

TOWN OF LITCHFIELD

Mosquito Control District

June 10, 2010

The Mosquito Control District held a meeting at 7:00 p.m. in the Town Hall Conference Room.

Members present: Alfred C. Raccio, Chairman
John Poulos

Absent: John Latsha, Vice Chairman

PLEDGE OF ALLEGIANCE

All rose for the Pledge of Allegiance.

PUBLIC INPUT

There was no public input.

MUNICIPAL PEST MANAGEMENT SERVICES

Mr. Michael Morrison, Municipal Pest Management Services, came before the Board to discuss the application of *Agnique MMF* in cattail marshes. Also present were Joan McKibben (Conservation Commission Chairman), Thomas Levesque, Sr. (Conservation Commission Vice Chairman), Marion Godzik (Conservation member), Michael Croteau (Conservation member), Kevin Lynch (Health Officer) and Frank Byron (Selectmen Chairman).

Chairman Raccio explained to those present that the only item to be discussed is a new treatment of Agnique and concerns about the overall program, or BTI program, should be addressed at the next scheduled meeting June 24, 2010.

Mrs. McKibben asked if Mr. Morrison would be doing a presentation this evening. Chairman Raccio replied that Mr. Morrison is here to address the application directed to him from the Board, department heads and committee heads.

The Board is in receipt of the many questions posed by the Conservation Commission through email and Mr. Morrison was provided those questions. The Conservation is asking why the application of Agnique. Accordingly, the EPA does not look at the food chain or the effects, or nonlethal effects on wildlife, health hazards, etc. In a study in the wetlands in Wisconsin after three years of BTI application, the entire food chain was changed. There has been concerns about effects on other insects and also how close it is applied to vernal pools and sensitive areas. There are several sites in Litchfield with rare endangered species and the Conservation is concerned about those areas as well as the cyclic nature of EEE.

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Chairman Raccio further stated that the Board has communicated with DES and Collins Adams, Division of Environmental Services, Department of Water and Wetlands. Mr. Raccio: I have several communications from him regarding the food chain and adverse impacts as it addresses the proposed new application. The bottom line is out of those discussions there were no records on file with DES regarding any adverse effects of this chemical throughout the State and also that the State DES services along with the Division of Pesticides has approved this chemical for utilization and verified that our license application for our Town also has utilization rights. Mr. Adams did state that there has been no official study of record for in-depth detail analysis for long term 15 years or greater adverse impact on the food chain. Also, MCD has done a lot of background research in cooperation with Mr. Morrison and his team. Handouts were provided and a map of the sites where the application would be applied if approved.

It was said that Agnique would not be applied in conjunction with BTI. Mr. Poulos pointed out that Agnique is a surface film that is biodegradable and specifically targets a breed of mosquito called perturbans. "Last year 18,967 mosquitoes were tested of many types and out of that 13,000 were perturbans but none of those had EEE. With that kind of ratio it is probably inevitable at some point that we would end up with some testing positive". Mr. Poulos asked Mrs. McKibben what her primary concern is with Agnique.

Mrs. McKibben told those present that her primary concern is in the literature that the manufacturer has put out on Agnique MMF also successfully controls midges...and one of the biggest concern is surface tension of the water and it is also going to target other types not so much dragonflies...it is nontoxic and the EPA says it is nonlethal yet the concern is the food chain. She read an excerpt from Emily Brockhurst, biologist: *There is evidence for some severe food chain effects since BT kills midges as well as mosquitoes. Midges are a huge part of the food chain. In one study in the Midwest the entire food chain of a wetlands was changed in three years just through BTI use. The EPA sheets only deals with direct lethal effect on species not sublethal or food chain effects. This is the reason that spraying is prohibited on NH Fish and Game lands except in the case of a real public emergency...we only allow BTI if there has been recent documentation of EEE or West Nile in mosquitoes from the vicinity of that wetlands...I urge you to protect the bog haunter population by prohibiting any mosquito control in known bog haunter breeding sites...*

Chairman Raccio interrupted to say that the Board is here to discuss Agnique not BTI.

Mrs. McKibben: It is pretty hard to separate the two when we are talking about the food chain and I understand that we are already using BTI and that is the one question I had on BTI - is that only going in all catch basins?

Mr. Morrison: Yes.

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Mrs. McKibben: So, this new treatment would be targeted at cattails?

Mr. Morrison: Yes, only.

Mr. Poulos: One of the statements that Ms. Brockhurst makes is we only allow BTI if there has been recent documentation of EEE or West Nile Virus in mosquitoes or the vicinity of that wetlands. That is the situation that we had last year. I do not know if any of these test sites were near the bog haunter sites.

Mrs. McKibben: They were not because we only sprayed on public land last year.

Mr. Raccio: We only applied barrier application...in a spray form on public properties but that is not to say that private industry did not contract on their own.

Mrs. McKibben said her issue is surface tension of the water; what it is doing to the food chain. I read the MSDS sheets and they do not know.

Mr. Raccio said when he discussed the issue with DES there is no record at the State level of any adverse environmental impact by the utilization of this chemical. This chemical is also biodegradable from a natural base. The real question is if it is applied what is its endurance to sustain the water attributes that it has. If its endurance is such that the chemical breaks down with proportional to the concentration of the mix that is applied, then we need to ask what is the adverse environmental impact of a one time application for a product that breaks down potentially in two weeks...the duration of the hatching cycle of perturbans which we are targeting.

Mrs. McKibben: Right, we are targeting the perturbans but we are also eliminating other midges.

Chairman Raccio: Again, there is a trade to be considered regarding the attributes that we discussed...its endurance versus its potential and understanding what is pointed out by our test...80% of our test sample is this species and we are targeting it for 3 to 4 weeks.

Talk ensued. Mrs. Godzik said that vector mosquitoes tested are potential carriers of EEE and they were not shown to be positive. You are hoping to get rid of those vector mosquitoes no matter if it wipes out all the rest of them. It does not mean that mosquitoes from other areas are not going to be coming in from other communities. They travel up to five miles.

Mr. Raccio: My experience that is the exception - five miles. The general habitats are more constraint to what we treat in our communities...

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Talk continued. Mrs. Godzik: There are several species of birds that live to eat mosquitoes...if people would work to try to bring natural feeders that eat mosquitoes - bats, etc. it would cut down the mosquito population.

Chairman Raccio went on to explain there has been a lot of education efforts made to the public. Mrs. Godzik further stated that now mosquitoes are able to pass on to their offsprings the ability to change and produce offspring that no longer respond to chemicals. DEET is one of those chemicals. Who is to say that this chemical would not be ineffective within a few years or so?

Mr. Poulos: The fact that that could exist does not preclude us and does not relieve us of responsibility to try to do something to get rid of those vector mosquitoes. This product is made from plant oils and last 5 to 22 days. Joan is right about the issue of surface tension...however, I do not feel that this, in the volume we are talking about, is going to have any long-term negative effect.

These cattails marshes were not shown to be positive. Mr. Morrison added that the larva would not have the disease.

Mr. Morrison: The reason we are going after the perturban mosquitoes is because it is the highest numbers found in light traps in NH. The problem with it they do not come to the surface, they stay in the mud and attach to cattail roots...the BTI does not work on them. Perturban mosquitoes emerge over a two-week period every year in huge numbers around the 14th of June they all emerge to the surface at the same time...it is not a chemical; it is a physical control of the pupae. A lot of the cattail marshes have dried up this year. One thing we can do when we have dippers we can sample the cattail marshes and try to find any midges or other invertebrates that are in there. The application would be applied with a backpack sprayer...it would only be applied in the shallow areas and we will check the sites afterwards.

Mr. Morrison further stated that he has used Agnique in other towns. It is invisible and odorless.

Chairman Raccio asked if there is added cost associated with the application. Mr. Morrison: No. It is part of our overall budget; it is a new technique...perturbans have been found with EEE many times and it feeds on everything - humans, birds, etc. It is a major vector species and we want to control it.

Mr. Raccio: Is there any adverse effect or drawback regarding this application?

Mr. Morrison: No, I think our areas are so small and it is not the entire marsh that we are treating. I do not think the impact would have a big effect on the insect population. We

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can dip for midges...I do not see us effecting the food chain because it is such a small part of the big picture. There are other areas that the midges can survive...rivers, streams, etc.

Chairman Raccio: This is a one-time application, once a year and with minimal concentration for that application, is that a true statement? Mr. Morrison: Yes.

Talk ensued. They will document and see what other invertebrates are found in these habitats before applying the material and if they find lots of midges, they would avoid those areas. It was noted that none of the other departments have expressed concern except for the Conservation Commission. They have used Agnique in salt marshes for four or five years, and have had good results. They have not heard of any allergic reaction from the workers...it is used in other parts of the country a lot more than here.

Mr. Michael Croteau: Because there is such little knowledge, certainly this has been done on salt marshes and catch basins but every environment is different and there are things you may not anticipate...that is our basic concern. I am a fisherman and I know there is a concern that we do not want to do something that is going to effect the balance of the habitat...we need to look at the intended consequences but we also have to look at the unintended consequence as well.

Mr. Morrison: What we could do...we could certainly sample these places and see what invertebrates are there and go back after the treatment.

Mr. Poulos: Can we do that for no additional charge?

Mr. Morrison: Sure, we have to go back and sample our areas anyways to make sure our application worked because if it didn't work, we need to see why it didn't work.

Chairman Raccio: My concern is that we do not adversely impact the amount of services we are contracted for...we have a set number of hours against a set of conditions in which the Budget Committee and the Town authorized payment for. If we were to start these additional samplings and documentation process, that time may or may not be docked from what we contracted services for...

Mr. Morrison replied that it would not hurt the program because they have to sample the areas anyways so they will simply document and they have a form...

Health Officer Kevin Lynch said that he found nothing negative regarding Agnique. It is biodegradable. The agency he contacted did not foresee any problem. 'We are targeting a limited area and only for a two week cycle'. He also checked with the Center for Disease.

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Mrs. McKibben pointed out that some of the proposed sites are in the area of endangered species. Mr. Morrison will get with Mrs. McKibben to review the areas in question. Mr. Morrison pointed out that there is no spraying but rather a direct application inside the cattail about one inch away from the target.

Chairman Raccio: To my knowledge all the information assembled to date shows no adverse impact to any of these species under any conditions.

Mrs. McKibben: Right, no lethal.

Chairman Raccio said the target date for application is nearing and no one has produced compelling data that says a one-time application is going to have adverse impact to our community.

Chairman Raccio: Is there any one here that can produce compelling data that says this Board should not consider authorizing a one-time application?

Mrs. McKibben: I think you have to look at your own data put out last year...a public service announcement...incidence of how many cases of EEE occurred, 220 cases confirmed in the US 1964 to 2004. So, I guess it is your job to weigh the risks.

Mr. Poulos: There is no question the number is small...again we have been chartered with the responsibility and the Town voted that EEE and West Nile were serious enough threats to form a Mosquito Control District and all this information was available then...

Mrs. McKibben: We didn't know when we started what we had and that is why the committee was formed to see what we had.

Mr. Poulos asked the Conservation members what they would do if they were in the MCD shoes.

Mrs. Godzik: I would not do it. Let me speak for myself. I researched the health aspect of EEE because I worked in the health industry...without the concrete knowledge saying these chemicals are necessary and all of these mosquitoes carry EEE and that you are going to get it if you get bit...

Mr. Poulos said that 2,600 tested positive for EEE last year out of 18,000 that were sampled. Talk ensued in line with this. There was one case of EEE last year but it is not certain if anyone contracted it in Litchfield. Mr. Croteau said that the Board should err on the side of caution and make sure if you do this, that it is not going to seriously impact the environment. The research part of it needs to be looked into more.

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Mr. Thomas Levesque had mixed emotions...there is concern with adding to the food change. Mr. Lynch felt West Nile is one of those things that will go away...he likes what is being said regarding the application and that it is only for a two-week period and not targeting every plant; that it is a controlled environment. He does not think it will hurt anything and it is a good trial. He feels that the drainage systems, not maintaining the swales, and keeping all the wetlands contributes to the mosquito population.

Mr. Poulos reiterated to Mr. Morrison: You will do some sampling before and after to get an idea of impacts on the other midges? Mr. Morrison: Sure. Mr. Poulos: And your doing that won't impact the scope of the contract? Mr. Morrison: No. Mr. Poulos: It will be an additional effort? Mr. Morrison: Yes. Mr. Poulos: For no additional money? Mr. Morrison: Right. Mr. Poulos: And you will get that information back to us as soon as you have it? Mr. Morrison: Yes.

Talk continued. Mr. Morrison told the Board he does have written authorization to enter the proposed sites for Agnique application. There are about three areas that the Conservation does not want the application applied and this will be taken under consideration.

VOTE: Chairman Raccio: It is my opinion that the Board consider an authorization of a one time application this year to be followed up by testing pre and post event to the fully recommended positions that the subject matter expert has come forward with in order to formulate a position that the Town and its committees and departments can look at in future years to come. It is my opinion that the proposed application for this year has little to no adverse impacts to known data that has been requested from various State and local agencies and the formulation how they position that will make determinations of future applications is paramount to be as pure a scientific test as can be so that additional decisions in the future are not biased or hampered by untreated sites that have been recommended.

Mr. Poulos also does not see any harm with pulling the three sites off the list but to go ahead with the other sites.

Mr. Poulos **MOTIONED** that the Board approves the application of Agnique in all but three areas previously identified and that Mrs. McKibben and the Conservation Commission coordinate with Mr. Morrison to pull those three off the list. Mr. Raccio seconded. Mr. Raccio **AMENDED MOTION** that those three sites will be determined by close of business tomorrow and communicated to the Mosquito Control District and Michael Morrison and if they are not communicated by close of business tomorrow, the fully submitted list as presented to this Board tonight shall be authorized in conformance with your main motion. Mr. Poulos seconded. Vote on amendment: Motion carried 2-0-0. Main motion: Motion carried 2-0-0.

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Chairman Raccio: Mike you are authorized the full application should the three sites not be identified and communicated to you or I by close of business tomorrow. This includes this committee. So, let me make it perfectly clear to the Conservation Commission: By 4:00 p.m. tomorrow afternoon this committee will be informed of your three site locations. Communication directly with Mr. Morrison is permitted as long as this committee is informed at that time. Should we not comply with those guidelines, Mr. Morrison is duly authorized to commence treatment within his time window for all sites identified on his submitted list.

Chairman Raccio had no objection to the Conservation Commission meeting with Mr. Morrison providing there is no instruction or work products given to Mike without the authority of the MCD.

There being no further business, Mr. Poulos **MOTIONED** to adjourn the meeting. Mr. Raccio seconded. Motion carried 2-0-0. The meeting adjourned at 8:35 p.m.

Lorraine Dogopoulos
Recording Secretary