

**REGULAR MEETING MINUTES
COLUMBIA BOARD OF SELECTMEN
Tuesday, October 20, 2015 - 7 pm.
Adella G. Urban Administrative Offices Conference Room
323 Route 87, Columbia, CT**

Members Present: First Selectman Carmen Vance; Selectman William O'Brien; Selectman Robert Bogue.

Also Present: Town Administrator Natasha Nau; Director of Senior Services Bernadette Derring; Senator Cathy Osten; CONA Chair Cathie Rowe; CONA members; Ann Dunnack and others.

CALL TO ORDER: C. Vance called the meeting to order at 7:02 pm.

1. **PLEDGE OF ALLEGIANCE:** The Pledge of Allegiance was recited.
2. **MINUTES: BOS Regular meeting minutes of 10/6/15:** W. O'Brien MOVED to approve the minutes with the following amendment: Item 3, paragraph 3 reads: "W. O'Brien stated that if the conditions are not met then this should not go forward which would mean starting the process over from the beginning." It should read, "W. O'Brien stated that if the conditions voted on and approved at the town meeting are not met then this should not go forward. He believed the addition of new conditions not discussed or voted upon at the town meeting would require the town to start the process over from the beginning." MOTION CARRIED 3:0.

S. Everett arrived at 7:03 pm.
3. **AUDIENCE OF CITIZENS:** None.
4. **OLD BUSINESS**
 - 4.1 **Ordinance 6-3 entitled "Encroachments into the Waters of Columbia Lake":** N. Nau stated that the Inland Wetlands Agent reviewed the ordinance and the corresponding Standards for Granting Permission for the Construction of Structures on Columbia Lake document and made suggested revisions. She stated that there is not a formal statement in the document discussing what is and what is not allowed in terms of "maintenance" on/around the lake at certain times of the year. i.e. sanding/staining docks, etc. N. Nau explained that this ordinance will target significant repairs/maintenance during the "low water" season. C. Vance MOVED to approve ordinance 6-3 as amended. W. O'Brien asked about the language stating "shall be fined not more than \$50.00 per day each day" and questioned whether or not it should state "may be fined not more than \$50.00 per day." N. Nau stated that this language was not changed when amending the ordinance, but will ask the attorney to review it one more time and seek clarification on what he feels is best. S. Everett questioned whether or not the Board feels that \$50.00 is a high enough fee. W. O'Brien stated that he has reservation about charging large fines that people will not end up paying leading to possible litigation situations. Discussion followed. N. Nau will research the history of fines and report back to the BOS. If necessary the BOS will further amend this ordinance. MOTION CARRIED 4:0.
5. **NEW BUSINESS:**
 - 5.1 **CONA Presentation – Senior transportation:** Catherine Rowe introduced the members of the Commission on Aging (CONA) and briefly discussed the need for senior transportation in town. She explained that a survey was done in January 2015 to gather input on what senior services were lacking and transportation was one. She stated that CONA is requesting permission to apply for a State grant for transportation. Gloria Hansen Cox spoke to the BOS and stated that she currently resides at Dartmouth Village. She asked that the BOS please be considerate to those who are in need for transportation assistance. She stated that being alone and unable to go from point A to point B when needed is very unsettling. She explained that "Dial-A-Ride" was very helpful in the beginning but now that they have been purchased by another entity she has problems reserving rides. G. Cox stated that in order to schedule a ride, you were required to give (2) two days notice but now sometimes a week's notice is not even enough. She explained that the company provides a "window" of time when you can catch a ride and that this may leave someone waiting hours for a scheduled appointment or in some cases, make you late so that you miss your appointment altogether. Ray Axelrod expressed that he feels a van would be very beneficial for seniors.

WRTD committee member Tom Currier, stated that he spoke with WRTD Director Rose Kurcinik, and she told him that the number of volunteer drivers has dropped from (4) four to (2) two drivers. Currently, DOT employee Ellen Grant has been helping them out.

Discussion regarding the cost for transportation services took place. T. Currier stated that there is a very small pool of individuals willing to drive. N. Nau asked if CONA has conducted any research as to how this would affect the budget if the request for these transportation services was approved. Senator Cathy Osten stated that she introduced CONA to a 53-10 grant which handled by the Council of Governments (COG). She explained that it is funded thru DOT but handled regionally via COG. C. Osten stated that the cost share is 1/3 funding by the town and 2/3 funding by the state. She explained that the Town of Sprague was approved for this grant and accepted. She stated that currently, Sprague has (2) vehicles and (2) drivers that are paid \$12 per hour. S. Everett asked if the town of Sprague charges residents for rides. C. Osten said no. She explained that the drivers are part time town staff. C. Vance asked who coordinates the trips. C. Osten stated the Senior Director is responsible for coordinating transportation. S. Everett asked about insurance for the vehicles. C. Osten explained that the vehicles are insured through the town's insurance carrier, CIRMA, at no additional premium cost. Discussion followed. C. Osten will send a copy of Sprague's budget to N. Nau so she can review.

S. Everett asked CONA if they know what type of vehicle they are looking for yet. Jill Livingston stated that they would like to purchase a van that is able to fit 10-12 passengers and has the option of two wheelchair lifts/ramps. She explained that the estimated cost for a vehicle like this is approximately \$53,000.

C. Vance suggested CONA work out details and a decision be made about how to proceed before pursuing a grant. C. Rowe explained that once CONA receives approval to apply for the grant, details such as this will be worked out. C. Osten pointed out that a grant does not have to be accepted if it is awarded.

C. Vance asked how many surveys went out. C. Rowe stated they went out to all households in town (approximately 2,600) and that a significant amount of surveys were returned. T. Currier stated that Columbia residents used Dial-A-Ride over 1,500 times last year. John Evans feels that there are a number of reasons for the need of a van. It is for the town, the seniors as well as the handicapped. He stated that years back, this was requested and was turned down and he does not feel it should have been rejected. Discussion followed.

CONA will provide N. Nau with a breakdown of the survey, including the amount of responses and comments made. M. Ramsey stated that the deadline to submit the grant is January 2016 and would like to see this item addressed as soon as possible so it may be addressed in the upcoming 2016-2017 FY budget process. C. Osten also stated that Columbia may want to look into elderly/handicapped housing while researching the transportation aspect. N. Nau pointed out that we have a rental senior housing project in the works.

- 5.2 Discussion of Board Clerk position:** N. Nau discussed her proposal to split the duties of this position. She explained that the position will require the same amount of hours per week and per month, but there will be one person handling the in-office clerical work, and another person taking the evening meeting minutes. N. Nau explained that Linda McDonald will take care of the in-office clerical work on her own time and Kelly McGuire will continue to take minutes for the evening land use board meetings, and the Board of Assessment Appeals. Discussion followed. The BOS was in favor of N. Nau's proposal.
- 5.3 Willimantic Athletic Club (WAC) 5K Road Race:** W. O'Brien MOVED to approve the WAK 5K Road Race scheduled for Saturday, April 30, 2016. The course route will include Village Hill Road, Cards Mill Road and Baker Hill Road. MOTION CARRIED 4:0.
- 5.4 Revision to Facilities Maintainer Job Description:** N. Nau stated that since the town has entered into a contract with the Connecticut Center for Advanced Technology (CCAT) for IT services, IT is no longer part of Matthew Jorgensen's job description. Therefore, George Murphy and Bud Meyers have revised the job description as presented to reflect M. Jorgensen's duties. MOTION CARRIED 4:0.
- 5.5 Authorization of Resolution #2015-07, DEMHS Homeland Security Grant Program:** S. Everett MOVED to allow First Selectman to enter into with and deliver to the State of

Connecticut Division of Emergency Management and Homeland Security, Department of Emergency Services and Public Protection any and all documents which it deems to be necessary or appropriate and to authorize the First Selectman to execute and deliver any and all documents on behalf of the Columbia Board of Selectmen and to do and perform all acts and things which deems to be necessary or appropriate to carry out the terms of such documents, including, but not limited to, executing and delivering all agreements and documents contemplated by such documents. MOTION CARRIED 4:0.

W. O'Brien MOVED to add item 5.6 entitled New Business, entitled "NECASA Nominations" MOTION CARRIED 4:0.

5.6 NECASA Nominations: W. O'Brien explained that NECASA has requested nominations for the Judith Nilan Award for Community Service to Youth and for the 22nd Annual Volunteer with Youth Recognition Award. W. O'Brien MOVED to nominate Principal Alyssa Gwinnell for the Judith Nilan Award and Ann Dunnack for the Community Service to Youth Award. MOTION CARRIED 4:0. W. O'Brien will work with N. Nau on these nominations.

6. COLUMBIA LAKE / DAM / BEACH

6.1 Letter from M. Coleman dated 10/7/15 re: Flyboarding on the Lake: N. Nau stated that Coventry just performed a study on Flyboarding and explained that she heard the results of the study are not in favor of the water sport. She will gather more information on this and bring it back to the BOS.

7. APPOINTMENTS / RESIGNATIONS:

7.1 Appointment of Linda McDonald to Board Clerk: C. Vance MOVED to hire L. McDonald as Board Clerk. MOTION CARRIED 4:0.

7.2 Resignation of Mark Coleman from LMAC: The BOS recognized the resignation of M. Coleman. C. Vance stated that she is currently working on finding a replacement for M. Coleman. N. Nau stated that M. Coleman is amenable to training his replacement on the tasks of Assistant Dam Keeper which has been part of his role.

8. TOWN ADMINISTRATOR REPORT: See report. In addition to the report, N. Nau stated that she attended the Annual CCM Convention on October 20, 2015 and will be participating in the Mandatory Emergency Preparedness exercise/drill at the CVFD on October 21, 2015.

9. CORRESPONDENCE

9.1 Letter to M. Coleman from C. Vance

9.2 Connecticut State Police report for Columbia - September 2015

10. BUDGET

10.1 Transfers: None.

10.2 Refunds: C. Vance MOVED to approve the following refunds:

AMOUNT	FROM	TO
\$79.02	Town of Columbia	Jerry Eisenberg
\$295.35	Town of Columbia	Jerry Eisenberg
\$15.30	Town of Columbia	Jonathan Kautman
\$28.54	Town of Columbia	Julia Mazzarella
\$2.17	Town of Columbia	Marc Schreiber

TOTAL REFUNDS: \$420.38

MOTION CARRIED 4:0.

11. APPROVE PAYMENT OF BILLS: R. Bogue MOVED to approve the payment of bills totaling \$34,974.48. MOTION CARRIED 4:0.

12. BOARD MEMBER COMMENTS: R. Bogue stated that he and N. Nau briefly spoke about the length of BOS meetings and the possibility of not allowing a meeting to adjourn later than 10 pm. Discussion ensued regarding limiting item discussion times, presentation times, etc. S. Everett stated that Audience of Citizens often turns into discussion when it should not. W. O'Brien feels that it is very rare that a meeting run past 10 pm. C. Vance stated that she does not feel there is a need to place a time limit on meetings or presentations. W. O'Brien thought the best way to control the length of meetings was to control the length of the agenda. The general consensus was not to set time limits.

13. EXECUTIVE SESSION:

13.1 Real estate per State Statutes Section 1-200(6)(D); Pending Litigation per State Statutes Section 1-200(6)(B); Personnel per State Statutes Section 1-200(6)(A); C. Vance MOVED to enter into executive session at 8:41 pm with N. Nau present. Executive session ended at 9:12 pm.

14. ADJOURNMENT: C. Vance MOVED to adjourn at 9:13 pm. MOTION CARRIED 4:0. The next meeting of the BOS is scheduled for Wednesday, November 4, 2015 at 7 pm.

Respectfully submitted by Kimberly A. Bona



27 October 2015

Natasha R. Nau, Town Administrator
Town of Columbia
323 Route 87
Columbia, CT 06237

Reference: Columbia Cell Tower - Proposal for Structural Engineering Services

Dear Natasha:

We are pleased to submit our proposal for structural evaluation of the town's existing steel lattice cell tower and proposed extension.

Project Description

The Town of Columbia is seeking an independent evaluation of the condition of the town's existing 50' steel lattice cell tower as well as a peer-review of the structural capacity report produced for the existing 50' tower alone and with a 10' extension.

Scope of Services

Our scope of services shall include, and be limited to, the following:

Evaluation of the Existing Structure

- a. Review of existing drawings of the structure (not yet provided).
- b. Visual survey of the tower structure to verify that the member sizes shown on the drawings are an accurate representation of what was built.
- c. Visual survey of the tower structure to determine its condition, life expectancy and possible repairs to extend its life if applicable.
- d. Review of the two structural capacity reports.

Preparation of Written Report

- a. Cirrus Structural Engineering will present our findings in written report form, documenting the nature and extent of noted conditions along with life expectancy and repair options if relevant. The report will also include a peer review analysis of the structural capacity reports.

Professional Fees

1. Compensation for the scope of services as described shall be **\$1,100**.
2. Should unanticipated conditions or additional scope drive the fee beyond that indicated above, we will secure your approval for the additional work prior to proceeding.

Terms and Conditions

Standard of Care: Cirrus Structural Engineering, LLC (Engineer) is an independent consultant and agrees to perform the Scope of Services as described above. Engineer's services shall be performed using the degree of care and skill ordinarily exercised under similar conditions by reputable members of the engineering profession in effect at the time of service. No warranty, expressed or implied, is made or intended by this proposal or by oral or written reports or designs.

Payment Terms: Invoices will be billed on a monthly basis. Payments are due and payable upon receipt of the Engineer's invoice. Reimbursable expenses shall be billed with a ten percent (10%) mark-up and include but are not limited to mileage, tolls, parking, travel, reproduction and shipping. Amounts unpaid thirty (30) days after the date of invoice may be subject to interest at the rate of one-and-one-half percent (1.5%) per month or eighteen percent (18%) per annum at the sole election of the Engineer. If full payment is not received within sixty (60) days of invoice date, Engineer reserves the right to suspend work efforts until all invoices are paid in full.

Kindly acknowledge your acceptance of this proposal by signing and returning the enclosed copy to us. This shall constitute your authorization for us to proceed with the services described herein.

If you have any questions regarding scope or fee, please do not hesitate to contact this office. Thank you for the opportunity to submit this proposal and we look forward to working with you.

Respectfully Yours,
Cirrus Structural Engineering, LLC



Elizabeth Acly, PE
Principal

Accepted by:

Name, Title

Affiliation

Date

ANIMALS ON TOWN OWNED PROPERTY

Town Record Book 8 Page 395

Selectmen's Book 10 Page 2594

1. PROHIBITED ACT: No person shall bring in, or permit onto, the town owned Recreation Area, any animal, unless the animal is under full and complete control of said person. Dogs must be leashed. Owners are responsible for cleaning up their animal's excrement on any town-owned land.

2. No person shall bring or allow onto the Town owned beach any animal except that any blind, deaf or mobility impaired person may be accompanied by his/her guide dog, provided such guide dog shall be in the direct custody of such blind, deaf or mobility impaired person and shall be wearing a harness or an orange colored leash and collar. Exception in the beach area: Dogs which are with their owners walking to and from a boat are permitted, however, such dogs must be leashed.

3. No person shall bring into a town owned building any animal, including pets and other domesticated animals, unless such animal is necessary to assist a blind, deaf or mobility impaired person. This ordinance shall not apply to Horace W. Porter School.

Exception in the beach area: Dogs which are with their owners walking to and from a boat are permitted, however, such dogs must be leashed and the owners shall be responsible for clean up of their pet's excrement.

PENALTY: Any person violating any provision of this ordinance shall be fined not more than \$50 for each offense.

Hearing: December 3, 1992 & February 20, 1992
Adopted: February 20, 1992
Special Town meeting: February 20, 1992
Publication Date: February 26, 1992
Effective Date: March 18, 1992

Hearing: June 15, 2004
Adopted: June 15, 2004
Effective: July 15, 2004

BOS Meeting: November 4, 2015
Adopted:
Effective:

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Memorandum

To: Board of Selectmen

From: Natasha R. Nau, Town Administrator

Date: November 2, 2015

Re: Outdoor Wood Furnaces (for November 4, 2015 BOS Meeting)

I was recently approached by Patricia Taylor, Deputy Outreach Director from Environment & Human Health, Inc. (EHHI) to make Columbia aware of the health effects of Outdoor Wood Furnaces (OWFs) and to initiate a local ordinance in Columbia to ban them.

Outdoor wood furnaces (OWFs) are one area of study and policy for EHHI because of their harm to human health. Neighbors who live near an OWF suffer illness and injury. Their homes lose value. When they decide the only solution to their health problems is to sell and move, they can't find a buyer when the OWF and the smoke it produces are discovered by potential buyers.

The installation of an OWF in a mixed residential and rural community of like Columbia creates a host of problems - it endangers the health of neighbors, decreases the property value of neighboring homes, and is the cause of investigation, regulation, and legal burdens for local government. A local ban on outdoor wood furnaces is protective and proactive for Columbia and its citizens.

The 17 Connecticut towns, including Tolland and Hebron have already banned them. I have attached a list of those towns as well as a copy of the ordinances passed in Tolland and Simsbury, CT. The Tolland ordinance is a model for towns governed by a First Selectman and the Simsbury ordinance is a model for towns managed by a Town Manager or Administrator. I have also attached a section of EHHI's 2010 publication on OWFs.

Short of a ban or zoning restrictions, it is EHHI's next best recommendation to implement a one-year moratorium on the installation of OWFs. This serves as a trial period for the community and an opportunity for town officials to measure the proactive and protective impact of a permanent ban.

I discussed OWFs with Columbia's Fire Marshall, Fire Chief and Building Inspector and none of them feel that OWFs are currently an issue in Columbia and estimate that we only have between 5 and 10 in the entire town. The Building Inspector says that early models were known to cause significant air quality issues and the DEEP created regulations and even tried to ban them a couple of years back but the newer models meet EPA regulations for emissions and the DEEP is now offering \$3,000.00 grants to replace older models with the new EPA compliant models.

A full version of EHHI's 2010 publication is available at:

http://www.ehhi.org/reports/woodsmoke/woodsmoke_report_ehhi_1010.pdf. This can be emailed to you if you are interested.



CT DEP Fact Sheet

Produced Sept 2005, revised 2011

Conn. Gen. Stat. 22a-174k and Outdoor Wood Burning Furnaces

During the 2005 session of the General Assembly Public Act 05-227, now codified as Connecticut General Statute 22a-174k, concerning the siting of Outdoor Wood Burning Furnaces (OWFs) was signed into law.

The Conn. Gen. Stat. 22a-174k requires that any OWF constructed, installed, established, or modified after July 8th, 2005:

- Must operate only on wood that has not been chemically treated.
 - Any other material burned in the OWF would constitute a violation of the statute.
 - Additionally, installation and operation must be conducted in accordance with the manufacturer's written instructions provided they do not conflict with the statute.

★ Must be located not less than 200 feet from the nearest residence not being served by the unit. (If the unit will be closer than 200 feet to the nearest residence not being served by the unit, then the OWF must not be installed).

★ Must have a chimney that is more than the height of the roof peaks of residences located within 500 feet of the OWF, provided the chimney height is not more than 55 feet (This is to the actual roof peak, not the mid-line of the slope).

- ★* ○ A chimney's height is limited to no more than 55 feet, from ground level, at its installed location. (If this is not more than the height of the roof peaks of residences located within 500 feet of the OWF, then the OWF must not be installed).
- A licensed Land Surveyor or Professional Engineer would be able to provide appropriate mapping, showing both the horizontal and the vertical control measurements to all residences within the 500 foot radius required by law in order to demonstrate compliance with Conn. Gen. Stat. 22a-174k.

- Is subject to an infraction, not to exceed \$90/day, for every day of operation not in compliance with Conn. Gen. Stat. 22a-174k. Violation of this statute is listed under miscellaneous in the Judicial Infraction Schedule.

Connecticut municipalities continue to have local control of land use in and around areas with OWFs, for instance:

- ★* • Some municipalities institute summer bans, complete bans, or limit installation of OWFs within their jurisdictions. Local municipalities may choose to limit installations near schools, churches, and commercial areas as the statute only addresses set back requirements from residences.
- The installation of an OWF requires a building permit.

Environment and Human Health, Inc.
1191 Ridge Road
North Haven, Connecticut 06473
Phone (203)248-6582 Fax (203)288-7571

A recent study on outdoor wood furnaces (OWFs) shows that homes as far away as 850 feet from an outdoor wood furnace are impacted by enough smoke to cause illness. Connecticut has setbacks regulations for OWFs of only 200 feet.

- NESCAUM has estimated that each OWF emits 20 times the wood smoke as one certified indoor wood stove. NESCAUM is an association of air quality agencies in the Northeast. Their Board of Directors consists of the air directors of the six New England states - Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont - and New Jersey, and New York. Their purpose is to provide scientific, technical, analytical, and policy support to the air quality and climate programs of the eight Northeast states.
- Although many people associate tobacco smoke with certain health risks, research indicates that second hand wood smoke has potentially even greater ability to damage health. Tobacco smoke causes damage in the body for approximately 30 seconds after it is inhaled. Wood smoke, however, continues to be chemically active and cause damage to cells in the body for up to 20 minutes, or 40 times longer.
- A house as far away as 850 feet from an outdoor wood furnace (OWF) had 6 times the levels of PM 2.5 as the houses not near an outdoor wood furnace and 4 times above the levels of the EPA air standards.
- *EPA defines PM 2.5 as Particle Matter less than 10 micrometers in diameter. These small particles pose a health concern because they can be inhaled into and accumulate in the respiratory system. Health studies have shown a significant association between exposure to fine particles and premature mortality. Other important effects include aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days), lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and cardiac arrhythmia. Individuals particularly sensitive to fine particle exposure include older adults, people with heart and lung disease, and children.*
Sources of fine particles include all types of combustion activities - motor vehicles, power plants and wood burning.

A house 240 feet from OWF had 12 times the levels of PM 2.5 as the as the houses not near an outdoor wood furnace and 8 times above the levels of the EPA air standards.

THE 17 TOWNS in Connecticut that have now banned outdoor wood furnaces are:

Avon

Cheshire

Granby

Haddam

Hamden

Hebron

New Fairfield

Norfolk

North Haven

Portland

Ridgefield

Rocky Hill

Simsbury

South Windsor

Tolland

West Hartford

Woodbridge

ENVIRONMENT AND HUMAN HEALTH, INC.'S STATEMENT ON WHY TOWNS NEED TO BAN OUTDOOR WOOD FURNACES - ALSO KNOWN AS OUTDOOR WOOD BOILERS.

It is the opinion of Environment and Human Health, Inc. (EHHI), along with the other non-governmental organizations and the states that originally sued the U.S. Environmental Protection Agency (EPA) for wood smoke standards, that the new standards the EPA has set for outdoor wood furnaces are not stringent enough to protect human health. Therefore EHHI is recommending that towns and cities ban outdoor wood furnaces in order to protect their citizens' health.

Seven states and four non-governmental agencies sued the U.S. Environmental Protection Agency (EPA) in 2013 because the EPA had not revised the wood smoke standards of the Clean Air Act in twenty five years. A lawsuit was filed by seven states - Connecticut, Maryland, Massachusetts, New York, Oregon, Rhode Island, and Vermont, and the Puget Sound Clean Air Agency (together referred to as "States").

The states sued EPA for failing to timely review and revise the New Source Performance Standards (NSPS) for residential wood heaters under the Clean Air Act. At that time, the EPA wood smoke standards did not even include outdoor wood furnaces.

At the same time, four public health and environmental non-governmental organizations (NGOs) - the American Lung Association, Clean Air Council, Environmental Defense Fund, and Environment and Human Health, Inc. (EHHI) - sued the EPA for failing to timely review and appropriately revise the NSPS for residential wood heaters, including outdoor wood furnaces.

Because of these lawsuits, on February 3, 2015, EPA established wood smoke emission standards for outdoor wood furnaces. These new standards do not affect existing outdoor wood furnaces that are currently in use.

The four NGOs and the seven states that sued EPA in 2013 considered re-suing them again because EPA's new wood smoke emission standards for outdoor wood furnaces failed to provide adequate protection for human health. However, even though there is agreement that the new standards were inadequate, the NGOs and the states lacked the legal authority to re-sue.

The harm that outdoor wood furnaces do to neighboring homeowners' health plus the inadequacy of the new wood smoke standards for outdoor wood furnaces are the reasons why EHHI is asking towns and cities to ban them. Outdoor wood furnaces are a flawed technology that not only harms the health of neighboring homeowners but also ruins the real estate value of their homes. Towns and cities owe it to their citizens to protect their citizens' health as well as their life savings which are often in the value of their homes.

Case number 2 - Suzan Converse, Weston, CT

My neighbor across the street has a wood-burning furnace and it has become an extreme disturbance and problem in our lives. Once he begins using his furnace in the fall I can no longer open my windows to get fresh air, in fact, my house is always contaminated by his wood smoke.

I found out that indoor air is 70% of what is outdoors...that no windows or doors can keep the smoke out. I also cannot hang any laundry out on my line because it will get completely smoked out and thus I am forced to use more energy with my clothes dryer. We are very health conscious and environmentally conscious people who make decisions carefully so that we don't leave much of a footprint.

We feel extremely frustrated that we are defeated in our efforts by someone else's lack of consideration. One of my children recovered from a serious autoimmune disease before we moved into our house (3 years ago) and had we known the circumstance with my neighbor we would never have bought it.

No one in my family had ever suffered any upper respiratory illness until three years ago. At that time I was very ill and had borderline pneumonia. The following year my entire family spent a day outdoors on our property doing yard work and playing and 3 days later we were all sick with bad coughs and I again was close to pneumonia.

We are very careful not to go out anymore when his furnace is in use and try to have our property cleaned up in the fall before he begins using his furnace. There are times when the smoke is at ground level. I can never even feel comfortable letting my own children out to play for fear of their breathing the toxic wastes. If we could afford to move we would.

We feel trapped and defeated not only by our neighbor but by our town and the illogical grandfather laws allowing someone to harm others if they have been doing it already before a certain time. Why aren't people protected from wood smoke like this automatically? The people who sold us this house moved because one of the owners had a terminal lung condition and had difficulty going up and down stairs (he used oxygen tanks). Was it exacerbated by my neighbor's furnace? I feel afraid for our future health and will do anything to stop this man from using his furnace not just for my family's health but my neighbors' health and that of the wildlife and plant life that still exists in our area.

From: Suzan Converse, Weston, CT

Phone number 203-587-1023

szan@optonline.net

ZONING REGULATIONS TOWN OF TOLLAND

Chapter 170 page 96

CODE of the TOWN OF TOLLAND STATE OF CONNECTICUT

Zoning Regulations Rev. July 20, 2009

ARTICLE XIV

Accessory Uses and Structures

Section 170-84. General Requirements.

Accessory uses and structures shall be subject to the following conditions:

A. Establishment of accessory uses.

1. Accessory buildings, structures and uses shall be located on the same lot as the principal building, structure or use to which they are accessory.

2. Accessory buildings, structures and uses shall not be located on a lot without the prior establishment of a permitted principal use, nor shall any new lot be created that has an accessory building, structure or use without a principal use.

B. Prohibited Accessory Uses and Structures.

The Commission feels that, by their very nature, the following uses and structures cannot be regulated in such a fashion as to protect the Health, Safety and Welfare of the general public and are prohibited in all zones.

Outdoor Wood Burning Furnaces, as defined by P.A. 05-227

DRAFT

Proposed Ordinance Concerning Outdoor Wood-Burning Furnaces

Section. _____ Simsbury Town Code of Ordinances.

- a. **Outdoor Wood-Burning Furnaces are prohibited in the Town of Simsbury. For purposes of this section, "Outdoor Wood-Burning Furnace" means an accessory structure or appliance designed to be located outside of living space used for human habitation and designed to transfer or provide heat, via liquid or other means, through the burning of wood or solid waste, for heating spaces other than where such structure or appliance is located, or any other structure or appliance on the premises, or for heating domestic, swimming pool, hot tub or jacuzzi water. "Outdoor Wood-Burning Furnace" does not include a fire pit, wood-fired barbecue or chiminea.**
- b. **Any person who violates this section shall be subject to a fine of up to \$250 per day. Each day such violation continues is a separate violation.**

Draft 1.1.11

Introduction

This study investigates how homes are affected by neighboring outdoor wood furnaces, as well as the health implications for the families living inside homes impacted by wood smoke.



When the weather forecast includes a warning of poor air quality, many people reduce their levels of activity and stay inside. However, many homes that are impacted by neighboring outdoor wood furnaces have air quality *inside* that is poor all the time. What can people do? This study investigates how homes are affected by neighboring outdoor wood furnaces, as well as the health implications for the families living inside homes impacted by wood smoke.

In this report, Environment and Human Health, Inc. (EHHI) explains its study, which measured potential wood smoke inhalation by people living in homes in the vicinity of outdoor wood furnaces (OWFs), also known as outdoor wood boilers (OWBs). EHHI's study monitored levels of PM_{2.5} and PM_{0.5} particles in each house for 72 hours.

The U.S. Environmental Protection Agency (EPA) has shown that PM_{2.5} and PM_{0.5} are the most common size particles in wood smoke. PM_{2.5} and smaller cause the greatest health impacts because they are small enough to go deep inside the lungs, where they can not only damage the lungs, but also pass through into the blood stream,

THE DANGERS TO HEALTH FROM



The components of cigarette smoke and wood smoke are very similar, and some components of both are carcinogenic.

Outdoor wood furnace emission problems are exacerbated by the fact that these devices cycle between oxygen-deficient and oxygen-rich burning. This causes the smoke that leaves the stack to be cool. Irrespective of the stack's height, the wood smoke will fall toward the ground and will then travel in a plume for up to one-half mile, impacting houses in its wake.⁴

Wood smoke contains particles that are so small they cannot be kept out of homes, even tightly built homes. The smoke particles enter through the windows and the doors and remain in the homes for long periods of time, impacting a family's health.⁵

As the use of outdoor wood furnaces has increased, so has the number of complaints. Neighbors have reported serious health impacts, including reduced lung function, increased asthma attacks, headaches, sinusitis, bronchitis and pneumonia. Many of the components of wood smoke are carcinogenic—and wood smoke as a whole can aggravate heart disease.⁶

According to the Environmental Protection Agency (EPA), wood smoke includes toxic air pollutants and can cause coughs, headaches, and eye and throat irritation in otherwise healthy people.⁷ Scientific literature further demonstrates that wood smoke exposure can depress the immune system and damage the layer of cells in the lungs that protect and cleanse the airways. Wood smoke interferes with normal lung development in infants and children. It also increases children's risk of lower respiratory infections, such as bronchitis and pneumonia. The components of cigarette smoke and wood smoke are very similar, and some components of both are carcinogenic.

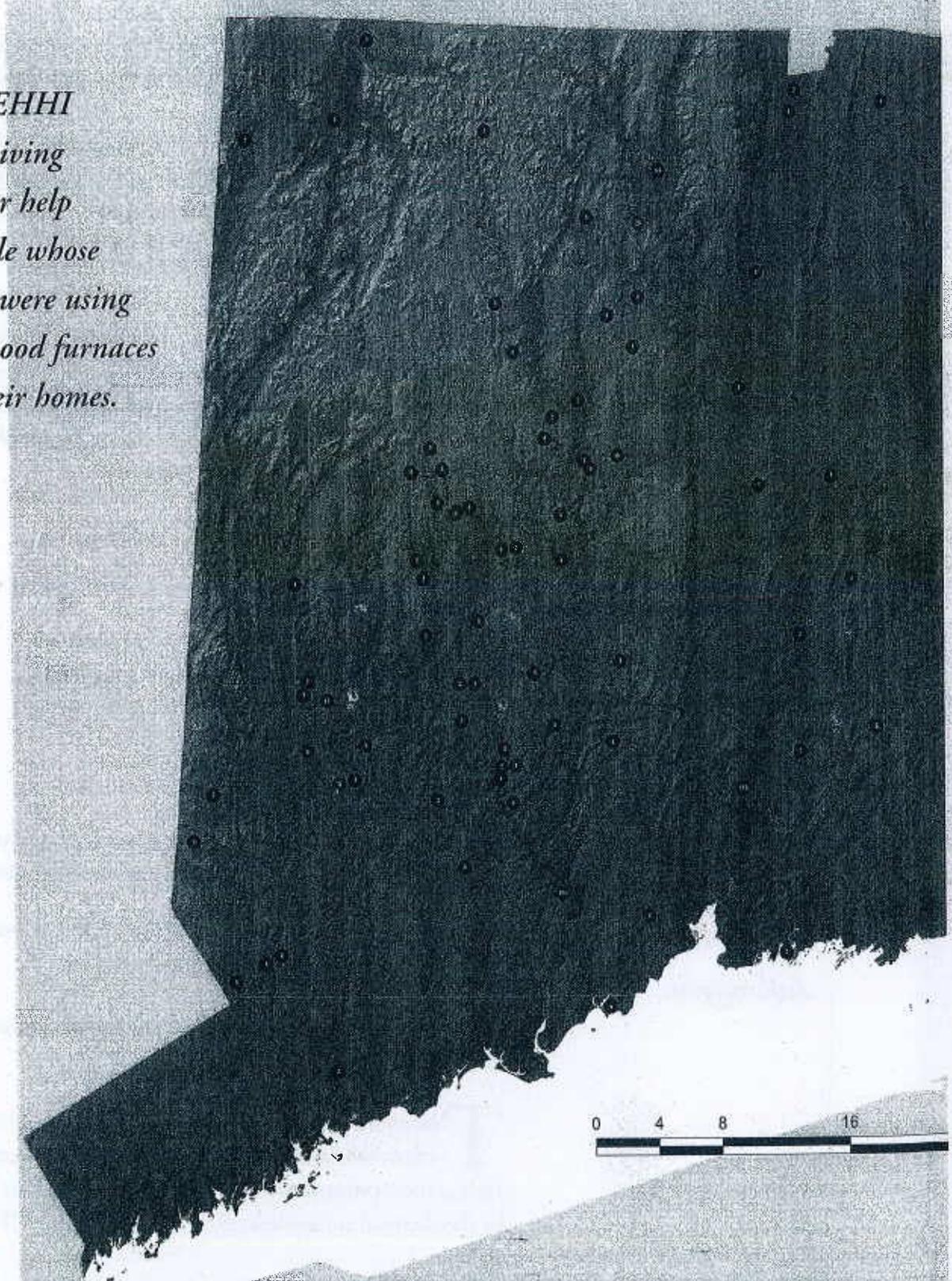
Why outdoor wood furnaces (OWFs) emit far more smoke than other wood-burning devices

The design of an outdoor wood furnace does not allow for complete combustion, and thus generates large amounts of dense smoke. When it leaves the stack, the smoke is much cooler

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Outdoor Wood Smoke: Number of Complaints

In 2008, EHHI began receiving requests for help from people whose neighbors were using outdoor wood furnaces to heat their homes.



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Emissions from a smoldering fire, with incomplete combustion, contain more carbon monoxide, carcinogens, organic toxicants and irritants than smoke emissions from a very hot fire that is supplied with high levels of air and oxygen.

Although some individual towns across the country have banned new installations of OWFs, this is a very cumbersome way to address the problem, as there are thousands of towns. In addition, bans by towns, going forward, do not address the problems created by “grandfathered” OWFs. In the meantime, new OWFs are being installed across the northern states in this country, creating more and more problems for people living near them (*see map, preceding page*).

When neighbors complain to the state about an outdoor wood furnace that is *in compliance*, but is causing them harm, they are often referred back to their town officials. Unless states take decisive action to protect their citizens, confusion and inaction will remain with regard to who has jurisdiction over wood smoke problems —and who will actually enforce wood smoke regulations.

Wood smoke contains unhealthy amounts of:

- particulate matter
- dioxin
- carbon monoxide
- nitrogen dioxide
- sulfur dioxide
- hydrochloric acid
- formaldehyde
- other toxic air pollutants

Exposure to these pollutants is associated with a diverse range of harmful health effects, some of them short-term and others long-term.

How can the risks to residents' health in a home impacted by wood smoke be determined?

The amount of wood smoke inhaled determines the health risk.

The amount of contaminated air inhaled inside a house determines the health risk. In the case of complex mixtures of toxins, such as those present in wood smoke, the health effects are determined by the chemical components of the smoke emissions. Thus, the health

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Until Environment and Human Health, Inc. conducted this study, very little was known about how much wood smoke was actually inside homes located near outdoor wood furnaces.

Until Environment and Human Health, Inc. conducted this study, very little was known about how much wood smoke was actually inside homes located near outdoor wood furnaces. EHHI has now evaluated the indoor air quality inside a number of homes near outdoor wood furnaces. EHHI also evaluated a number of homes that were not near outdoor wood furnaces, which served as the control houses.

The critical question is the safety of those who continue to inhabit a house that has accumulated wood smoke emissions.

In order to understand the risk from the exposures occurring inside houses impacted by wood smoke emissions, it is necessary to monitor the hourly concentrations over several days to establish the patterns of air changes. To establish the added risk from wood smoke, it is necessary to compare the measurements to concentrations in control, or background, houses.

How outdoor wood smoke enters the inside of neighboring homes and the resulting health effects

The amount of smoke emissions that enter a house is dependent on the concentration of the smoke emissions outside of the house, as well as the rate at which the house exchanges outside and inside air. Typical houses in the Northeast exchange one total volume of air each hour, but can vary from one air change every two hours for "tight" houses to one air change every half-hour for a very drafty house.

Over a period of several hours, the amount of smoke emissions inside the house will reach the same concentration as in the air that surrounds the house. As a rule of thumb, it can be assumed that after one hour—in a house with good interior circulation to mix the emissions entering the house with the clean air inside it—the concentration of emissions inside a house is approximately half of that outside. The concentration inside the house will increase hourly,

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A study by the University of Washington in Seattle showed that 50 to 70 percent of the outdoor levels of wood smoke were entering homes that were not burning wood. The EPA performed a similar study in Boise, Idaho, with similar results.

- Particulate matter in wood smoke that is less than 10 microns in diameter finds its way into the alveoli in the lungs. Once in the alveoli, the particulate matter can cause structural and chemical changes, which interfere with oxygen uptake. As well, the toxic compounds and carcinogens enter into the bloodstream by way of the alveoli of the lungs.
- Episodes of short-term exposures to extreme levels of fine particulates from wood smoke and other sources, for periods as short as two hours, produce significant adverse health effects.^{17, 18, 19}
- Wood smoke interferes with normal lung development in infants and children. The components of smoke increase children's risk of lower respiratory infections, such as bronchitis and pneumonia. Wood smoke exposure can depress the immune system and damage the layer of cells in the lungs that protects and cleanses the airways.
- Wood smoke causes coughs, headaches, and eye and throat irritation in otherwise healthy people. For vulnerable populations, such as people with asthma, chronic respiratory disease and those with cardiovascular disease, wood smoke is particularly harmful—even short exposures can prove dangerous.
- Children and the elderly have the highest sensitivity to wood smoke. However, no age group is without risk for respiratory problems, including asthma and chronic obstructive pulmonary disease (COPD), that result from breathing wood smoke. The effects are cumulative.
- The air impact of health exposure to wood smoke is increased two-fold during periods with stagnant air. Under such conditions, the inhaled dose levels of particulates within houses approach the hazardous level found in regulated work sites by OSHA. EHHI found smoke entering houses, every day, at even higher levels.

Summary of the Study's Findings

States have tried to control the harmful effects of outdoor wood furnaces by legislating set-back regulations. Some states have set-back regulations of 100 feet from the nearest neighbor, while other states have set-back regulations of 200 feet. This study shows that none of the regulations that have been put in place protect the neighboring properties or the health of the families living in the homes on those properties.

- EHHI measured the two particle sizes— $PM_{2.5}$ and $PM_{0.5}$ —designated by EPA to be the most dangerous to human health. Both of these particulates were continuously recorded in each of the impacted homes for a period of three days. Both hourly averages and minute-by-minute data were collected.
- Two of the most hazardous components of wood smoke, particulate matter (PM) measuring 2.5 and 0.5μ (u) microns in size, were significantly elevated inside homes neighboring outdoor wood furnaces. High levels were present in every 24-hour period tested, in every home.
- A look at the hours of peak exposures to $PM_{2.5}$ particles in both the background houses and the impacted houses shows that House A had peak levels that were six times higher than the control houses; House B had peak levels 14 times higher than the control houses; House C had peak levels 12 times higher than the control houses; and House D had peak levels more than eight times higher than the control houses (see charts showing Houses A, B, C and D on pages 23–26, where the blue line represents background levels in control houses).
- Comparing the derived equivalent $PM_{2.5}$ particle count to the estimated EPA 24-hour air standard of 35 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) shows that House A had four times the EPA air standard; House B had nine times the EPA air standard; House C had eight times the EPA air standard; and House D had six times the EPA air standard.
- Every impacted home had many hours when $PM_{2.5}$ particles were significantly above both the levels found in the background houses and the EPA air standards.
- All impacted houses had particulate exposures well above the EPA air ambient air quality standard. Levels of $PM_{2.5}$ that exceed the EPA standard are associated with asthma or COPD attacks and hospitalizations, and are also associated with increased risk of cardiovascular problems.
- An impacted house 100 ft. from an OWF had 14 times the levels of $PM_{2.5}$ compared to the background houses, and nine times the levels of $PM_{2.5}$ in the EPA's air standards.

- Be so constructed to prevent unauthorized climbing,
 - Not exceed a 45 dBA sound level as measured as the property line, with the exception of during short-term events beyond the owner's control such as utility outages and/or severe wind storms.
- b. The construction and operation of a Small Wind Energy System shall be consistent with all applicable local, State and Federal requirements, including but not limited to all applicable safety, construction, environmental, electrical, communications and Federal Aviation Administration (FAA) requirements.
- c. As part of any application to establish a small wind energy system, the applicant shall submit:
- Wind system specifications, including manufacturer and model, rotor diameter, dbA levels, tower type and total height of system,
 - Foundation and design plans signed by a professional engineer licensed to practice in Connecticut,
 - Information showing how the facility shall be designed to prevent unauthorized access,
 - A letter indicating that the small wind energy system will be removed if it has reached the end of its useful life, or fails to operate for a one year period, or has been abandoned.

8.17 Outdoor wood-burning furnace (Effective 7/1/14). The installation of an outdoor wood-burning furnace, as defined by CT State Statute 22a.174k, as revised, may be permitted as an accessory use in all districts with approval from the Zoning Enforcement Officer, subject to the following conditions:

- a. All applicable CT State Statutes and regulations regarding such furnaces shall be met. The applicant shall submit a signed statement affirming compliance with the State's requirements .
- b. The application shall include a sketch plan indicating the location of the proposed furnace and all residences within 500' along with the height of each roof peak; the Zoning Enforcement Officer may also require a site plan prepared by a licensed surveyor to determine compliance. The furnace shall meet the required yard setbacks for the applicable zone.
- c. The furnace shall not be operated between May 1 and September 30.
- d. To maximize the furnace's efficiency and minimize impacts to the environment, the Applicant is strongly encouraged to:
- Use a right-sized furnace that will operate at maximum efficiency during most of the winter and plan for supplemental heating for unusually cold weather;
 - Reduce heat loss in water transfer lines by placing pipes below frost level and using proper insulation;

- Burn wood efficiently by only using wood with a moisture level no greater than 20%; and manage your wood supply to keep moisture below 20%.
 - The following items as listed, but not limited to, should not be burned:
household garbage, plastic or cardboard, painted, coated or pressure-treated wood, or wet, rotted, diseased or moldy wood.
- e. Permits for outdoor wood-burning furnaces shall be issued for a period of 3 years and may be renewed upon request from the owner if the Zoning Enforcement Officer, upon inspection, finds that the furnace remains in compliance with applicable Connecticut Statutes and regulations and Columbia zoning regulations regarding such furnaces.
- f. The CT Statutes and these Regulations shall be enforced by the Commissioner of Environmental Protection and the Town of Columbia, and fined for violations per CT State Statute Sec. 22a-174k.

Town Administrator

From: Mark Coleman [csp30@charter.net]
Sent: Sunday, November 01, 2015 7:55 AM
To: George Murphy
Cc: Town Administrator; Carl Foster; Dan@VOengineers.com; dvanderbilt@sbcglobal.net; FILE; Henry Beck Jr.; James Santos; John Burrell; Karl Then; Mary Roickle; Michael Gnazzo; Robert Powell; Steven Harrington
Subject: LAKE STATUS - FALL DRAWDOWN

Good Morning George;

A little earlier this morning, I was at the dam with David Vanderbilt, and we opened the gate to begin the fall drawdown of lake waters. The lake level is at minus three (-3") inches and the initial drawdown needs to lower to minus six (-6') feet. The gate is now open at thirteen (13") inches and with the current head pressure, will initially lower the lake four (4") inches per day. As the head pressure diminishes, the outflow slows down to approximately two and one half (2 ½") inches per day. Normally it takes between 15-20 days to reach the minus six (-6') foot level and much of this is determined by how much rain we get during the drawdown period. Once the initial minus six (-6') foot level is achieved, the gate needs to be closed and the lake level allowed to rise and be maintained between minus five feet, six inches (-5' 6") and minus five (-5' 0") feet. The weep holes are flowing normally at 25%, both clear. The water temperature is 54 degrees with a full mixing of top and bottom waters. The clarity is down to just under three (3) meters, normal for this time of year. I will turn my gate key over to Michael Gnazzo (Interim LMAC Chairman) at the November 4th meeting of LMAC and hopefully at that meeting will be able to submit a recommendation for a replacement gate keeper.

Mark

Memorandum

To: Board of Selectmen

From: Natasha R. Nau, Town Administrator

Date: November 2, 2015

Re: TA Report for November 4, 2015 BOS Meeting

CVFD Day-Time Staff

Had my second meeting with Peter on Friday October 30th and we looked over sample job descriptions from other towns that employ part-time firefighters. I have asked Peter to re-approach his board and membership about the idea of creating a joint volunteer membership. He will be providing recent call data and response times for our next meeting which is set for Friday November 13th.

Bridges/Roads

Pucker Street Bridge replacement continues to progress and is scheduled to be complete one week ahead of time (November 19th). If anything unforeseen arises, they will use the additional week and the road re-opening will remain at November 26, 2015.

Library

We received a total of 6 bid submissions before the 3pm October 19th deadline: Millennium Builders, Scope Construction, Diversity Construction, Montagno Construction and LaRoche Builders. The low bidder was Millennium at \$987,000 total (base and alternate). Bob Powell and I have vetted Millennium by calling references on past and current projects and all have good reviews. We have unofficially selected Millennium and will meet with them on Tuesday November 3rd. The AIA contract is being completed today and will be sent off to the State Library and Auditor General. A draft copy will be provided to Millennium for review while we await the confirmation from the State.

Hoarding

The inspection of the home on October 5th, 2015 by the building official, fire marshal and state did not reveal any significant progress unfortunately. A letter was sent by the homeowner shortly after requesting a 4.5 month extension and we have denied that request. I met with the homeowner to discuss and have given him one final 30-day extension with a final inspection on November 24th at 4pm.

Environmental Advisory Committee (EAC)

The committee and I are starting to brainstorm how we wish to spend our first Bright Ideas Grant once awarded. Light bulb exchange and home energy audits are the two events the committee wishes to offer first.

Beach Erosion Meetings

George and I are contacting companies to give us their proposals of work and associated quotes. The plan is to review these over the winter, have one public meeting once we have a plan we are happy with executing and secure someone to put the design together over the summer and the work be done in early fall.

Plan of Conservation and Development (POCD) Update (2016)

I will meet with Paula on November 3rd to go over the results of the survey and to go over the revisions of the three chapters I am responsible for. I also wish to place a focus on the Complete Streets initiative in the POCD.

R66 & Hunt Road/West Street

The tree removal permit is almost complete and will be submitted to the State for approval. The cost to pay Asplundh as well as hiring traffic control is estimated at \$2,000 - \$4,000 and we need to decide where that will be paid out of. I think it will have to come out of contingency.

Tabor Land Sale

This was finally completed on October 27, 2015.

Fracking Waste

I am researching the health effects of these substances and the ordinance that Coventry has created and will present it to the Board soon. I am consulting with EHHD as well.

Communications

I have enhanced our Community Calendar on the website, created an email function with a sign-up on the website and created a Town Facebook to improve the Town's communications with its residents as we have received complaints that residents are not well informed of upcoming events and other information.

Holiday Tree

My father will be providing a tree for the front of town hall this year from his farm in Vermont. I am getting this tree for significantly below cost. Carmen and I will make up any difference if it is slightly over budget. The tree will be delivered shortly before or after Thanksgiving.

Upcoming Deadlines

- 11/9/15: DEEP Invasive Aquatic Plants Grant
- 11/16/15: Energy Star Certification
- 11/20/15: Nutmeg Electronic Document Management and/or Human Resource Portal Grants