



**TOWN OF BOURNE  
BOARD OF HEALTH  
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Cynthia A. Coffin,  
Health Agent

**MINUTES  
April 13, 2011**

**Members Present: Kathleen Peterson, Chairperson; Stanley Andrews, Vice Chairperson; Galon Barlow, Don Uitti and Carol Tinkham.**

**Support Staff:** Cynthia Coffin, Health Agent, Carrie Furtek, Health Inspector and Kathy Burgess, Secretary

**Call to order: Meeting called to order at 7:00 P.M.**

Mr. Andrews stated that he would move item #1 further down on the agenda and move directly onto item #2.

1. **Sign final decision on site assignment for Sagamore Truck & Rail-** Moved further down on the agenda
2. **ISWM-Dan Barrett-**General update; discussion regarding DEP answers relative to questions 4 & 6-proposed alternative technologies-Mr. Barrett stated that they have not had any odor complaints since February but early morning odor loops by ISWM staff have noticed some minor odors due to morning startup of ongoing construction projects. These minor events have all been dealt with quickly and effectively. ET&L is continuing the installation of the gas system expansion. All header piping is in and four of the nine new vertical wells have been hooked up. The remaining wells will be hooked up by the end of next week, as finish grade is reached on the top areas and the wells can be set to their finish elevations. Mr. Barrett stated that in anticipation of the next potential area to cause odors they plan to focus land filling in the south end of Phase 2A/3A Stage 2 through the summer. This is the last area with waste in place that does not have any vertical wells. Their plan is to drill in that area sometime next winter. Litter-over the past month filling operations have been focused on the top level of the northeast corner of the landfill. They are placing the final lift of trash daily and intermediate cover on this area and doing the finish grading to facilitate the Final Cap project. Mr. Barrett stated

that the need to bring this area to finish grade to stay ahead of the Final Cap Project has not allowed us to drop operations to a lower elevation when the winds pick up. This caused problems last week when they experienced strong winds out of the southwest blowing litter on to the Gun Club and the MMR. They were working on an outside slope and could not place temporary nets in position. Mr. Barrett stated that he sent an email to DEP representatives at MMR as well as the Southeast Regional Office, TA Tom Guerino and Health Agent Cynthia Coffin to notify them of the situation. Everything has been cleaned up but there are still a few issues and they have to clean up on a daily basis. Mr. Barrett stated that today was a disheartening day as ET&L was working with about 7,000 yards of sand up on a slope and it all washed down. There is still some drainage and water issues at the landfill that they are continuing to work on. The Phase ID reclamation project is moving along well and they have not had odor complaints. Mr. Barrett stated that on Feb 23, 2011 he came before the Board and asked them to vote on several topics. Mr. Barrett stated, speaking for the working group, he wanted to thank them for that. It allowed them to move forward and get the RFP's off the ground and moving ahead. Mr. Barrett stated that he and Phil Goddard took the questions from the Board to DEP and to James Colman, Assistant Commissioner, Bureau of Waste Prevention, to discuss. In quick summation DEP will allow and supports combustion of gasses derived from various processes as long as the material consists of source separated organics and more specifically, not mixed MSW. They will allow and support the processing of source separated C&D wood to make industrial chemicals or other products but they would not allow production and combustion of gas. They would like to study a little further to see what is in the C&D waste before they allow gasification of it. Mr. Barlow asked if Mr. Barrett was happy with the response he has received from DEP so far. Mr. Barrett stated that he was happy with the response. Mr. Andrews stated that he took a ride over to the landfill and it looked like they had dropped their operations back down into the valley. Mr. Barrett stated that they have and the North end is complete and the lift is finished. Mr. Barrett stated that they will continue to focus on the Stage 2 area. It is in the South end and is the only area that doesn't have vertical gas collection wells in it. They will bring it up to grade as quickly as they can and hope to be drilling there by next winter. All nine gas wells are now hooked up and are operational. Mr. Barrett stated that the decision by DEP on questions 4&6 did not slow the working group down and if they receive a proposal large enough to warrant coming back to question a combustion issue it would also require a tonnage issue and at that time they would bring it up before the Board of Health. Mr. Barrett stated that they are planning an open house for the residential drop off area on May 21, 2011. The Board thanked Mr. Barrett for coming in.

3. **45 & 47 Cove Lane-Brad Birtolo, JC Engineering, for Thomas LeBlanc-**request variance-Mr. Birtolo stated that this property encompasses roughly three acres including 7 separate vacant parcels. This project is a revision of a

prior approved plan for the property that was before the Board many years ago. They had gotten an extension on an approval for a single family house at 47 Cove Lane which encompasses the Northern side of the project. The applicant owns two parcels to the South of the property and will be purchasing the property at 47 Cove Lane. Mr. Birtolo stated that they are asking for variances to install a septic system with variances to the wetland setback. They are requesting four variances for four separate wetlands. North, West, South and Southwest. The project includes the construction of a four bedroom dwelling, a garage/boathouse and pool with a 4 bedroom septic system. Mr. Birtolo stated, following the policy of the Board in regards to wetland setbacks, the variances he is requesting are a 74.4ft variance from the wetlands to the West, a 77.6 variance to the wetlands to the North, 121.8 ft variance to the wetlands to the Southwest, and 100 ft variance from the wetlands to the South. They are greater than 75ft in all directions. They have included the use of a microfast septic system and also included a UV treatment prior to discharge and to a leaching field of four chambers. Since the time they submitted this plan they have done a little more research on the UV treatment. The UV treatment can be connected to an alarm panel so that if the light goes out the alarm panel will go on. Mr. Birtolo stated that he is aware that UV treatment has issues with maintenance but with the alarm panel you will know if there is a problem. The variances are very similar to the ones on the previously approved plan for the site on 47 Cove Lane. Mr. Birtolo stated that they have come up with a total concentration of 1.8 parts per million. Ms. Coffin stated that she has a problem because what they combined to make the lot bigger isn't really upland it is still wetlands and back when the Board approved the variances it was for a two bedroom dwelling and does not see why they should do anything different now by approving it for a four bedroom house. Ms. Coffin stated that they have combined the land but it's not land that will add to treatment of the effluent. Ms. Coffin stated that she spoke with the Conservation Agent and there will be quite a lot of fill out there. Mr. Birtolo stated that they are not touching any wetlands. Ms. Peterson stated that she would like to make a site visit with the engineer. Mr. Andrews agree. Mr. Andrews stated that he had gone out there today and didn't dare try and drive in because of the huge puddle. Mr. Birtolo stated that they have talked about doing something to alleviate that problem. Mr. Andrews stated that he believes the UV and blowers to alarm panels would be beneficial. Mr. Barlow stated that this is a much bigger project than was first proposed and he would also like to take a look at it. Ms. Coffin stated that looking at the architecturals there is a game room in the main house that would meet the definition of a bedroom. Mr. Birtolo stated that they have already spoken with the building inspector who told them he would not approve the game room in the basement because it's in the flood zone. Mr. Birtolo stated that it will be open there now and used only for storage. It was decided that the site visit would be conducted on Sunday morning with the engineer. **Mr. Andrews made a motion to CONTINUE the request for variances until April 27, 2011 after the Board has made a site visit to the property. Don Uitti**

**seconded the motion. All in favor and the motion PASSES.** Ms. Peterson stated that she would like to apologize for arriving a little late for the meeting tonight.

4. **Debbie's Veggie Depot-441 Shore Rd-Debbie Larsen**-Request to allow expanded use of existing business-Ms. Larsen stated that they would like to have a steel smoker outside and sell ribs to expand their business. Mr. Barlow stepped off at this point as he also holds a food permit in Bourne. Ms. Coffin stated that when Ms. Larsen wanted to open last year there was an issue because there is no grease trap in the ground. Ms. Coffin stated that she told Ms. Larsen she could open but no food could be cooked on the premises and she could not operate as a restaurant. Only already prepared meals and hot dogs were okay to sell. Ms. Coffin stated that she does not have anything against generating business but is afraid this is turning into a restaurant because they have also mentioned having a raw bar. Ms. Coffin has spoken with the plumbing inspector and the plumbing code has changed. If they serve food that is to be consumed on the premises they must provide bathroom facilities for the patrons. Ms. Furtek stated last year there was one complaint that they were serving foods that were not on the list of what they should be selling. Ms. Furtek did an inspection and did not find any evidence of that. She just did their pre-inspection for this year and everything was okay. Mr. Andrews stated that he would like the Board to make a site visit to the property. Ms. Peterson agreed. Ms. Furtek asked how they would clean the smoker. George Ayer, Debbie's business partner, stated that you just broil it off the smoker and then scrape it off which would actually be easier to clean than the hot dog cart. Ms. Peterson asked where they are washing items. Ms. Furtek stated that they have a three bay sink where they wash and sanitize. They have also installed a grease trap under the sink. Ms. Peterson asked where the food is prepared that they sell. Mr. Ayer stated that they buy it from Boar's Head and are not making anything at home and are more than willing to follow any guidelines they are given and just want to have a successful business. Ms. Larsen stated that they have to grow to survive. Ms. Peterson stated that she has had a number of people tell her that Mr. Ayer and Ms. Larsen smoke out in front of the business where there is a screen door and she is concerned that the smoke will go into the shop where the food is kept. Ms. Peterson reminded them to be mindful of that and that people are seeing it. Ms. Peterson asked Ms. Coffin to look up how far you have to be away from a building while smoking. It was decided to conduct a site visit on Sunday. Mr. Uitti was going to walk through on Thursday morning. **Mr. Andrews made a motion to CONTINUE 441 Shore Rd until April 27, 2011 so the Board could make a site visit. Mr. Uitti seconded the motion. All in favor and the motion PASSES.** Mr. Barlow stepped back on after the vote was taken. Ms. Peterson called for a five minute recess.
5. **Wind Turbine Project**-General discussion & brief factual statements submitted by the public and applicant with regard to flicker from wind

turbines- Ms. Peterson stated that this is a fact finding session and the only people who will ask question of the presenters will be the Board, Health Agent and media. If there is something that is really upsetting to someone then the Board will allow them a few minutes but they would like to keep it at just the information coming in. Ms. Peterson stated that over the next few weeks the Board and Health agent will sift through the mountains of paperwork that have come in. Ms. Peterson will ask Ms. Coffin to put her thoughts together and bring it to a future meeting for any ideas she may have on future regulations and then at a public meeting the Board will discuss it. Ms. Peterson stated that they will hear from New Generation Wind first because the Citizens for Renewable Energy went first at the last meeting. Diane Tillotson, attorney for New Generation Wind Project, stated that shadow flicker has gotten a lot less attention in the world of turbine regulations. Ms. Tillotson stated that the reason for that is that there are no established adverse medically supported health impacts from shadow flicker. There has been some discussion on the impacts for people that suffer from epilepsy and photo sensitivity. Ms. Tillotson stated that there is no scientific basis for that. There is no regulatory statewide standard on the amount of shadow flicker that you are allowed to have. Ms. Tillotson stated that shadow flicker is a combination of the sun impact on the rotor blades and what happens when the sun gets to a certain point in the sky on a sunny day and the blades are turning at a particular angle. The Bourne zoning bylaw has adopted the Massachusetts model zoning ordinance which has been prepared by the Dept. of Energy Resources in 2009 which basically says that turbines have to be sited in a manner that minimizes shadowing or flicker impacts but doesn't set any kind of numerical standard for that. Ms. Tillotson stated that there has been a study done by Epsilon Assoc. and presented at a webinar in February on shadow flicker regs. They looked throughout the Commonwealth of MA and also at other New England states and did a study on what regulations were out there. Ms. Tillotson stated that there are not many regulations that deal with shadow flicker. Those that do state that they have to be sited in a manner that minimizes shadowing or flicker impact and that the applicant has the burden of proving that the effect does not have a significant adverse impact on neighboring properties. Ms. Tillotson stated that when there is an hour standard adopted it is generally the industry standard of 30 experienced hours of shadow flicker per year. There is one standard in Wisconsin that is 30 hours per year but it requires mitigation after 20 experienced hours per year. Ms. Tillotson stated that it is very easy to program the turbines so that the impacts from shadow flicker can be mitigated. The turbines can read whether or not the sun is out and can be adjusted or shut off so that people do not experience shadow flicker. All of the models that New Generation is looking at have the capacity for curtailment to address the impacts of shadow flickers. Ms. Tillotson stated that another point the survey makes is that there are no requirements in any of the bylaws that require any sort of post construction modeling but maybe that is something that should be added to a permit. Rich Tavisinski, Atlantic Design Engineers, stated that they have been doing

shadow flicker studies for dozens of projects in MA. Mr. Tavisinski stated that flicker is a moving shadow that is cast by rotating turbine blades directly in line with the sun. The flicker is viewed from inside a building when these rotating shadows cross the window in the room you are in. When you are outside it is just basically a moving shadow in the area you are standing in. It usually occurs when the sun is low in the horizon and is rising or setting unless you are directly underneath the turbine you will then experience it more during the midday. It occurs in areas that are East and West of the turbine. It will be for specific times of the day and during the year. There are ways of calculating the times and dates and how much flicker you will experience on a daily basis during the entire year. Mr. Tavisinski stated that across the industry flicker is not considered to be a health hazard, it is more of an annoyance. When you are in a building trying to read or watch TV it can be considered an annoyance while you are in that particular room. The information from the epilepsy foundation indicates that flashing lights with the frequency of 5-30 hertz typically can be considered a hazard. Mr. Tavisinski stated that 5-30 hertz would be defined as flashes per second. Modern turbines are moving at a lot slower rotation and would cause a lot lower frequency of flashes per second or flickers per second. Mr. Tavisinski stated that they looked at 7 different turbine models and sizes from smaller 100 KW models up to the larger 2.5 Megawatt turbines and listed how fast their blades rotate and converted that to hertz and basically the range that those came into was 0.5 to 2.95 flashes per second. The smaller 100 kilowatt turbines rotate a lot faster and those are the ones that have the higher range of that frequency which is still well underneath the 5-30 hertz range that the epilepsy foundation considers. Mr. Tavisinski stated that this shows and is accepted in the industry that the frequency that the flicker is occurring is way under what would typically cause epileptic seizures according to the epilepsy foundation. Mr. Tavisinski stated that most bylaws do not quantify anything and just read that turbines should be placed in a manner to minimize shadow flicker. He believes that a lot of the regulations are so general because it is hard to quantify what should cause an annoyance and what does not because it is a very personal issue. The guidelines that most consultants in the industry follow are based on some German guidelines that were set forth in Germany and some court decisions that were rendered relating to those guidelines. Those court decisions came down to a standard of 30 hours per year of actual shadow flicker experience and in certain instances 30 minutes per day of experienced shadow flicker. Mr. Tavisinski stated that experienced means that you are home and are awake. That is the guideline that everyone particularly in MA and the US has followed. They have researched numerous studies by numerous firms and they are all referencing the 30 hours per year. The UMass wind energy center which does a number of feasibility studies and flicker studies for projects throughout the state use that guideline. Atlantic Design has received special permits in the Towns of Plymouth, Douglas, Dartmouth and Scituate where there were not any specific guidelines but Atlantic Design presented the 30 hour per year as their case and they were accepted as part of

the permits issued for those projects. Ms. Peterson asked if those presentations were made to the Boards of Health in those Towns. Mr. Tavisinski stated no, they were presented to the special permit granting authority or the zoning board of appeals for variances. They have made presentations on dozens of wind turbine projects throughout the State and this is Mr. Tavisinski's first Board of Health meeting. In all the other Towns the Boards of Health have not been involved. Ms. Peterson stated that anyone has the right in the Town of Bourne to ask the Board of Health to look at any project that is being presented and that is why the Board of Health has stepped in. Mr. Tavisinski stated that they use software called Windpro which is commonly used by industry professionals and is able to track the sun as it rises and sets every day and also tracks the position of the sun and where all the homes are located surrounding the sight. The program takes into consideration the height and size of the turbine, the blade diameter, wind data, the distance from the turbines from the various residential receptors surrounding the turbine, and the elevation of the ground at the turbine. It also takes into account the probability of the amount of sunshine occurring on a monthly basis. One thing it does not consider is the existing vegetation or anything that is in line between the receptor and the turbine itself. If a house has a lot of trees surrounding their property they may not experience the shadow flicker. Mr. Tavisinski then showed the Board a presentation with a table which listed when sunrise and sunset would be occurring on a certain day and how the flicker might start to occur and when it will end on that day. The software gives them the opportunity to know when and what day shadow flicker may occur at a certain residence. The turbine can be programmed to automatically shutdown a turbine during certain times of the year to reduce the amount of flicker that is occurring. Over 300 receptors can be programmed into it. It can also be programmed to be shut down for a certain day with notice given ahead of time to the operator. Mr. Ingersoll stated that it was important to note that the module can be faultless when programming in where windows are located at a particular residence. Mr. Tavisinski agreed and stated that flicker usually dissipates to a point where it is imperceptible around 3000 ft. Mr. Barlow stated that Mr. Tavisinski stated several times in his presentation that flicker is an annoyance and annoyance on a regular and predictable basis is a nuisance. Mr. Barlow stated that this is telling the residents of that area that they can expect a new nuisance in their life for 30 hours a year and why would they accept that? Ms. Tillotson stated that the 30 hour industry guideline is maximum potential experienced. The perception is experienced differently by different people and if it can be programmed to address someone who does experience it as a nuisance that is the goal. Ms. Tillotson stated that everyone accepts a certain amount of risk and annoyance in their lives every day because that is part of living in society. Ms. Tillotson stated that they are talking about clean power that provides a sustainable energy source which is a goal of this community and the region. Ms. Tillotson stated that from a legal standpoint a nuisance has almost no social benefit. Wind energy projects will have an enormous benefit on the other side. Mr. Barlow stated that he would

like to have the engineer comment on the benefit of 30 hours of nuisance imposed on the neighbors. Mr. Barlow stated that he has talked to people that live on Taylor's Point that have told him they are uncomfortable using certain sections of their house certain times of the year and consider it nuisance. Mr. Tavisinski stated that the definition of nuisance is different for different people and believes that what annoys one person will not annoy another. Mr. Barlow stated that he does not have a problem with wind power or clean energy but there is a place for everything and he would like Mr. Tavisinski to tell the Board why he would want it next to his home. Mr. Tavisinski stated that he would not be annoyed at that particular level of shadow flicker. Mr. Andrews asked what type of equipment they would use to detect flicker at a receptor or what would the Health Agent have to use to measure if she gets complaints to prove yes there is flicker coming through. Mr. Tavisinski stated that he would recommend a camera facility on those particular areas. Mr. Ingersoll stated that the GIS location of each of those modules is in the program and they will not tell you a falsehood and will tell you when the flicker occurred. Mr. Ingersoll stated that someone that is upset with the flicker just has to notify the operator of the turbine who could just turn it off at that time. There was general discussion regarding this issue. Mr. Barlow stated that the homes that are surrounded by trees are not supposed to be affected by the flicker but with a 25 year permit he has seen a lot of trees come and go. Ms. Peterson asked how far the trees have to be from the turbines to reduce the flicker affects. Mr. Tavisinski stated that it depends on where the house is situated and how far away the turbine is they would perform a line of sight study that could calculate that if you put a 40 ft tree 20 ft from a window it would screen the turbine. Mr. Ingersoll stated that if you stand at a home and cannot see the turbine you will not get shadow flicker at that property. Ms. Peterson stated that the flicker from the turbine at the industrial park in Falmouth was extremely annoying to her and she can understand why people are concerned when telling her that they will be annoyed by shadow flicker in their neighborhood. Ms. Peterson stated that if someone has to call to complain about the flicker the nuisance has already happened. Ms. Peterson stated that she was concerned that epileptic seizures can occur because of flashing lights and that if even one person has to call to complain about an outside event they may want to have that alone is a nuisance. Ms. Peterson stated that she is having a hard time with the fact that they have admitted that it will be an annoyance and with all the specific information programs that can mitigate annoyance there must be annoyance complaints to begin with. Mr. Tavisinski agreed. Ms. Tillotson stated that their modeling does not even project close to 30 hours per year. Ms. Tillotson stated that the report put out is by the Epilepsy Foundation and talks about all photo sensitive seizures and the turbine frequency is nothing like a disco strobe. Ms. Peterson stated that it can be constant. Ms. Tillotson agreed. Mr. Barlow stated that he believes that annoyance on a regular basis rises to the level of nuisance. Mr. Barlow stated that an occasional odor from the landfill is an annoyance but an odor from the landfill every day is a nuisance so they



are predicting annoyance or nuisance for a 25 year period on people in Town. Mr. Barlow believes that renewable energy and wind energy is great but thinks there is a place for it and does not know if it's right up against people's homes. Mr. O'Brien stated that 30 hours a year is the maximum and they are not projecting anything even close to that and that is 30 hours out of 8,760 hours in the year. Mr. Andrews questioned how many of those hours were actual sunlight hours. Mr. Uitti asked how far away from a house would a turbine have to be to eliminate the flicker. Mr. Tavisinski stated that generally flicker will dissipate through dust and other atmospheric conditions and will be undetectable at about 3000 ft away. Mr. Barlow stated that when the sun goes down in Bournedale the shadow by the hill casts a shadow on the other side of the canal and if you were to put a wind turbine on top of that hill that wind turbine would very likely impact some of those houses over there on the other side of the canal. Mr. Ingersoll stated that the MMA turbine casts a shadow flicker on several of the houses on the other side of the canal which is at least 2000 ft away but for 10 minutes on June 22<sup>nd</sup> as the sun goes down. Mr. Andrews asked what the range is that the shadow flicker could be adjusted from zero to max. Mr. Tavisinski stated that it is fully adjustable for mitigation purposes on a minute by minute basis. Ms. Peterson stated that she would like to thank the speakers for coming. Mr. Hebb asked if there would be any shadow flicker that would occur under moonlit conditions. Mr. Ingersoll stated that on a beautiful moonlit night in the wintertime when there are no clouds in sight and the turbine is at the right angle there would be flicker. Ms. Peterson called for a two minute recess. Ms. Peterson resumed the meeting and stated that anyone is welcome to send in a letter or information or questions to the office and that everything will be looked at. Kiana Nowzar and Jim Potter, Concerned Citizens for Responsible Energy, are presenting a power point presentation. Ms. Nowzar stated that shadow flicker is a severely under addressed issue universally speaking. Ms. Nowzar stated that they would begin a presentation with Google Earth where they would take a look at the proposed wind farm. Mr. Potter stated that they used Google Earth and Google Sketch for the 3D modeling. It puts the sun direction in the right spot and is very accurate. Mr. Potter showed how the 500ft turbines would look from the Bourne Bridge and also where the power plant would be located. Mr. Potter stated that he will give the Board members a copy of the presentation. Ms. Nowzar pointed out the Pilgrim Pines area along with the Bournedale Elementary School location. Mr. Potter showed where the proximity of the turbines to major roads such as Scenic Highway and Rt. 25 and the shadow that would be cast along those areas. The presentation showed where each turbine would be located and the scale of the size of the turbines. Ms. Nowzar stated that the understanding of the physical presence of the turbines is of utmost importance in the context of shadow flicker. Ms. Nowzar showed the projected shadow flicker from one of the turbines at 5:30 A.M. which came in at 12,000 ft from a 500ft structure in sunshine. The presentation showed where and what time of day each turbine would cast a shadow in each location. Ms. Kowzar stated that there is concern for motorists at certain times

of day trying to travel through two lines of potential shadow flicker. Mr. Potter stated that there should be some concern with the shadow going over the canal because that could affect nautical traffic. Mr. Barlow stated that it would be a stretch to get into navigational hazards because boats are moving and would only be exposed to the flicker for a matter of seconds. Mr. Potter showed video of homes in Illinois located close to wind turbines that experience shadow flicker. It showed the flicker effect inside as well as outside the homes. Mr. Potter stated that they also have an 800 number to call when the flicker is bothersome. Ms. Coffin asked if the people there ever call to complain. Mr. Potter stated that they do call and their neighbors complain but after awhile he believes that people just stop complaining. Ms. Peterson stated that she would like Mr. Potter to drop off copies of the presentation to the Board of Health Office. Mr. Potter agreed. Mr. Jim Smith, Sagamore Beach, stated that he was not a flicker expert but does have epilepsy. The strobing part of the flicker of the turbines is most concerning to him. Mr. Smith stated that there are triggers that he has to watch out for having epilepsy and some of them are inadequate and infrequent sleep and flashing lights. Mr. Smith stated that he is also concerned about Scenic Highway and how that will affect people sitting in traffic in that area that may have epilepsy and experience the shadow flicker there. Ms. Peterson asked what Mr. Smith's doctor has said about this issue. Mr. Smith stated that his doctor told him about these epileptic triggers that he just talked about and to stay away from them. Mr. Smith stated that he cannot go into 3D movies and that he designs circuit boards for a living and one of his customers designed LED signs but he cannot go into the lab to check and make sure that the signs are functioning properly because of his epilepsy. Walter Nagle, 58 Mirasol Drive, stated that he is concerned about the affect of flicker on his wife because she suffers from migraine headaches. There is a study out from the Mayo clinic that describes the various triggers that induce migraines. Mr. Nagle stated that when migraine headaches hit his wife it is the result of flashing lights or reflected light coming through a window. Any type of flashing light that will come in their house will cause her to pull shades down and possibly stay indoors. Mr. Nagle passed in a letter from his wife who could not be here today( see attached). Another resident from Mirasol Drive expressed his concern and wondered what kind of guarantee they would have that the turbines would be shut down when they complain that the flicker is too much at a certain time. Laura Fortune stated that she has a mass in her brain that causes seizures and her doctor told her to stay away from anything that causes any kind of flicker which might bring on a seizure. She is also concerned about driving with her children in the car on Scenic Highway to the Elementary school when there is flicker which could bring on a seizure. Keith Mann stated that he does not think that flicker on the roadways would be a concern. Mr. Mann stated that there are also shade from trees on the road which would be the same thing as shadow from the turbines. Mr. Mann feels that cars are traveling at such a speed that they will pass through the shadows in 2 seconds. Mr. Mann stated that he does not believe that 30 hours a year of shadow flicker would be an

annoyance. Ms. Peterson stated that if everyone does not get a chance to speak tonight there will be other opportunities for them to speak as the Board develops the regulations and it will all be in a public hearing. Ms. Peterson stated that everyone will get their chance to voice their opinions at future meetings. John Sutton, Pilgrim Pines, stated that you have to remember that they are planning 7 turbines, not just one and believes that this will be a constant annoyance.

**Sign final decision on site assignment for Sagamore Truck & Rail- Agenda #1-** Ms. Peterson asked the Board Members if they had all read the final site assignment. Everyone had. **Mr. Uitti made a motion to ACCEPT the final site assignment for Sagamore Truck & Rail. Mr. Andrews seconded the motion. All in favor and the motion PASSES.** Ms. Coffin stated that she had spoken with Dave Ellis, DEP, and he does not see any problem with DEP approving the waiver. The Board Members signed the Site Assignment for Sagamore Truck & Rail at the Board of Health meeting dated April 13, 2011.

6. **Approval of Minutes dated March 9, 2011 and March 23, 2011-Mr. Andrews made a motion to APPROVE the minutes dated March 9, 2011 and March 23, 2011. Mr. Uitti seconded the motion. All in favor and the motion PASSES.**
7. **New Business-**Ms. Coffin stated that Mr. Sabbot is holding a meeting for the residents of Pocasset Mobil Home Park and will be before the Board at the next BOH meeting on April 27, 2011. They are installing six trenches at the Park because it has been overflowing on a daily basis. DEP has been out quite a bit to help. Ms. Furtek stated that the door is on backorder for 62 Old Plymouth Rd but did an inspection today. Ms. Peterson stated that they should continue to be fined and when everything is in compliance they can appeal the fine.

**Mr. Andrews made a motion to ADJOURN the meeting. Mr. Uitti seconded the motion. All in favor and the meeting was adjourned at 10:10 P.M.**

Taped and Typed by Kathy M. Burgess for the Bourne Board of Health

Respectfully submitted by the Bourne Board of Health

Kathleen Peterson\_\_\_\_\_

Stanley Andrews\_\_\_\_\_

Galon Barlow\_\_\_\_\_

Donald Uitti\_\_\_\_\_

Carol Tinkham\_\_\_\_\_

cc Board of Selectmen/Town Clerk