City of Ansonia

253 Main Street
Ansonia, Connecticut 06401

ENERGY IMPROVEMENT DISTRICT BOARD

January 23, 2013

Special Meeting

Present: Frank Tyszka, Chairman
Steve Blume
David Knapp
James Prestiano

Others Present: Mayor James Della Volpe
Kevin Blake, Corporation Counsel
Tara Kolakowski, Government Liaison Officer
Linda Gentile, State Repr.

The Special Meeting of the Energy Improvement District Board was called to order at 6:00 p.m. by Chairman Tyszka.

All present rose and pledged Allegiance to the Flag.

The secretary called the roll. There was a quorum present.

Chairman Tyszka stated that there will be a presentation this evening and at the end of the presentation he will open the meeting to the public for questions.

Mr. Blume made a motion to begin the Public Informational Meeting on the proposed Ansonia Organic Recycling & Energy Anaerobic Digestion Facility. Mr. Prestiano seconded. All in favor, so carried.

This public hearing was taped and will be typed verbatim by Post Reporting. The minutes will be attached when received.

Chairman Tyszka introduced Tom Brayman, Greenpoint Energy Partners. The following were in attendance for the presentation:

Tom Brayman, Greenpoint Energy Partners
Chris Timbrell, Greenpoint Energy Partners
Dan Mori, PE, CEM, Honeywell
Wallace Reinecke, IDEA (Innovative Design Engineering Associates Inc.)
Thorsten Winkler, BDI – BioEnergy International AG

Chairman Tyszka stated that those in attendance should take notes and pay attention to the presentation so that they will be informed. He stated Greenpoint will make their presentation and then there will be a public session for questions.

Mr. Brayman reviewed the proposal via a slide presentation. He said that they have started the process with the State of Conn. but have not filed anything yet.

Copy of the slide presentation is attached and on file in the Town Clerk's office.

Mr. Brayman concluded his presentation and opened the meeting to the public.

The following spoke:

1. Natalie Biasucci
   57 Rockwood Ave.
   Ansonia, CT 06401

2. Scott Nihill, Alderman
   6 Berkshire Road
   Ansonia, CT 06401

3. Fran DiGiorgi
   Ansonia, CT 06401

4. Marie Dirienzo
   Ansonia, CT 06401

5. Greg Patacky
   N. State St.
   Ansonia, CT 06401

6. Linda Gentile, State Repr.
   Hodge Ave.
   Ansonia, CT 06401

7. Robert Turschman
   40 Hotchkiss Terrace
   Ansonia, CT 06401

8. Andrew Adamchuk
   Hill Street
   Ansonia, CT 06401

9. Noel Lafayette

10. Frank Pergola
    Moulthrop Street
    Ansonia, CT 06401

11. Einar Johnson
    (family owns property in the grid area)
    Bethany, CT

12. David Cassetti
    High Acres Road
    Ansonia, CT 06401

13. Tara Kolakowski
    14 Farrel Drive
    Ansonia, CT 06401

14. Rita St. Jacques
    16 Myrtle Ave.
    Ansonia, CT 06401

15. Joseph Jeanette, Alderman
    Grace Lane
    Ansonia, CT 06401

16. Joan Radin, Alderwoman
    Wakelee Ave.
    Ansonia, CT 06401

17. Donna Lindgren
    81 Prindle Ave.
    Ansonia, CT 06401

18. Bart Flaherty
    28 Pinecrest Ave.
    Ansonia, CT 06401

19. Charles Stowe, Alderman
    23 Granite Terrace
    Ansonia, CT 06401

20. Jerome Fainer, Alderman
    36 Cedar St.
    Ansonia, CT 06401

21. Charlene Colucci
    28 Hoinski Way
    Ansonia, CT 06401

Chairman Tyszka asked if there was anyone else who wished to speak. There was no one.

Mr. Blume made a motion to adjourn the public hearing at 8:10 p.m. Mr. Knapp seconded. All in favor, so carried.

Respectfully submitted,

Jo-Lynn Flaherty

Jo-Lynn Flaherty
Secretary

There will be a verbatim transcript of this public hearing prepared by Post Reporting Service.

City of Ansonia

253 Main Street
Ansonia, Connecticut 06401

RECEIVED FOR FILE
13 JAN 18 AM 11:50
Elizabeth A. Lynch
TOWN AND CITY CLERK
ANSONIA, CONNECTICUT

ENERGY IMPROVEMENT DISTRICT BOARD

Special Meeting

January 23, 2013

Madeline Bottone
Town& City Clerk
City of Ansonia
Ansonia, CT 06401

Dear Ms.Bottone:

The Energy Improvement District Board has scheduled a Special Meeting as follows:

DATE: Wednesday, January 23, 2013

TIME: 5:45 p.m.

PLACE: Ansonia City Hall
Aldermanic Chambers
253 Main St.
Ansonia, CT 06401

PURPOSE:
1. To discuss the Anaerobic Digestive Facility
2. To conduct the public informational meeting about the Proposed Ansonia Organic Recycling & Energy Anaerobic Digestion Facility (start time 6:00 p.m.)
3. Adjournment

Respectfully,
Jo-Lynn Flaherty
Secretary

Notice to the Public:
To insure ADA Compliance Requirements Call 203-736-5900 at least 48 hours prior to the meeting

PUBLIC INFORMATIONAL MEETING ANNOUNCEMENT

GREENPOINT ENERGY PARTNERS AND
THE CITY OF ANSONIA

ARE HOLDING A PUBLIC INFORMATION MEETING REGARDING

THE PROPOSED ANSONIA ORGANIC RECYCLING AND ENERGY ANAEROBIC DIGESTION FACILITY

TO BE LOCATED AT
72 NORTH DIVISION STREET, ANSONIA, CT

THE PUBLIC INFORMATION MEETING WILL BE HELD AT

THE ALDERMANIC CHAMBERS, CITY HALL,
253 MAIN STREET, ANSONIA, CT 06401

ON
WEDNESDAY, JANUARY 23RD, 2013 AT 6.00PM

PRIOR TO THE MEETING, INTERESTED PARTIES MAY RSVP ON WEEKDAYS WITH RESPECT TO ATTENDANCE, TO: CHRIS TIMBRELL AT 917-903 3437 OR EMAIL TO CTIMBRELL@GREENPOINTEP.COM

THE AGENDA FOR THE INFORMATIONAL MEETING WILL BE:

1) GENERAL INTRODUCTION
2) LAYOUT AND PURPOSE OF THE FACILITY
3) SAFETY FEATURES ASSOCIATED WITH FACILITY OPERATION
4) BENEFITS ASSOCIATED WITH THE FACILITY
5) QUESTIONS AND ANSWERS

Ansonia Organic Recycling and Energy Center

Public Hearing

Greenpoint Energy Partners

January 23, 2013

Contents

The Team

Greenpoint Energy Partners

New York based Developer

BDI

Technology Provider

Honeywell

Construction, operation and maintenance

IDEA

Connecticut engineering

LPCiminelli

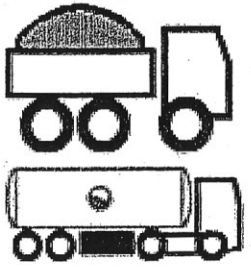
Construction

What is Anaerobic Digestion?

- Used throughout Europe with over 9,000 plants
- Anaerobic Digestion (AD) is a natural process in which microorganisms compost organic matter, in the absence of oxygen, into biogas (a mixture of carbon dioxide (CO_2) and methane) and digestate (a nitrogen-rich fertilizer).
- The biogas can be used directly in engines for Combined Heat and Power (CHP) and the digestate can be cured to an organic compost.

Anaerobic Digestion Process

Organic Waste



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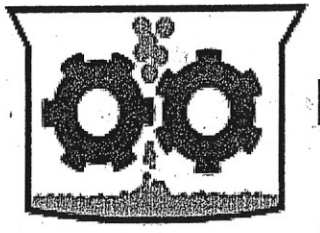
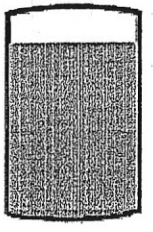
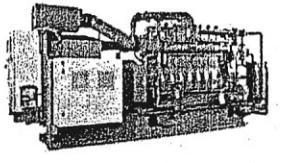


Gas Production Through AD



Electricity Generation

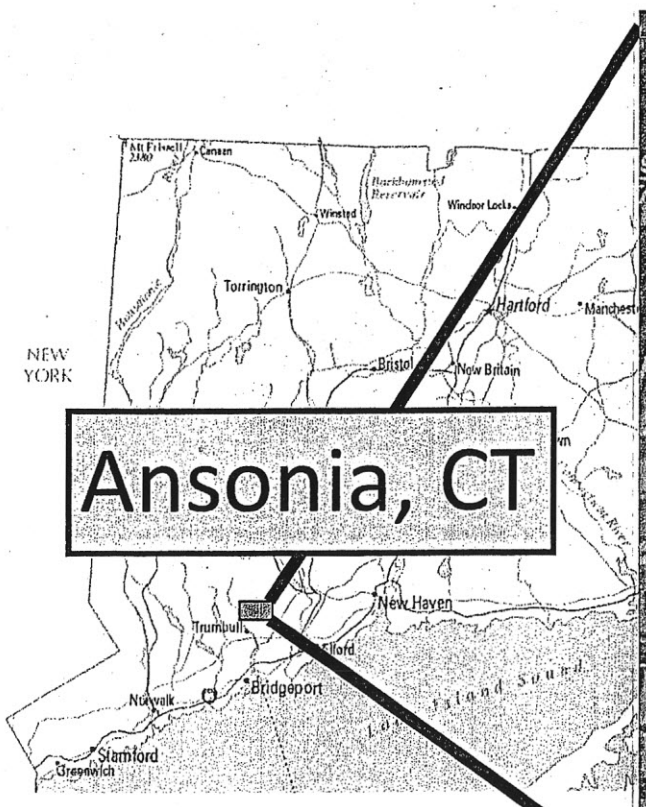


Compost

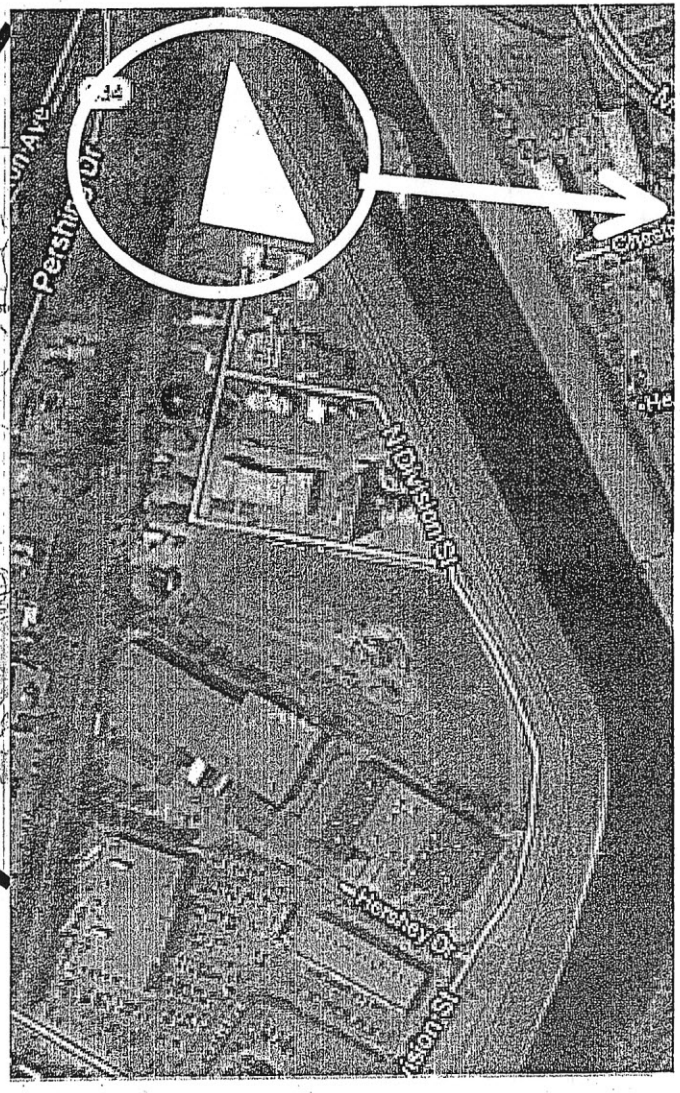
Electricity

Ansonia
CONNECTICUT

Proposed Location



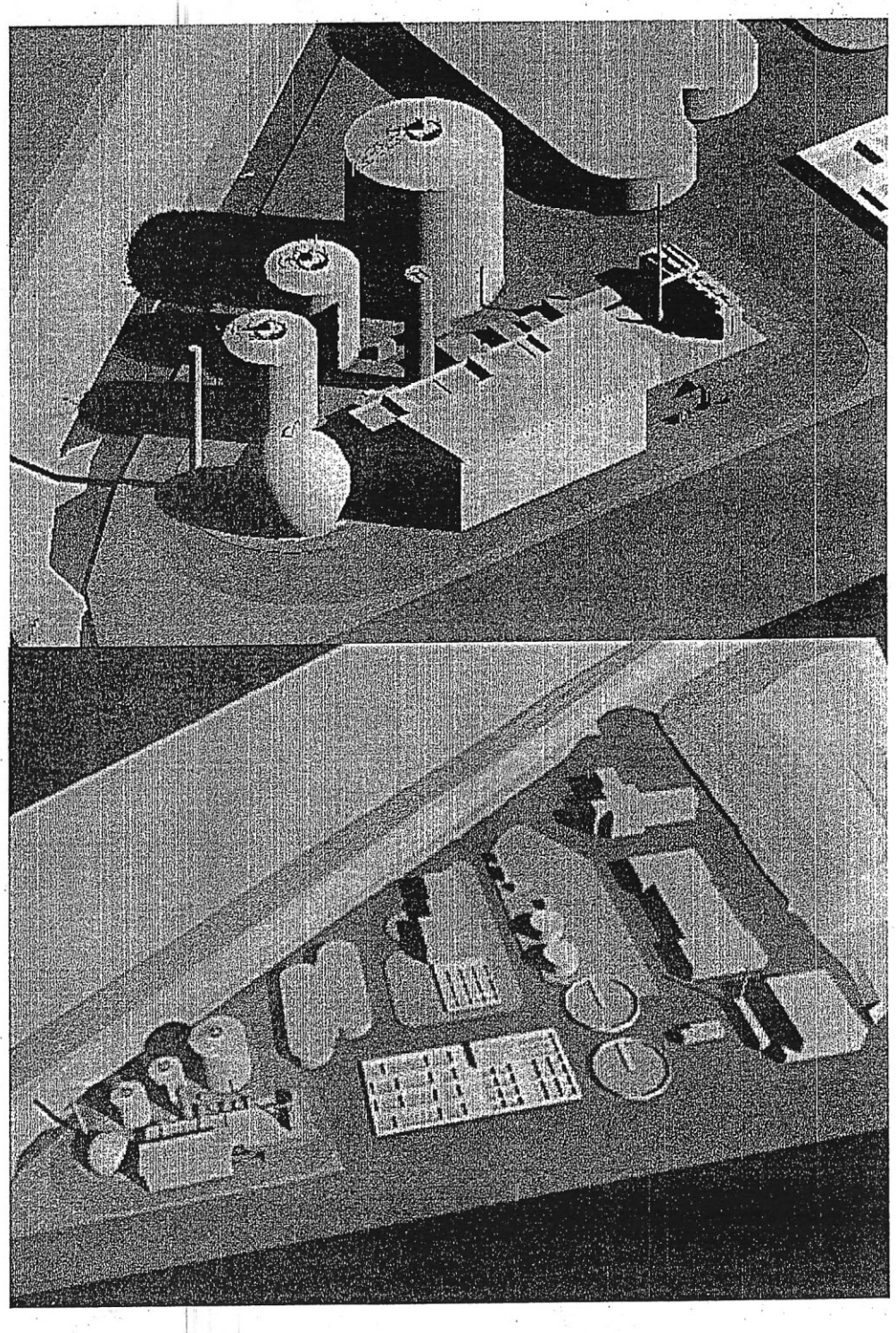
Ansonia, CT

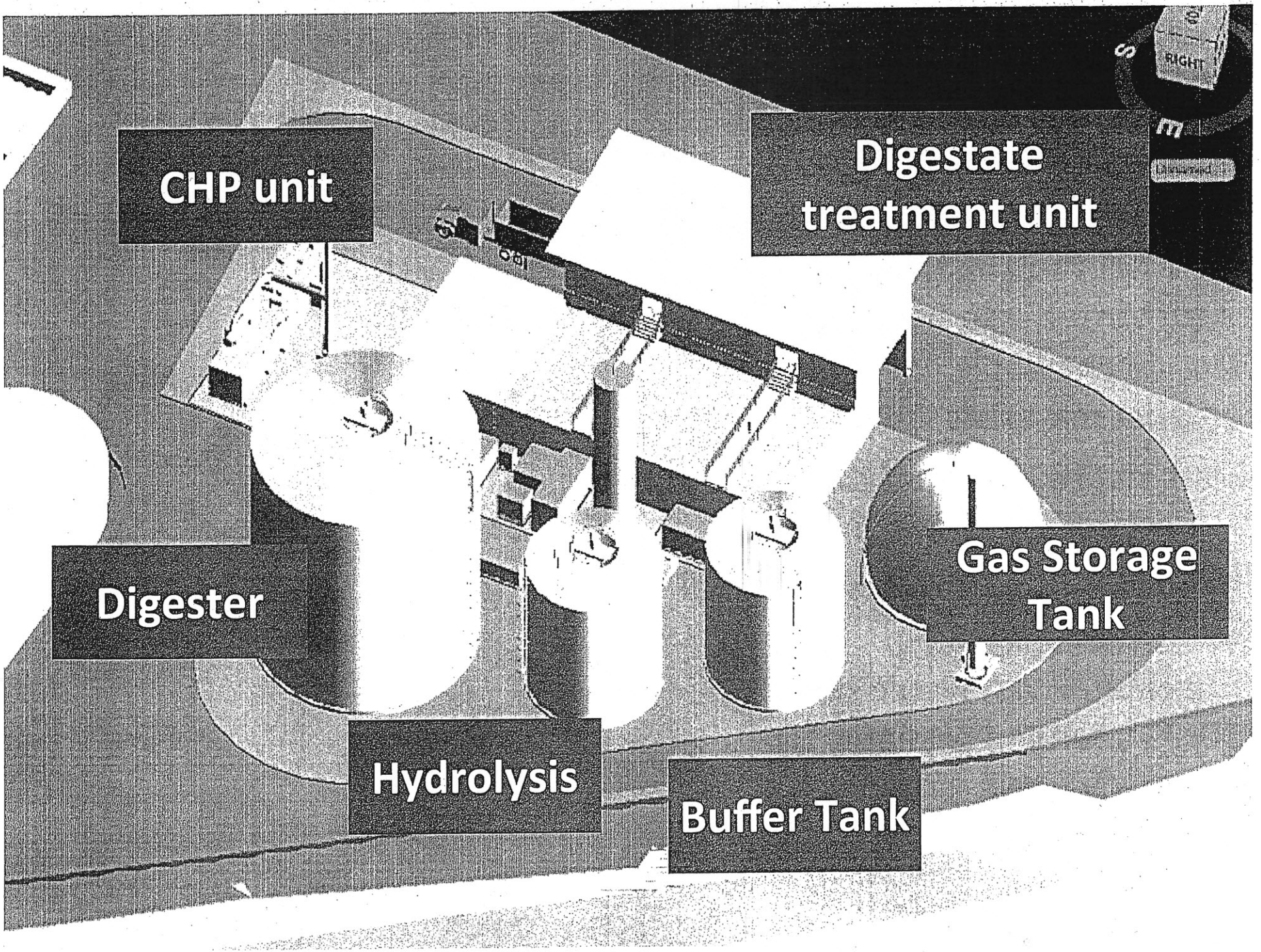


North End of Ansonia's Waste Water Treatment Facility

THE ANSONIA PROJECT

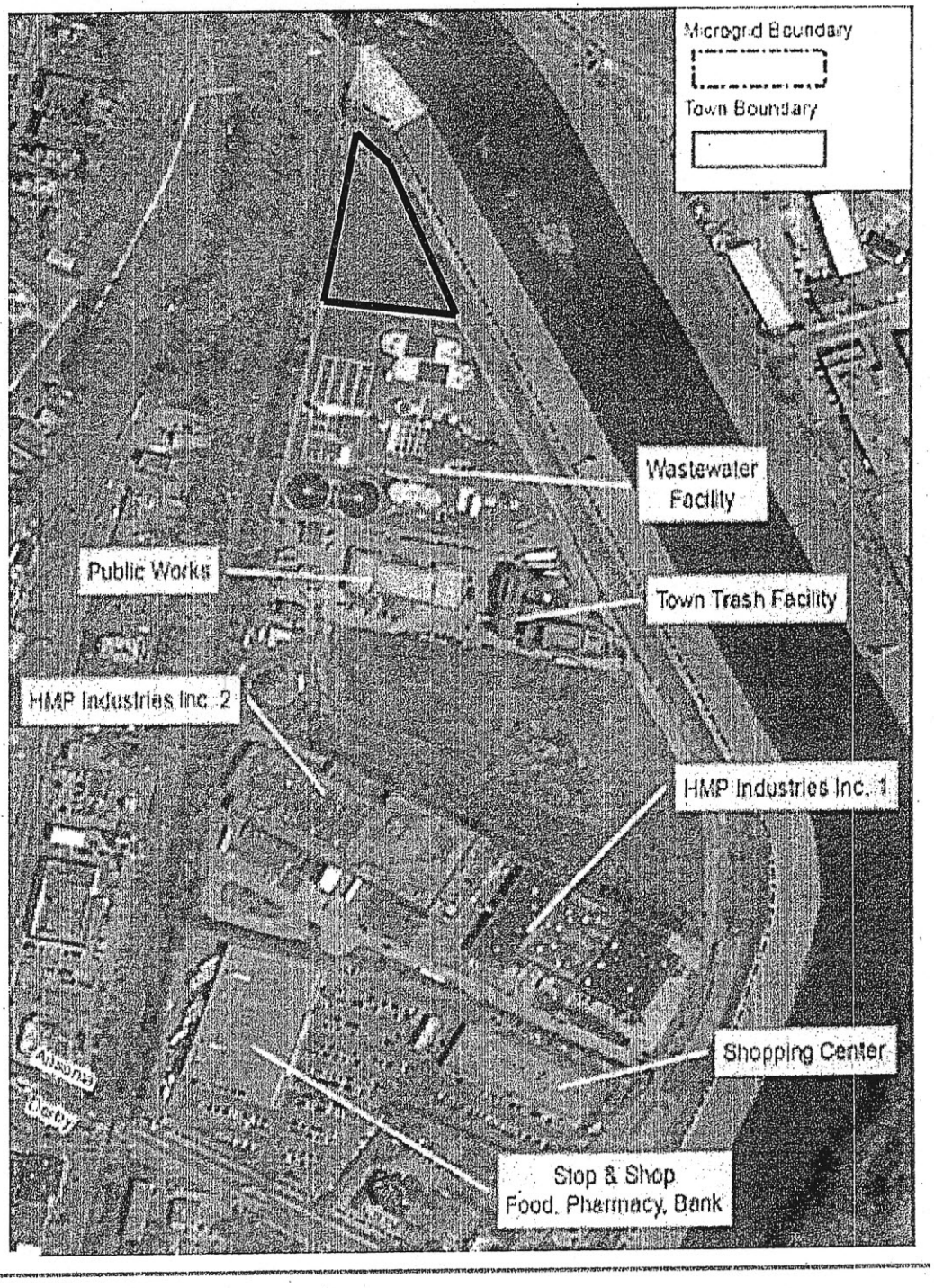
- Food waste (150 tons per day) from grocery stores, restaurants and other food institutions will be converted into 2MW of Class-1 renewable energy and compost materials
- Compost (60 tons per day) is created for high grade organic compost for gardens, parks, golf courses, etc.
- The capital cost would be $30MM, funded primarily by private investors




CHP unit
Digestate treatment unit
Digester
Gas Storage Tank
Hydrolysis
Buffer Tank

MICROGRID DESIGN

- Designed to withstand blackouts
- Providing 24/7 power and remains running in emergencies like recent Connecticut outages
- Providing power to critical facilities like the Water Treatment Plant, Public Works Complex, Emergency Services, Supermarket, and Gas Station, Bank and Pharmacy



Benefits of the Project

Local jobs, local recycling, local energy

- Jobs – numerous construction jobs plus 8 full time jobs
- Green-tech industry investment- $30MM
- Class-1 renewable energy for the city / neighboring industries
- Energy savings from reduction in transmission & distribution charges
- Energy security – distributed generation, will increase the reliability of the local grid.

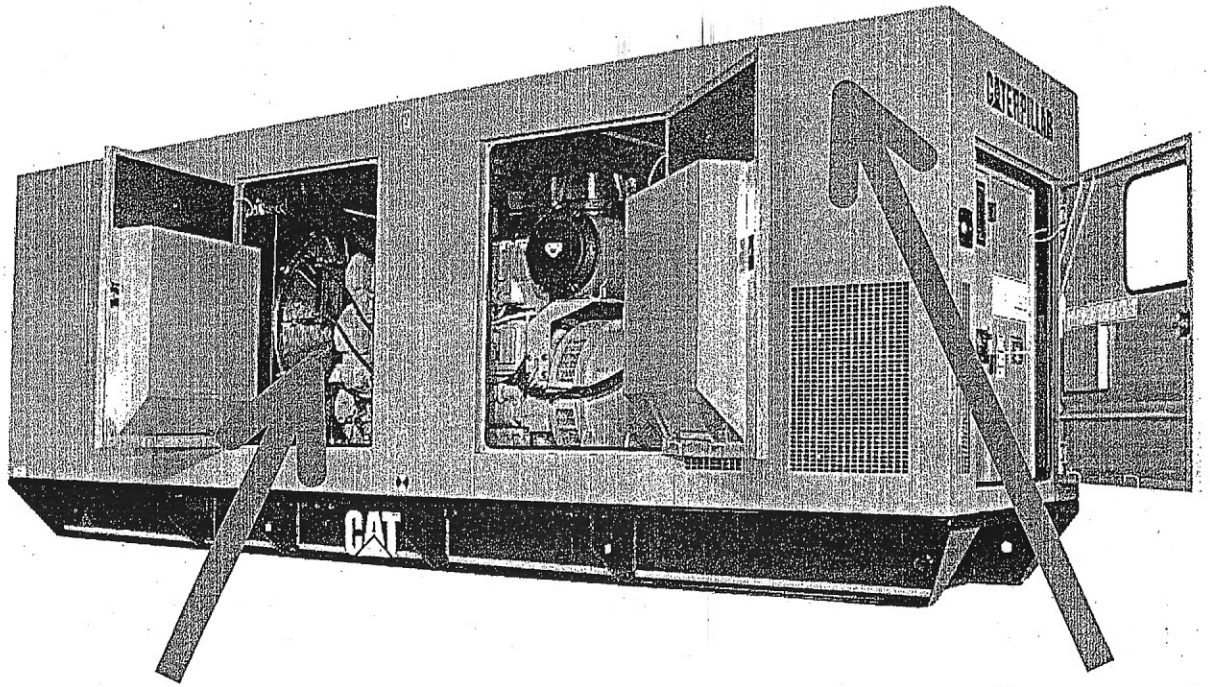
What Does The Project Mean for My Neighborhood?

- **Truck Traffic.** Truck traffic to / from the site will be limited to normal commercial business hours.
- **Noise** - Although mitigated, this will be a commercial site, and it is inevitable that extra noise will be generated from the site. Noise will be kept below state standards .
- **Odors** – Food waste will generate some odors, however, odor mitigation steps will be taken.
- **Visual** – blend with the Public Works Complex with the largest tank rising only 60 feet
- **Air Emissions** – the generators burn methane-based biogas that are equipped with catalytic oxidizers which oxidize the majority of the emissions produced from the engines and keep the emissions below state standards.

Truck Traffic

- Truck traffic will be controlled and operating during normal business hours between 7am and 3pm Monday through Friday.
- On average, there will be 10 trucks entering / leaving the Facility during a normal business day, either delivering food waste (45,000 tons per year) or carting way digestate (18,000 tons per year).
- The existing truck traffic to the site is an average of three 18-wheelers each day currently. Public works vehicles are in and out on a regular basis.

Engines are housed in noise reduction containers keeping noise below 65 decibel lever



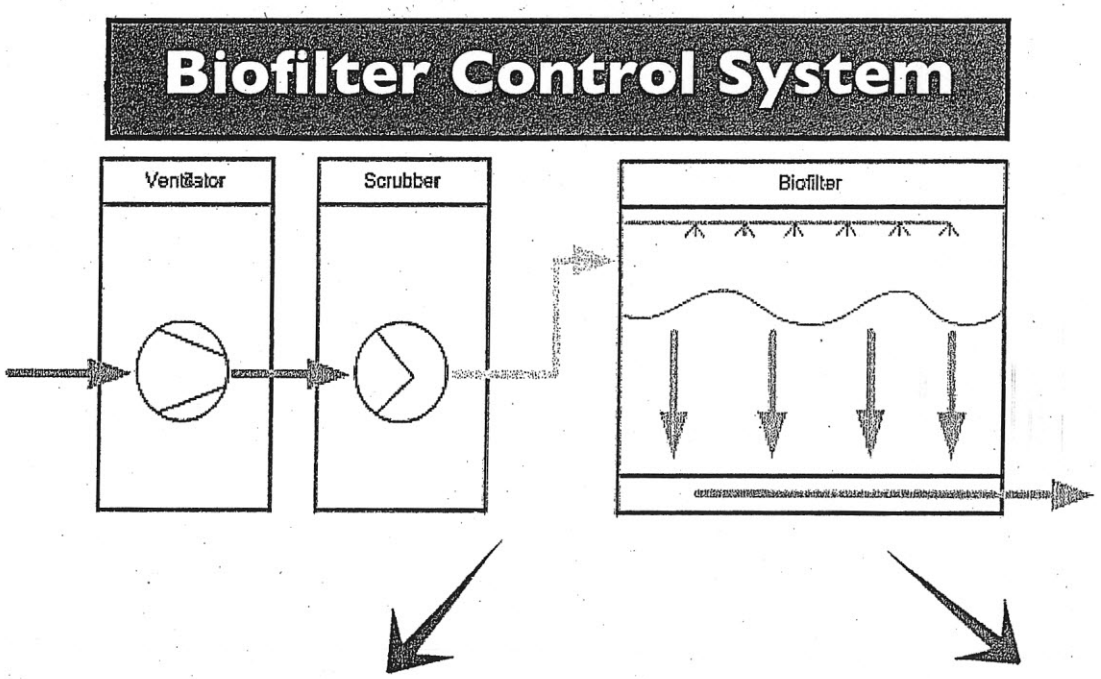
Generator

Soundproofing

Noise

- The facility will be equipped with noise reduction equipment, so no noticeable increase in noise should be discernible to neighbors.
- The engines will be housed in a special noise-attenuated container, with a sound level of 65 dba at 32 feet.
- The facility will meet all applicable state and noise regulations and requirements.

Reduce Odors and eliminate bioaerosols through biofilter technology



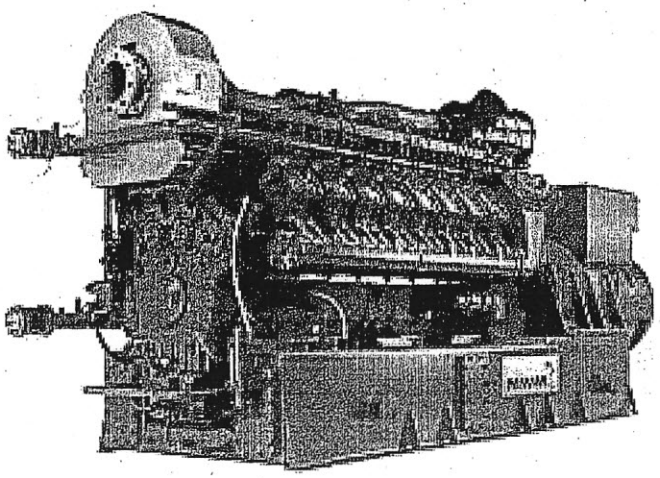
Reduce Odor

Eliminate Bioaerosols

Odors

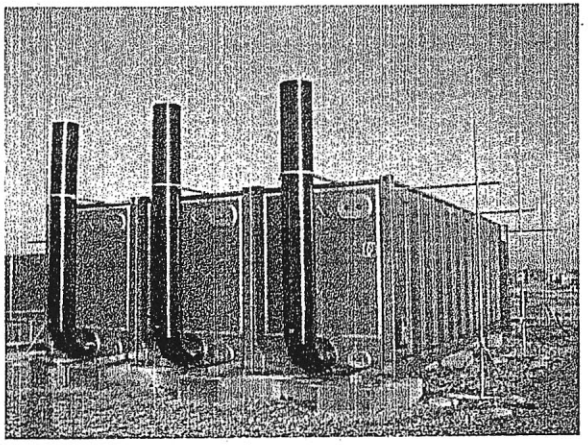
- The Facility will be equipped with odor control technology, to ensure that no noticeable increase in odors occurs at the plant, or in the immediate vicinity.
- All odor producing equipment will be housed within negative-pressure buildings, thereby preventing any odors escaping to the environment. The negative building pressure will be induced using a high-volume & velocity, air extraction system.
- Air which is exhausted from the odor producing areas is then scrubbed by passing it all through a specially designed biofilter.
- The biofilter removes odors and eliminates bioaerosols meeting all applicable Federal, State and Local regulations and requirements.

Air Emissions



- Biogas will fuel a Caterpillar MWM Model Prime Mover TCJ2020 engine to generate electricity

- Equipped with catalytic oxidizers to oxidize the majority of the emissions produced from the engines.



- Catalytic oxidizers ensure air emission complies with Connecticut air emission standards.

Air Emissions Profile

Assumption after catalytic oxidization:

Power Output per Kilowatt hour (kW): 2,000

Boiler horsepower (BHP) 2,770

	Carbon Monoxide	Sulfur Dioxide	Nitrogen Dioxide
Output g/BHP/hr.	0.68	0.60	0.10
Grams / hr.	1.884	1.662	273
Lbs./hr.	4.15	3.66	0.61
Tons/hr.	0.0021	0.0018	0.0003
Tons per year	17.4	15.4	2.6
Lbs./yr.	38,440	33,917	5,653

Required Permits

Department of Energy & Environmental Protection

- Environmental Justice Plan
- Solid Waste Volume Reduction
- DEEP Disruption Solid Waste
- DEEP Air-New Stationary Source
- Soil / Soil Staging
- Storm Water
- Wastewater

Ansonia Planning and Zoning

- Ansonia Wetlands
- Ansonia Planning & Zoning
- Ansonia Building Department

Connecticut Siting Council

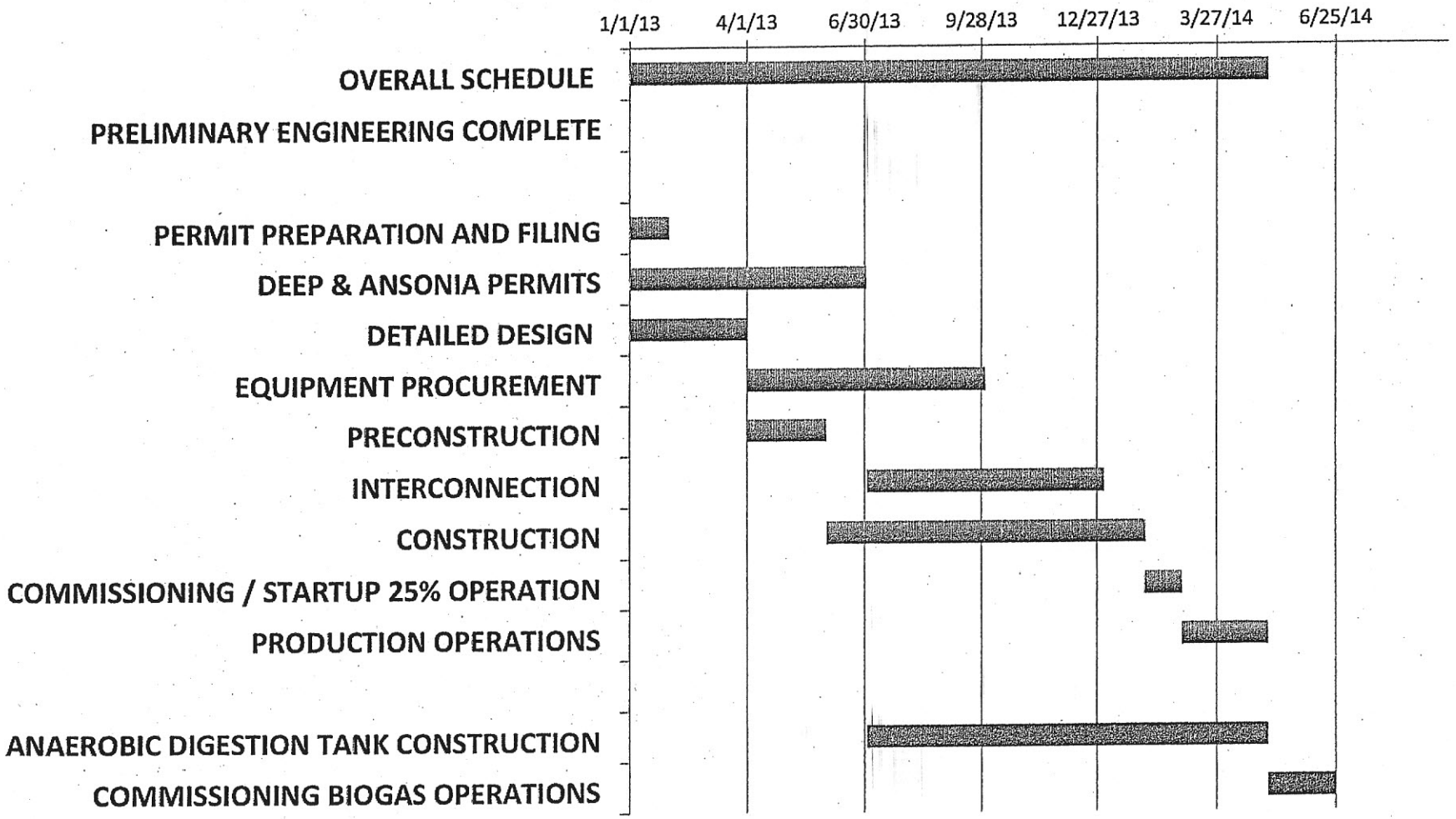
- CT Siting Council (CSC) Petition

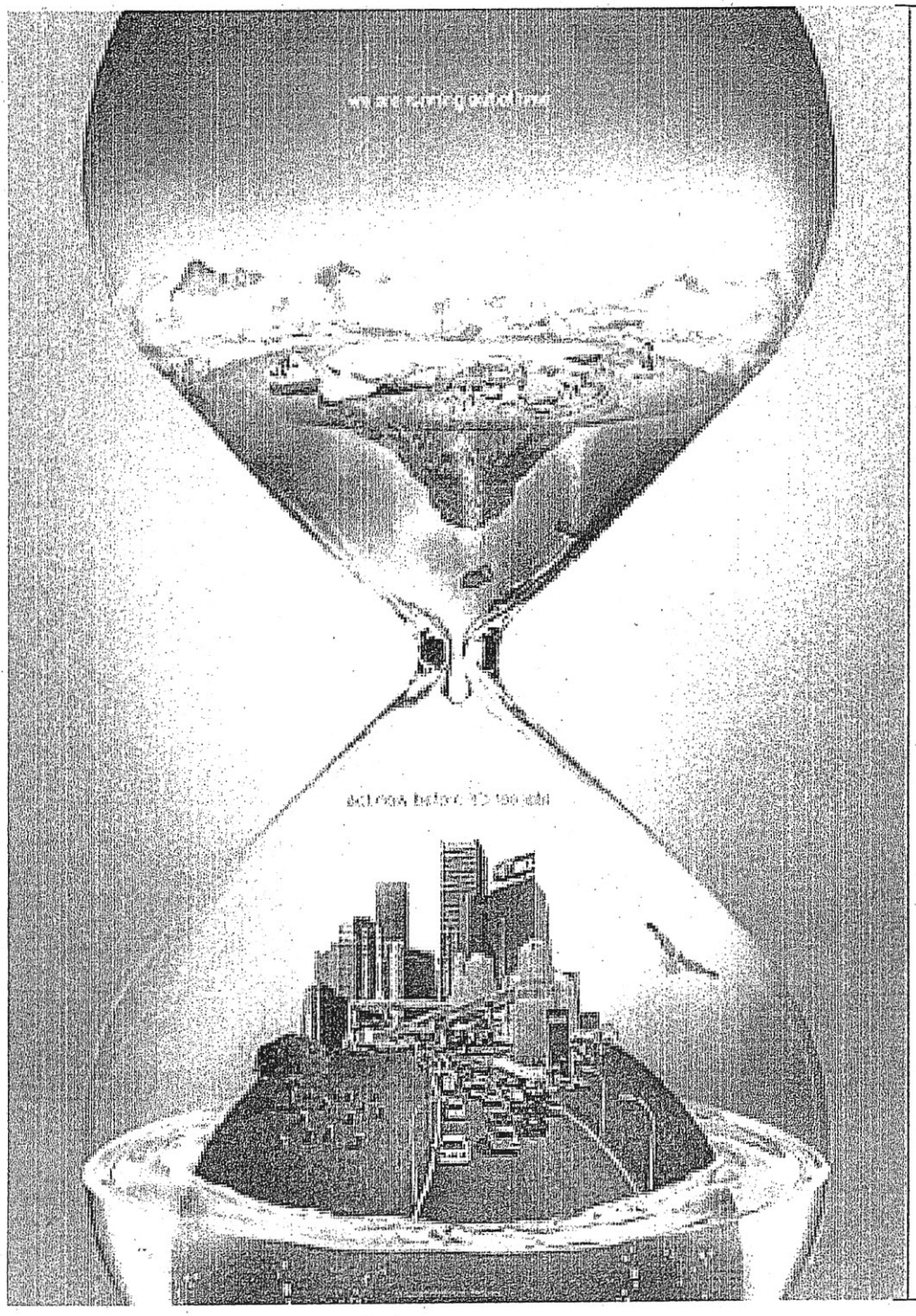
Federal Management Agency

- FEMA & Army Corp of Engineers

ANSONIA ORGANIC RECYCLING & ENERGY CENTER

Timeline





Greenpoint
Energy Partners

Making communities greener

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