the results of regional storm water monitoring data from the Atlanta Region with impervious areas based on estimated averages for land uses in the Atlanta Region. Actual pollutant loads will vary with the actual impervious area and percentage. The following tables summarize the results of the analysis:

Estimated Pounds of Pollutants Per Year

Land Use	Land Area (ac)	Total Phosphorus	Total Nitrogen	BOD	TSS	Zinc	Lead
Heavy Industrial	8.00	11.60	153.92	1024.00	6360.00	13.28	1.68
TOTAL	8.00	11.60	153.92	1024.00	6360.00	13.28	1.68

Total Impervious = 80%

In order to address post-construction stormwater runoff quality, the project should implement stormwater management controls (structural and/or nonstructural) as found in the Georgia Stormwater Management Manual (www.georgiastormwater.com) and meet the stormwater management quantity and quality criteria outlined in the Manual. Where possible, the project should utilize the stormwater better site design concepts included in the Manual.

BOARD OF COMMISSIONERS
RICHARD A. ODEN, CHAIRMAN & CEO
OZ NESBITT, SR., COMMISSIONER POST I
JANICE VANNESS, COMMISSIONER POST II

DEPARTMENT OF PLANNING & DEVELOPMENT
MARSHALL W. WALKER, DIRECTOR
Phone: (770) 278-7100
Fax (770) 785-6968

May 17, 2013

Jon Tuley, AICP
Principal Planner
Atlanta Regional Commission

RE: DRI 2346 – Conyers ReNewable Power

Jon,

Staff of the Department of Planning and Development coordinated the review of the proposed anaerobic digestion plant with other departments of Rockdale County.

Planning and Zoning, Environmental Health and Water Resources do not anticipate the project to have a significant impact on our community. Fire and Transportation have not submitted comments at this time.

Should you have any questions, please do not hesitate to contact us.
Cordially,

Catherine Mercier, AICP, LEED-AP
Rockdale County Planner
958 Milstead Avenue
Conyers, Georgia 30012
planning@rockdalecounty.org
direct: 770 278-7140

REGIONAL REVIEW NOTIFICATION

Atlanta Regional Commission • 40 Courtland Street NE, Atlanta, Georgia 30303 • ph: 404.463.3100 • fax:404.463.3105 • www.atlantaregional.com

DEVELOPMENT OF REGIONAL IMPACT
REQUEST FOR COMMENTS

Instructions: The project described below has been submitted to this Regional Development Center for review as a Development of Regional Impact (DRI). A DRI is a development of sufficient project of sufficient scale or importance that it is likely to have impacts beyond the jurisdiction in which the project is actually located, such as adjoining cities or neighboring counties. We would like to consider your comments on this proposed development in our DRI review process. Therefore, please review the information about the project included on this form and give us your comments in the space provided. The completed form should be returned to the RDC on or before the specified return deadline.

Preliminary Findings of the RDC: **Conyers ReNewable Power** *See the Preliminary Report.*

Comments from affected party (attach additional sheets as needed):

Per the Georgia Department of Transportation office of Planning's review, the Conyers ReNewable Power DRI does not appear to affect any GDOT projects currently programmed in the vicinity of the development.

Individual Completing Form:
Julia Billings

Local Government:

Department:
Georgia Dept. of Transportation, office of planning

Telephone: (404) 631-1774

Signature: Julia Billings

Date: 5-7-13

Please return this form to:
Jon Tuley, Atlanta Regional Commission
40 Courtland Street NE
Atlanta, GA 30303
Ph. (404) 463-3307 Fax (404) 463-3254
jtuley@atlantaregional.com

Return Date: *May 21 2013*

Jonathan Tuley

From: Hood, Alan C. <achood@dot.ga.gov>
Sent: Tuesday, May 07, 2013 6:17 PM
To: Jonathan Tuley
Cc: Comer, Carol; Cevallos, Peter Paul Jr.; Cobb, Nancy C.; Sands, Carla Jo; Doyle, Danny; Vincent Passariello
Subject: Re: DRI Review Notification - Conyers ReNewable Power (DRI #2346)

Jon,

The proposed development in the City of Conyers, of the Conyers ReNewable Power Anaerobic Digestion Plan, will process pre and post-consumer waste and recycle the material into biogas. It is approximately 7.5 miles west of the Covington Municipal Airport (CVC), and is located outside of any of the airport's FAA surfaces and compatible land use areas, and does not appear to impact the airport.

However, if the proposed project's vertical construction or equipment exceeds 200ft above ground level, an FAA Form 7460-1 must be submitted to the Federal Aviation Administration. That may be done online at https://oeaaa.faa.gov/oeaaa/external/portal.jsp. The FAA must be in receipt of the notification, no later than 45 days prior to construction. The FAA will evaluate the potential impact of the project on protected airspace associated with the airports and advise the proponent if any action is necessary.

I have copied Vincent Passariello with the Covington Municipal Airport on this email.

Thank you for the opportunity to comment on the proposed development.

Alan Hood | Airport Safety Data Program Manager
Georgia Department of Transportation - Aviation Programs
600 West Peachtree Street, N.W. | 9th Floor |Atlanta, Georgia 30308
T: 404-631-1343| F: 404-631-1414| M: 404-660-3394 | E: achood@dot.ga.gov

View our website at http://www.dot.ga.gov/aviation

On May 6, 2013, at 10:26 PM, "Jonathan Tuley" <JTuley@atlantaregional.com> wrote:

Development of Regional Impact Request for Comments

This e-mail serves as notice that the ARC staff has begun the review for Conyers ReNewable Power, DRI #2346. We request that you or a member of your staff review the attached preliminary report and provide comments to ARC by Tuesday, May 21, 2013.

This project is a proposed Anaerobic Digestion Plan, located on 8 acres in the City of Conyers along old Covington Road. The facility will process pre and post-consumer waste and recycle the material into biogas.

Review opened: 05-06-13
Comments Due: 05-21-13
Review will close on or before: 05-26-13

For more information regarding the DRI processes, information needed for the review or other DRI's reviewed by ARC, please see the DRI website<http://www.atlantaregional.com/html/332.aspx>.

Please let me know if you have any questions about the review.

Jon Tuley, AICP
Principal Planner

Atlanta Regional Commission
regional impact + local relevance

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Atlanta, Georgia 30303-2538
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jtuley@atlantaregional.com<mailto:jtuley@atlantaregional.com>
atlantaregional.com<http://www.atlantaregional.com/>

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Get connected on LinkedIn<http://www.linkedin.com/groups?gid=4240534&trk=myg_ugrp_ovr> »

_____

<Preliminary Report - Conyers ReNewable Power (DRI 2346).pdf>



Anaerobic Digestion Information
First Generation Energy, LLC

CONFIDENTIAL

March 2013

1

TECHNOLOGY OVERVIEW:

EISENMANN's proprietary ***BIOGAS-GW High Solids Anaerobic Digestion*** process technology efficiently converts organic waste into methane and carbon dioxide rich biogas without the use of fossil fuels. These process outputs can be used in place of natural gas in the production of electricity, as a transportation fuel alternative, and as a nutrient-rich soil amendment for commercial and residential agricultural and horticultural applications. Almost any organic material can be processed using anaerobic digestion, including biodegradable waste materials such as waste paper, grass clippings, leftover food, sewage and animal waste.

The process of anaerobic digestion takes place naturally in "anaerobic environments" (e.g., landfills), where necessary microorganisms are present to break down waste material. However, without the institution of recovery system to capture the gas outflow, all valuable biogas is lost into the atmosphere. These outflows can also result in the emission of harmful greenhouse gases that are damaging to the environment.

As diagramed below, the GA Plant will consist of the following:

- 4 Port Receiving Building
- 4 Modular Plug Flow Digesters (264,200 gallons tanks each) for processing organic waste
- 1 Post Digester (1,300,000 gallons) for storing and processing biogas and liquid soil amendment for shipment
- Solids Separation Equipment and CHP Units

Figure 5: 3D Isometric Site Rendering:

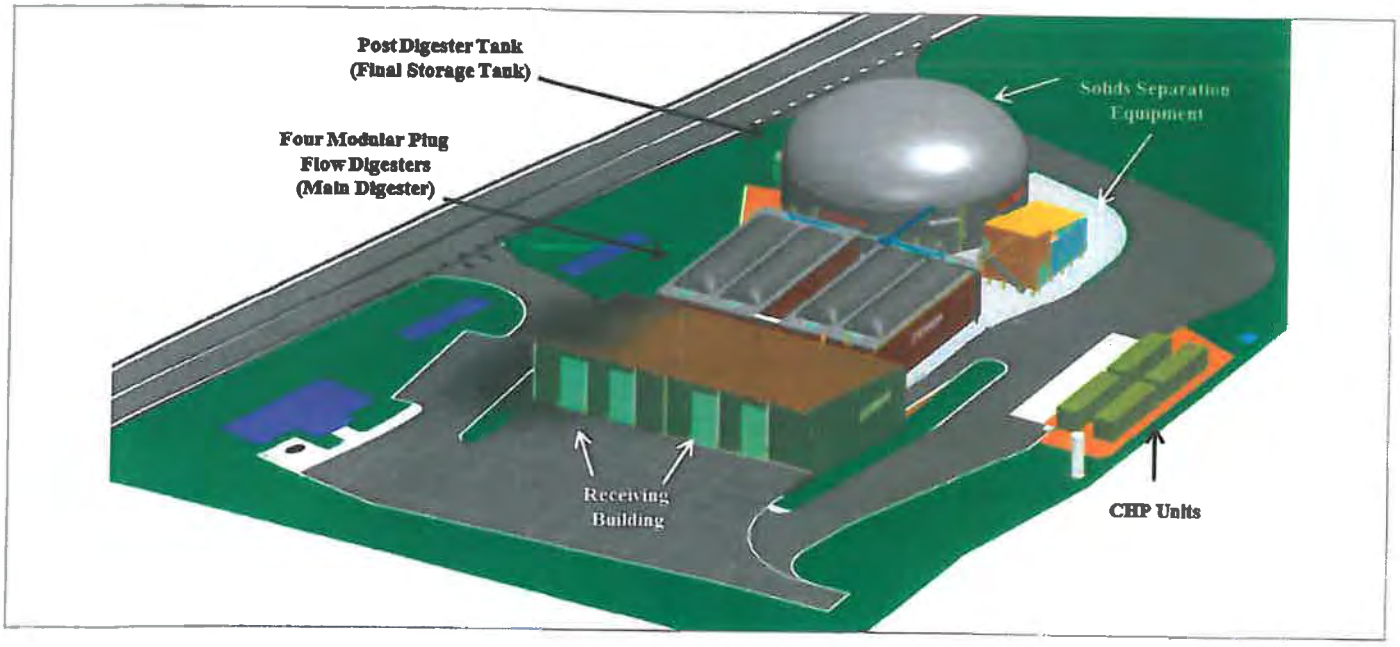
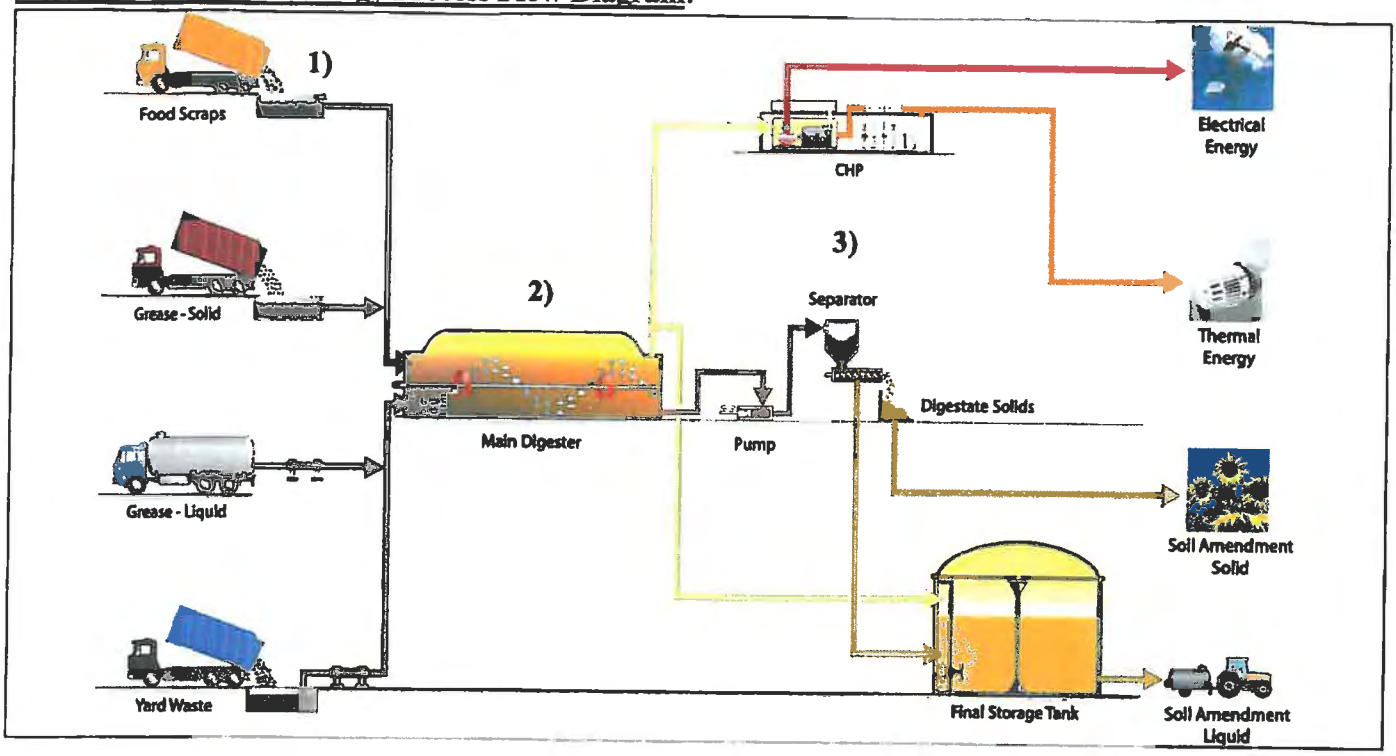


Figure 12: Waste-to-Energy Process Flow Diagram:



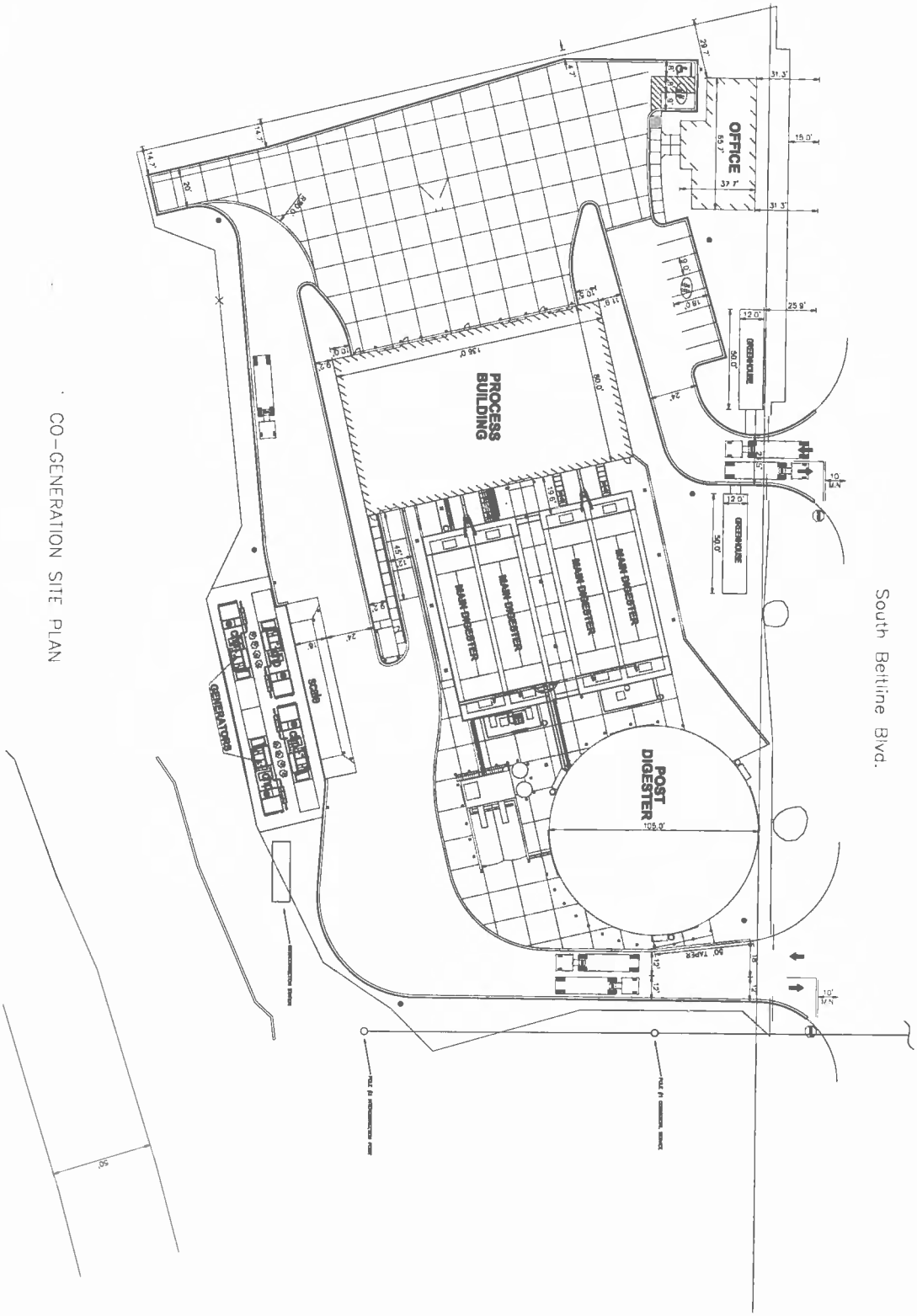
Process Flow Summary:

1) Green waste substrates are delivered via truck to the ***Receiving Building***, which is equipped with seven receiving areas, including: two liquid material tanks with hose connections; two grease trap receiving bins; two food waste receiving bins; and one yard waste receiving bin. The Receiving Building provides ample storage capacity so multiple trucks can unload their waste directly into the bin at the same time. **The waste receiving system is critical during EISENMANN's proprietary process, since it screens, prepares and blends the substrates in order to provide the desired feedstock for the *Main Digesters*.** The system's bins and tanks utilize load cells and flow meters to regulate the appropriate amount of material into each Main Digester. The digesters are continuously fed with organic material during a typical operating shift.

2) In the Main Digester, the material is mixed to ensure homogenous blending of substrates and microbial culture while assisting in the release of biogas. Hot water is circulated through heating coils in the Main Digester to maintain an appropriate process temperature. The digester vessel is properly sized in order to achieve the necessary residence time for the optimal production of biogas.

3) The mixture leaving the Main Digesters is pumped to the Solid / Liquid Separator Unit. Solids are pressed into a wet cake and the remaining liquid stream is directed to the ***Post Digester Tank*** (or the ***Final Storage Tank***). The Post Digester Tank is designed with a double membrane roof so it can yield ample biogas storage capacity. The biogas quality and flow is constantly monitored and tracked to ensure consistency in the mix. The biogas travels from the Post Digester Tank to a condensate trap before being routed to the ***Combined Heat and Power Units*** (***CHP Units***). The CHP Units convert the biogas to electrical power, which is sent to the utility grid and/or thermal energy. A portion of the biogas is scrubbed to pipeline quality and injected into the natural gas pipeline or compressed and marketed as Renewable Compressed

Natural Gas (RNG) for use as transportation fuel. Any condensed moisture from the biogas is captured in the trap and re-directed back to the Post Digester Tank for further use.



CO-GENERATION SITE PLAN

Project Name	BIO-DIESEL CO-GENETATION PLANT
Drawing Title	SITE PLAN
Commission No.	
Date	01/11/08
Scale	1/8"=1'-0"
Drawn By	HOL
Drawing No.	E2
Sheet	2 OF 2

HARVEY O. LUCAS JR. PE
2214 DEVINE STREET
COLUMBIA, SC 29205
tel. 803.748.7760 lucasho2@yahoo.com

Date	Revisions	By

N

0 250 500 1,000 Feet

April 23, 2013
Project No. 13137-2122

+/- 8 Acre Site
Located Near the Intersection of
Old Covington Road and Aldrin Drive
City of Conyers, Rockdale County, Georgia

ALLIANCE CONSULTING ENGINEERS

Prepared By: Alliance Consulting Engineers, Inc.

FIRST GENERATION ENERGY

Mrs. Laura Beall, AICP
Georgia Regional Transportation Authority
245 Peachtree Center Avenue, NE Suite 800
Atlanta, Georgia 30303-1223

RE: Conyers Renewable Power Facility Site

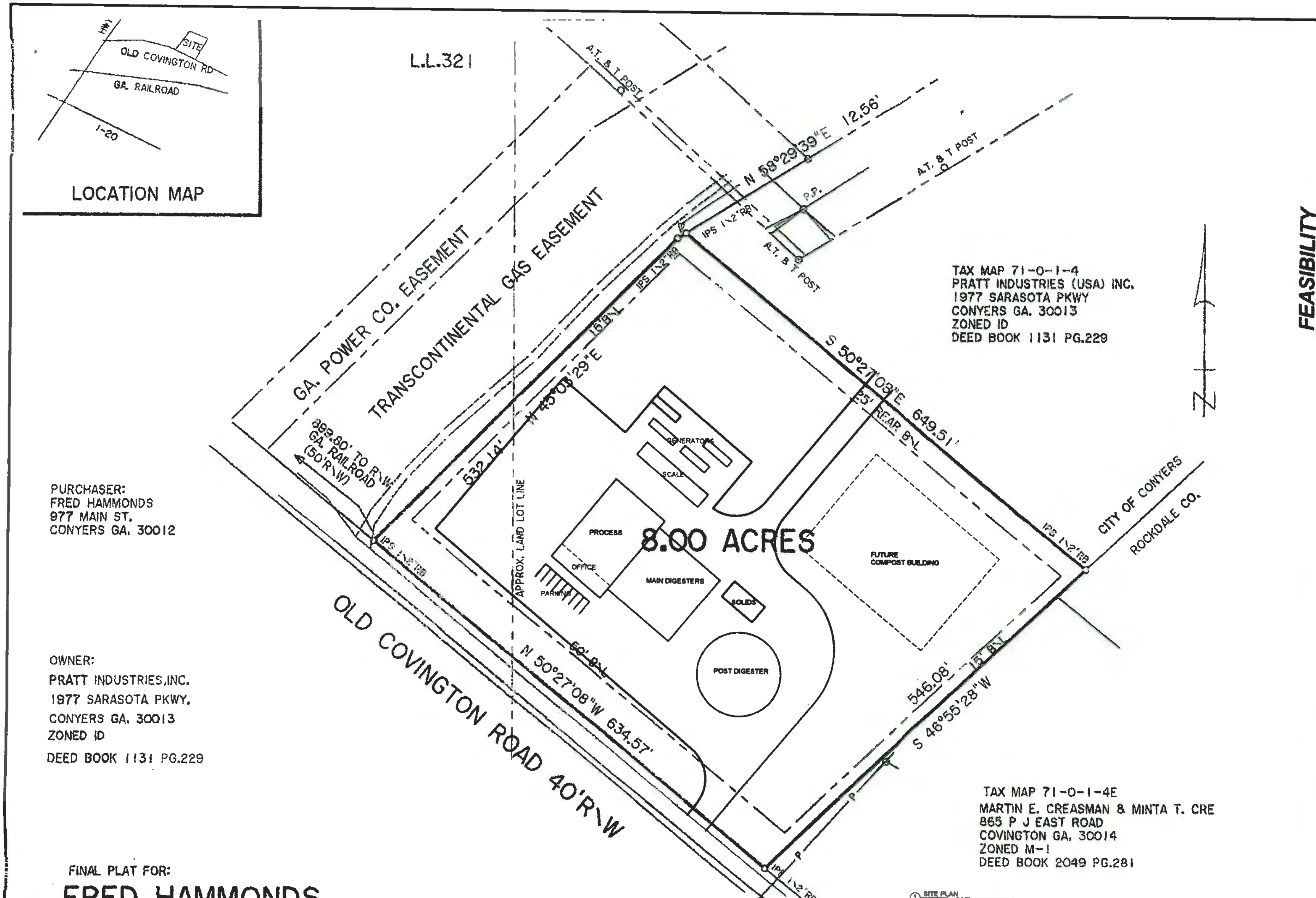
Mrs. Beall,

I hope this finds you well. It was a pleasure to meet you at Atlanta Regional Commission office this passed Thursday.
As I stated at our meeting, the estimated truck traffic count to our facility is anticipated to have between 12-15 trucks a day, on a six day week schedule. There will be 5 employees at the site during the work week, but with varied schedules resulting in roughly 3(three) employees being onsite at any given time. I have attached a sketch site plan along with this letter for your file. Please feel free to contact me at 803.920.9541 , if any additional information is needed. Thank you in advance for all your time and efforts on behalf of our project in the City of Conyers.

Thank you very much,

Daniel J. Rickenmann

PO Box 50734
Columbia, SC 29260
803.622.2813



FEASIBILITY

DRAWINGS ARE DIAGRAMMATIC ONLY AND HAVE NOT BEEN REVIEWED FOR CODE.

BOBBITT

APPROVAL DATE

COORDINATOR: JEFF FORD

DRAWN BY: JGF

CHK BY: -

FIRST GENERATION
OLD COVINGTON ROAD
CONYERS, GEORGIA

24 X 36 1" = 50'-0"

4/24/13

CONCEPT SITE

A1
OF 1

Developments of Regional Impact

DRI #2346

DEVELOPMENT OF REGIONAL IMPACT
Initial DRI Information

This form is to be completed by the city or county government to provide basic project information that will allow the RDC to determine if the project appears to meet or exceed applicable DRI thresholds. Refer to both the Rules for the DRI Process and the DRI Tiers and Thresholds for more information.

Local Government Information

Submitting Local Government:	Conyers
Individual completing form:	Marvin D. Flanigan
Telephone:	770-929-4280
E-mail:	marvin.flanigan@conyersga.com

*Note: The local government representative completing this form is responsible for the accuracy of the information contained herein. If a project is to be located in more than one jurisdiction and, in total, the project meets or exceeds a DRI threshold, the local government in which the largest portion of the project is to be located is responsible for initiating the DRI review process.

Proposed Project Information

Name of Proposed Project:	Conyers ReNewable Power
Location (Street Address, GPS Coordinates, or Legal Land Lot Description):	1718 Old Covington Road Land Lot 324 16th District
Brief Description of Project:	This will be an Anaerobic Digester Facility that will convert urban organics into bio-gas that will then be converted into electricity through a combined heat and power unit that will deliver electricity the to the grid.

Development Type:

○ (not selected)	○ Hotels	○ Wastewater Treatment Facilities
○ Office	○ Mixed Use	○ Petroleum Storage Facilities
○ Commercial	○ Airports	○ Water Supply Intakes/Reservoirs
○ Wholesale & Distribution	○ Attractions & Recreational Facilities	○ Intermodal Terminals
○ Hospitals and Health Care Facilities	○ Post-Secondary Schools	○ Truck Stops
○ Housing	◉ Waste Handling Facilities	○ Any other development types
○ Industrial	○ Quarries, Asphalt & Cement Plants	

If other development type, describe:

Project Size (# of units, floor area, etc.):	This facility will process 48,000 metric tons of organic material that will in return produce roughl
Developer:	First Generation Energy, LLC John S. Hill, Principal
Mailing Address:	P.O. Box 6353
Address 2:	
	City:Columbia State: SO Zip:29260
Telephone:	803-728-5200
Email:	jhill@firstgenenergy.com
Is property owner different from developer/applicant?	(not selected) Yes No
If yes, property owner:	
Is the proposed project entirely located within your local government's jurisdiction?	(not selected) Yes No
If no, in what additional jurisdictions is the project located?	
Is the current proposal a continuation or expansion of a previous DRI?	(not selected) Yes No
If yes, provide the following information:	Project Name:
	Project ID:
The initial action being requested of the local government for this project:	Rezoning Variance Sewer Water Permit Other
Is this project a phase or part of a larger overall project?	(not selected) Yes No
If yes, what percent of the overall project does this project/phase represent?	75 Percent
Estimated Project Completion Dates:	This project/phase: September 2014 Overall project: September 2016

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Developments of Regional Impact

DRI #2346

DEVELOPMENT OF REGIONAL IMPACT
Additional DRI Information

This form is to be completed by the city or county government to provide information needed by the RDC for its review of the proposed DRI. Refer to both the Rules for the DRI Process and the DRI Tiers and Thresholds for more information.

Local Government Information

Submitting Local Government:	Conyers
Individual completing form:	Marvin D. Flanigan
Telephone:	770-929-4280
Email:	marvin.flanigan@conyersga.com

Project Information

Name of Proposed Project:	Conyers ReNewable Power
DRI ID Number:	2346
Developer/Applicant:	First Generation Energy, LLC John S. Hill, Principal
Telephone:	803-728-5200
Email(s):	jhill@firstgenenergy.com

Additional Information Requested

Has the RDC identified any additional information required in order to proceed with the official regional review process? (If no, proceed to Economic Impacts.)	(not selected) Yes No
If yes, has that additional information been provided to your RDC and, if applicable, GRTA?	(not selected) Yes No

If no, the official review process can not start until this additional information is provided.

Economic Development

Estimated Value at Build-Out:	$28,000,000
Estimated annual local tax revenues (i.e., property tax, sales tax) likely to be generated by the proposed development:	$145,000
Is the regional work force sufficient to fill the demand created by the proposed project?	(not selected) Yes No
Will this development displace any existing uses?	(not selected) Yes No

If yes, please describe (including number of units, square feet, etc):

Water Supply

Name of water supply provider for this site:	Rockdale County Water Resources
What is the estimated water supply demand to be generated by the project, measured in Millions of Gallons Per Day (MGD)?	Estimated water usage is 20,000 gallons per day.
Is sufficient water supply capacity available to serve the proposed project?	(not selected) Yes No
If no, describe any plans to expand the existing water supply capacity:	
Is a water line extension required to serve this project?	(not selected) Yes No
If yes, how much additional line (in miles) will be required?	

Wastewater Disposal

Name of wastewater treatment provider for this site:	Rockdale County Water Resources
What is the estimated sewage flow to be generated by the project, measured in Millions of Gallons Per Day (MGD)?	Proposed facility will have two restrooms and showers.
Is sufficient wastewater treatment capacity available to serve this proposed project?	(not selected) Yes No
If no, describe any plans to expand existing wastewater treatment capacity:	
Is a sewer line extension required to serve this project?	(not selected) Yes No
If yes, how much additional line (in miles) will be required?	

Land Transportation

How much traffic volume is expected to be generated by the proposed development, in peak hour vehicle trips per day? (If only an alternative measure of volume is available, please provide.)	Traffic volume is expected at 10 to 15 trucks per day and 5 employee vehicles per day.
Has a traffic study been performed to determine whether or not transportation or access improvements will be needed to serve this project?	(not selected) Yes No
Are transportation improvements needed to serve this project?	(not selected) Yes No
If yes, please describe below:	

Solid Waste Disposal

How much solid waste is the project expected to generate annually (in tons)?	Less than 500 tons annually.
Is sufficient landfill capacity available to serve this proposed project?	(not selected) Yes No
If no, describe any plans to expand existing landfill capacity:	
Will any hazardous waste be generated by the development?	(not selected) Yes No
If yes, please explain:	

Stormwater Management

What percentage of the site is projected to be impervious surface once the proposed development has been constructed?	An estimated 1.5 acres (19%) will be dedicated to impervious surface.

Describe any measures proposed (such as buffers, detention or retention ponds, pervious parking areas) to mitigate the project's impacts on stormwater management:Proposed development shall comply with the drainage requirements as specified in both the City of Conyers Subdivision Regulations and the Soil Erosion and Water Quality Regulations.

Environmental Quality

Is the development located within, or likely to affect any of the following:

1. Water supply watersheds?	(not selected) Yes No
2. Significant groundwater recharge areas?	(not selected) Yes No
3. Wetlands?	(not selected) Yes No
4. Protected mountains?	(not selected) Yes No
5. Protected river corridors?	(not selected) Yes No
6. Floodplains?	(not selected) Yes No
7. Historic resources?	(not selected) Yes No
8. Other environmentally sensitive resources?	(not selected) Yes No

If you answered yes to any question above, describe how the identified resource(s) may be affected:

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