TIOGA COUNTY PLANNING BOARD MEETING MINUTES

September 17, 2014

Ronald E. Dougherty County Office Building
Economic Development and Planning Conference Room – Second Floor
56 Main Street, Owego, NY
7:00 PM

I. CALL TO ORDER AND INTRODUCTIONS

• Chairman Doug C. called the meeting to order at 7:00 PM.

II. ATTENDANCE

A. Planning Board Members:

Present: William Dimmick III, Tim Pollard, Doug Chrzanowski, Hans Peeters, Georgeanne Eckley, Patricia Porter, John Current, Gary Henry, Pam Moore

Excused: Dave Mumbulo, Jason Bellis, Elaine Jardine

Absent: Nathan Clark B. Ex Officio Members:

C. Local Officials:

- D. 239m Review Applicants: Scott Sinnett, Carlo Ciliberti, Chris Konrad, Nick Scalzo
- E. Guests: Amanda Renko-Morning Times, Josh Martin-WBNG, Geri Wiley-Resident
- F. Staff: Nathan Layman, Caroline Quidort

III.APPROVAL OF AGENDA

• Approval of agenda

P. Porter/G. Henry/Carried None Opposed No Abstentions

IV. APPROVAL OF MINUTES

• Motion to table the approval of the August minutes until next month's Planning Board meeting (10/15/14) due to a missing page of the document.

P. Moore/T. Pollard/Carried None Opposed No Abstentions

V. PRIVILEGE OF THE FLOOR

None heard

VI. CORRESPONDENCE

Folder passed around.

VII. NEW BUSINESS A. 239 Reviews

Caroline Quidort: Due to the similar application materials, the only difference being that one special use permit is for the facility itself and the other is for a height variance, it would make sense to consider both cases together during our discussion and separate the cases with two separate motions when it comes to the voting process.

Doug Chrzanowski: Hearing no issues we will consider both as one and vote on independently.

1. County Case 2014-018: Town of Owego, Special Use Permit, Site Plan Review, Lockheed Martin

The applicant is proposing to construct a biomass to energy generation system adjacent to the current biomass facility. The new facility will be a Concord Blue Assessment & Demonstration System and will utilize "staged reforming" to use the woody biomass, without incineration, to produce electricity. The new facility will have the capability of producing renewable energy. The facility is composed of multiple structures including a tower, biomass storage containers, a generator, wastewater treatment building, and gas storage tank. The proposed facility's overall height will be 65 feet. A portion of a previously disturbed site will be redeveloped in relation to this project. Less than 1 acre of total land will be disturbed therefore a Storm Water Pollution Prevention Plan is not required. The proposed project will result in an additional 2-3 truckloads per week to service the facility.

The surrounding area is currently made up of industrial, commercial, and residential uses.

Staff Comments: The proposed project will be located in a previously developed area adjacent to the existing biomass facility. The project is primarily accessed through the existing internal network of roads and is buffered by distance and elevation from surrounding land uses. The construction of a 16' wide access road will result in minimal new impervious area. A minor increase in truck traffic will utilize the existing route for current biomass traffic. The proposed facility will have a minimal impact on the surrounding area.

Conditions:

1. That the applicant obtain all required state, county and local permits, licenses and registrations.

Recommendation: After thorough consideration of the above, Staff advises the County Planning Board recommend <u>APPROVAL of the Special Use</u> <u>Permit with the conditions noted above.</u>

2. County Case 2014-019: Town of Owego, Special Use Permit, Lockheed Martin

The applicant is proposing to construct a biomass to energy generation system adjacent to the current biomass facility. The new facility will be a Concord Blue Assessment & Demonstration System and will utilize "staged reforming" to use the woody biomass, without incineration, to produce electricity. The

new facility will have the capability of producing renewable energy. The facility is composed of multiple structures including a tower, biomass storage containers, a generator, wastewater treatment building, and gas storage tank. The proposed facility's overall height will be 65 feet. A portion of a previously disturbed site will be redeveloped in relation to this project. Less than 1 acre of total land will be disturbed therefore a Storm Water Pollution Prevention Plan is not required. The proposed project will result in an additional 2-3 truckloads per week to service the facility.

The surrounding area is currently made up of industrial, commercial, and residential uses.

Staff Comments: The proposed project will be located in a previously developed area adjacent to the existing biomass facility. The overall height of the proposed facility will exceed the permitted height in the Industrial District but a Height Exception may be granted by special permit. The visual impacts of the 65' structure and its appurtenance are clustered next to the existing biomass facility which included appurtenance that are greater in height and at a higher elevation then the proposed facility. Issuance of a special permit for a height exception will have minimal impact on the surrounding area.

Conditions:

2. That the applicant obtain all required state, county and local permits, licenses and registrations.

<u>Recommendation:</u> After thorough consideration of the above, Staff advises the County Planning Board recommend <u>APPROVAL of the Special Use</u> <u>Permit with the conditions noted above.</u>

Nick Scalzo: Discusses the project process and provides visual aids in the form of poster boards in order to demonstrate the preexisting site with current Biomass facility, Site circulation, and the conceptual design for the new facility.

- **Q: J. Current-** Are you still going to have some sort of methane gas being produced or what type of gas is going to come off?
- **A:** Nick Scalzo- It will be a synthetic gas because it's a mixture of a number of different gasses. This gas will go through a whole cleaning process that takes some tars out of it and some of the gasses such as the methane and such will be utilized in the power generation facility.
- **Q: J. Current-** What type of exhaust comes from combustion?
- **A:** Nick Scalzo The exhaust since it is cleaned up and we are taking out some of the materials that are more troublesome it will be just like any other gas.

- **O: J. Current-** So Carbon Dioxide?
- **A:** Nick Scalzo It will be the same product as basically a methane or natural gas process produces. This will all be spelled out in our air permit that will be submitted to the DEC.
- **Q: J. Current-** Are there any other products that get formed during this process that have to be dealt with in any special nature that don't get consumed during combustion?
- **A:** Nick Scalzo There will be a tar product that we will dispose of and there will be an ash product that comes out of the bottom.
- **Q: J. Current** Disposed of in a landfill?
- **A:** Nick Scalzo What we currently do at the biomass facility today is we use our ash for landfill cover which is a relatively green way to use our ash rather than just throw it away. The ash produced will be a very small amount because this will be a demonstration facility.
- **Q: J. Current** Demonstration being that you will sell this system to somebody?
- **A:** Nick Scalzo- The intent is to engineer it, make sure it works like we think it will work, and then possibly use it to sell and as a new marketing basis.
- **A:** Chris Conrad- The benefit for us is the company looks at this as a potential new source for sales and we were lucky enough to have the land up here and the ability to do it, and since we had such success with the last biomass facility they wanted to put it right next to it, so that if a customer wants to do it we can actually show them how it works.
- **A:** Nick Scalzo- And to add onto that the fact that we had this biomass facility which you helped us to get, we got this project when other Lockheed Martin Facilities did not.
- **Q: G. Eckley-** So basically you are feeding it wood? Is it a specific type of wood?
- **A:** Nick Scalzo It is a wood chip product. I don't want to name names but we buy most of our wood chips from a local person right here in Owego.
- **A:** Chris Konrad- It's the left over product from the mill. So we buy the chips from the mill, he trucks them in and we use them and it's a pretty efficient system.
- **Q: J. Current** Is there any appreciable noise with this process?

- **A:** Nick Scalzo There will be a standard amount of noise, the generator will make a little noise along with a few motors, and we are thinking of using the compressed airlift that's already on site. No more noise than we already have at the site. It's a very quiet system.
- **Q: J. Current** Are the containers that bring the product in staged or immediately unloaded?
- **A:** Nick Scalzo These containers will be brought in on truck, we are still running through the calculations but there will most likely be two to three trucks a week at most.
- **Q: J. Current-** So that's like a container that sits on a truck, and then the container gets left behind when the truck leaves? When the truck arrives it drops off a full container and takes an empty one back?
- **A:** Nick Scalzo It's not unlike a dumpster at someone's facility. The containers will be staged at where we buy the wood chips.
- **Q: D. Chrzanowski** Are the waste products that exit the bottom of the tower accumulated somewhere so there is no escape?
- **A:** Nick Scalzo There is a hopper and a shaker system to funnel it down into a collection bin making the process is a continuous closed loop system.
- **Q: H. Peeters-** So the carbon gets used for the coverage of landfills?
- **A:** Nick Scalzo That is what we will probably use it for. In the real world it can be used for a number of things. There is still some energy value in there, you could use it to fertilize fields, so there are number of things that can be done. This is just a demonstration facility to show that the process is working.
- **A:** Chris Konrad—So our intent right now is to dispose of it the same way we do with residual product from our existing biomass facility. So it will go down the same way it is now by working with environmental groups to truck the residual product to approved landfills for coverage.
- **Q: J. Current-** As a demonstration unit what is the scale of this unit compared to if it was a permanent installed unit? Does it depend on the users demand?
- **A:** Nick Scalzo These are a little bit like windmills, this is a very small windmill whereas the bigger windmills are only 2 megawatts. The bigger units are most comparable to the bigger windmills. This is small and the bigger ones aren't super huge. This is a full scale working unit it is just deciding how much power you want. This unit would be good for approximately 100 homes.
- **Q: J. Current** How many kilowatts a year would you have to use to make this feasible to be installed on a site?

- **A:** Chris Konrad I think that is what we are trying to figure out.
- **Q:** C. Quidort- Will your own campus be using the energy generated?
- **A:** Nick Scalzo—The intent is to use it in a power house to run this biomass facility and nowhere else at our facility. As a demonstration facility we are not running it every day of the week. We are not generating great amounts of electricity.
- **Q: J. Current** So you are not going to contribute anything to the grid with this unit?
- **A:** Nick Scalzo No, our biomass facility today makes steam and that steam provides a small amount of electricity to our own site. We don't put anything back to the grid even with our existing biomass facility.
- **Q: G. Henry-** So you said that this is not running every day of the week?
- **A:** Nick Scalzo I mean I come here saying it could however our intent right now is to take it slow and test it out. We are looking at running it for about 12 hours a day for maybe four or five days a week. If it does work out where we can run and everything is going good then we could start thinking about using the electricity produced for our facility.
- **Q: G. Henry** So if it was run on a continuous basis the number of truck loads that would be coming in would probably be two to three times what you are looking at now?
- **A:** Nick Scalzo- I think those numbers were based on full 24 hours a day, 7 days a week. But our initial is just 4 to 5 days a week.
- **Q: J. Current** What is the cycle time, when its down and then to get it running again?
- **A:** Nick Scalzo There is a heating system so you do have to heat it back up again but I do not think it is more than 6 hours.
- **Q: P. Moore** What are the emission points in this system and what are the gasses that are going to be produced?
- **A:** Nick Scalzo There is a small amount of emission at the top of the tower, the generator its self will be an emission point, and then the storage tank has a release valve on it which should never go off and this is the third emission point. The gases that are produced will be methane gasses.
- **Q: P. Moore** Are some of these gasses going to be flared off?

- **A:** Nick Scalzo Yes there is a flare that will be used in the event that we do not use the gas. For example if the storage tank is full of gas and you want to shut down the unit you would flare off the excess gas.
- **A:** Chris Konrad The thing to remember is we will not be able to operate this unit until we get the air permit that shows that all those emission points are within regulation.
- **Q: P. Moore** The ceramic marbles do they contain something or are they just for holding heat?
- **A:** Nick Scalzo They are for holding heat.
- **Q: J. Current** Is this a totally new technology that Lockheed Martin Developed?
- **A:** Chris Konrad It's a fairly new technology that we partnered with a well-known technology company named Concord Blue out of Germany. We are taking it and testing it out to make sure it is 100 working before we do anything else. This is not the only prototype of this running in the world.
- **Q: J. Current-** So there is something similar to this running somewhere else?
- A: Chris Conrad- Yes
- **Q:** C. Quidort- What type of facility do you envision such a facility running, an industrial site, a commercial site, etc.?
- **A:** Chris Konrad- I don't think we know right now and don't have an answer to that question at the moment.
- **Q: P. Moore** How do the residents located 2 tenths of a mile from this fell about the project?
- **A:** Nick Scalzo I don't know if I can answer about this specific project but we have had no negative comments on the biomass facility that we put in back in 2009.
- **A:** Chris Konrad As you can see where it is on the facility its located fairly far away from any residence.
- **Q: J. Current-** Could this use any other fuel other than wood?
- **A:** Nick Scalzo It could there are other potential fuels that could be used.
- **A:** Chris Konrad But just for clarity we will only be using wood chips, due to our air permitting we use wood chips, so that is what we are trying to demonstrate.

- **A:** Scott Sinnett- Also with any type of experiment you want to have a consistent source that doesn't vary and wood chips are very consistent. We want to really study this and make sure it is working correctly.
- **Q: P. Moore** How many truck trips a week are there right now?
- **A:** Nick Sclazo- This time a year we are looking at 14-16 trucks a week whereas is in the wintertime we bring in about 20 a week.
- **Q:** P. Moore- So your trucks will be coming and going from state route 17c?
- **A:** Nick Scalzo That's correct that's what they all do today.
- **Q: D. Chrzanowski** Is there access from Taylor Rd.?
- **A:** Nick Scalzo Actually there is, we put in a road from Taylor road but it is difficult for trucks to access.
- **Q: D. Chrzanowski** I am more worried about egress, you have quite a sizable gas storage tank it looks like it is probably 3-5 thousand gallon tank?
- A: Carlo Ciliberti It is right now about the size of a thousand gallons.
- **Q: D. Chrzanowski** Have you contacted the emergency services support due to the large size of the storage tank? Also I noticed the tower is not enclosed I am assuming for structural reasons?
- **A:** Carlo Ciliberti The tower is not enclosed due to structural reasons in addition to the nature of the facility being demonstrational and the need to be able to see within. The fire marshal has been consulted and also the roads are structured so a fire truck could get in if need be.
- **Q: D. Chrzanowski** So the fire truck could come in from both sides?
- **A:** Chris Konrad- Yes, there is a gate out to the main road up the back of the site. We also have an onsite emergency response team with a fire truck that has coordinated with the local fire department so that they know what we are doing. As a part of the project the local fired department will come in, look at it, and overall better understand the project.
- **Q: P. Moore** Are you utilizing the heat as well as the electricity that will be generated?
- **A:** Nick Scalzo Just to reheat itself, some of the gas will be used to heat the ceramic marbles, but no the heat will not be used because it will be somewhat dissipated through the process.

- **Q: P. Moore-** I am envisioning a composting kind of process which produces a lot of heat and this sounds like it is sped up from a type of composting process.
- **A:** Nick Scalzo It might not be a good comparison but it is just to try to get us all on the same page.
- **A: Scott Sinnett** The special thing of the whole project is that due to the use of the ceramic marbles you are actually spreading the heat evenly throughout the whole system rather than just heating the outside of the system.
- **Q: G. Eckley-** So in other words these ceramic marbles mixed with the wood accelerates the heating process making the gas which goes into the generator?
- **A:** Scott Sinnett Yes, with no flame what so ever.
- **Q: G. Henry-** What is the length of time it takes for when you put something in the top for it to make it to the bottom?
- **A:** Carlo Ciliberti— The total drop time is less than an hour.
- **Q: H. Peeters** You've talked about the air pollution, you've talked about the solid waste produced, is there any waste water coming off this site that you have to be concerned with?
- **A:** Nick Scalzo- There is water that will be collected off the bottom. It will be put into tanks and evaluated; again this is a demonstrational facility so we need to understand. We do not anticipate any problems, it will be collected in a small storage tank and then tested and we will have the capability to put it to our storm water system or if something is wrong with it we will dispose of it appropriately.
- **Q: H. Peeters-** So you are going to be monitoring data on a continuous basis?
- **A:** Chris Konrad- It will be a catch all system that will catch every bit of it and we will constantly monitor it, and if there are any issues we will properly dispose of it.
- **A:** Nick Scalzo We do have data from some of these that are actually running so we have an idea of what types of things to be looking for.
- **A:** Chris Konrad So in essence the data is out there, if you go look at the Concord Blue website they provide the data but we are not going to trust fully in the data. We are going to gather our own data in an attempt to fully understand it.
- **A:** Nick Scalzo In regards to the other special use involving height this tower is 65ft tall max, we actually think it is only 62ft but we put in for 65ft.

The stack of our existing biomass facility is 75ft and we are only asking for 65ft for our new facility.

Q: P. Moore- The woody biomass that is input into this facility is it just a raw wood from a mill as opposed to a processed wood product that has been shredded?

A: Nick Scalzo – Explains the milling process that produces the wood chips in which this facility uses and further explains that the waste wood that is provided to Lockheed Martin is dependent on what is being milled that week.

Q: P. Moore- So no glues, resins, or anything else from a processed wood?

A: Nick Scalzo – No, it comes straight from the mills.

Q: H. Peeters- So it is still pretty wet and already de-barked?

A: Nick Scalzo- We don't get much bark with it because it is de-barked, and it is wet somewhere to 30-50% moisture content.

Q: H. Peeters- So undoubtedly you produce a lot of tar from burning the wet wood through this biomass process?

A: Nick Scalzo- Yes, those tars are the things that are being collected at the bottom.

Q: G. Eckley- The ash and the tar is what goes to the landfill for cover?

A: Nick Scalzo – Correct the charcoals and ash.

Q: P. Moore- Is it actually ash that is left or is it more of a cellulose material since there is no combustion?

A: Nick Scalzo – Our biomass facility is true ash, whereas this facility produces more of a charcoal material which still has some energy value left in it.

Q: T. Pollard- So have you identified a market for that byproduct yet?

A: Chris Konrad – No we have not

A: Scott Sinnett – There is a lot of potential markets as it is used for a lot of things around the world.

Q: T. Pollard- Is it worth shipping it though?

A: Scott Sinnett – Again it's a development facility, we are Lockheed Martin, we don't want to sell it and be responsible for it so the safest place for us to put it is in a landfill which is the greenest thing we can do.

Q: P. Moore- But there might be an opportunity for researchers to get involved to develop workable products from it?

A: Scott Sinnett– Absolutely there is a lot of potential in the research of syngass.

Q: D. Chrzanowski – Does anyone have any other questions or concerns?

With no further discussion, motion to recommend approval of Staff recommendations of County Case 2014-018:

G. Henry / J. Current/ Carried Yes 9 No 0 Abstention 0

With no further discussion, motion to recommend approval of Staff recommendations of County Case 2014-019:

G. Henry/ J. Current/ Carried Yes 9 No 0 Abstention 0

VIII. REPORTS

- A. Local Bits and Pieces
 - 1. Town of Candor G. Henry
 - Updating our comprehensive plan and there has been some heated debate on the planning board as to involve public input or not in the process. It seems like we spent more time arguing if we would have it or not but in the end the final vote determined that we would.
 - 2. Town of Nichols P. Porter
 - Our Comprehensive plan is sitting idle, due to our debate on our drone ordinance.
 - We are currently looking at a production brine law in which I will be continuing to research.
 - Also we are looking at the town of Chemung's right to farm law in order to develop our own for the town.
 - Meeting every couple of weeks in order to catch up on this.
 - 3. Town of Berkshire T. Pollard
 - No Report
 - 4. Town of Tioga D. Chrzanowski
 - Continuing to work on the comprehensive plan while our site plan is kind of stalled at the moment.

- 5. Village of Waverly W. Dimmick III
 - No Report
- 6. Village of Owego G. Eckley
 - No Report
- 7. Town of Newark Valley H. Peeters
 - Continuing to work on the comprehensive plan.
- 8. Town of Richford vacant
- 9. Town of Owego J. Current
 - No Report
- 10. Town of Barton D. Mumbulo
 - Not in attendance
- 11. Spencer N. Clark
 - Not in attendance
- 12. Village of Nichols P. Moore
 - No Report
- B. **Staff Report** No report

IX. OLD BUSINESS

A. August's Minutes will be provided next planning board meeting and included in the agenda for approval during the October 15th meeting.

X. ADJOURNMENT

- A. Next Meeting October 15th, 2014 @ 7:00 PM in the Legislature Conference Room.
- B. Motion made to adjourn at 7:57PM. P. Porter/H. Peeters/Carried.

Respectfully submitted,

Nathan Layman, Administrative Planning Assistant

Economic Development and Planning