

October 29, 2020

Dear Members of the Truro Zoning Board of Appeals:

We're hoping that the following excerpts from the international and national scientific and medical community might be helpful to you in solving this difficult problem of nitrates in Pond Village's drinking water. We're hoping also that it will give you a more complete understanding of the reasons for our concerns. Let me apologize at the outset of this letter for this late information. As you now know, Pond Village residents were unaware that elevated nitrates in their drinking water placed them at such high risk to their health. However, we became recently aware of research findings such as these from multiple medical and scientific journals. They have alerted us to the reality that our health may be further imperiled by the Cloverleaf project as it is currently proposed.

The ENVIRONMENTAL WORKING GROUP points out that the standard of 10 mg/L as the maximum contamination level (MCL) for nitrates in drinking water was set in 1962 and has not been revised, just as Truro's standard has not been revised. They recommend an MCL of 1 mg/L. To quote: "Studies conducted in the U.S. and in other countries found greater incidence of colorectal, ovarian, thyroid, kidney and bladder cancers in people exposed to nitrate in drinking water....Studies also report that nitrate contamination of tap water can harm the developing fetus."

THE JOURNAL OF PREVENTIVE MEDICINE says that reducing the nitrate level in drinking water to 5 mg/L "would become consistent with other European countries and would encourage the prudent public health strategy of limiting human nitrate exposure."

The ENVIRONMENTAL HEALTH PERSPECTIVES reports that "women who had babies with neural tube defects, limb deficiencies, and oral cleft defects were significantly more likely than control mothers to ingest 5 mg/L of nitrates per day from drinking water."

The INTERNATIONAL JOURNAL OF CANCER “found statistically significant increased risks of cancer at drinking water levels above 3.87 mg/L.”

The INTERNATIONAL JOURNAL OF PUBLIC HEALTH reports that since 2005, more than 30 epidemiological studies have evaluated drinking water nitrates. The studies concluded that the “strongest evidence for a relationship between drinking water nitrate ingestion and adverse health outcomes (besides methemoglobinemia, i.e. blue baby syndrome) is for colorectal cancer, thyroid disease and neural tube defects.”

The INTERNATIONAL JOURNAL OF CANCER found “statistically significant increased risks at drinking water levels above 3.87 mg/L.”

The journal EPIDEMIOLOGY found “an increased risk of thyroid cancer with higher average nitrate levels in public water supplies and with longer consumption of water exceeding 5 mg/L of nitrates.” Perhaps most shocking is their finding that “average drinking water nitrates above the 95th percentile of 2.07 mg/L, compared with the lowest quartile of 0.21 mg/L, are associated with bladder cancer.”

We could continue to cite studies, but we find it overwhelmingly clear that the major problem that these studies reveal is that any nitrate level above 5 mg/L is dangerous. In fact, much research suggests, including our own Silent Spring Institute, that 1 mg/L is the desired level.

We urge the ZBA to postpone any decisions until these major threats to the health of Truro’s citizens can be ameliorated. We understand that other studies are forthcoming.

With much gratitude and sympathy for this dilemma that we all find ourselves in,

Mary Ann Larkin for the residents of Pond Village

November 2, 2020

Dear Members of the Zoning Board of Appeals,

The Public has been following the proceedings of the Truro ZBA with great interest in the past few months. The neighbors of Pond Village wholeheartedly support Affordable Housing in Truro and are aware of the acute need. We are incredibly grateful for our neighbors at Sally's Way. However, we have recently become better-educated on the fragile state of the Aquifer in the Pond Village Neighborhood, as well as the complexity of the ecological issues before us as we look to good stewardship of our natural resources.

The members of the ZBA have volunteered countless hours bringing the Cloverleaf Project forward. We applaud your time and commitment to Truro. We understand your desire to move the project ahead, yet we remind you of the vital requirement to pause and consider new information. Staying on your self-imposed schedule must take a back seat to considering new information as the Community educates itself on critical data that underscores the significant health risks to the Community. Many 40B Projects in MA take years to come to fruition, especially if litigation transpires during the process. As you know, several scientific and medical professionals are presenting the "Docs Report" to the BOH on December 1st, a meeting which is attracting great interest from Town officials all across the Cape and the citizens they represent, all of whom are concerned about water safety. It might be wise to pause the Cloverleaf ZBA proceedings until AFTER the BOH has had time for follow-up and community interaction. Perhaps waiting until the New Year to reconvene will allow time for clarity?

In a parallel to the above notion, a few members of this Board have remarked both during ZBA meetings and in recent press articles about questions put forth by the Public, indicating that they have "heard this before," and disparaging the need for "review after review." This derision leads us to wonder if some members of the Board wish to expedite this process to a tidy end because they no longer have the wherewithal to hear public commentary or emerging new evidence regarding the safety of this project.

In regards to the above-mentioned report, and the notion of having already heard this evidence, we have scoured the public record relating to the Cloverleaf Project and see no previous testimony mentioning many of the recent studies cited in the erstwhile-named "Docs Report." This report has educated many of us on the perils to our drinking water, the Pond Village Aquifer, and the Bay. This report also notified us of a study accomplished in 2016 under the aegis of the Town that indicated that the BOH knew that Pond Village was one of the three "at-risk" neighborhoods for nitrogen overloading in the town. Subsequent to learning of the elevated levels of nitrates in PV, many of us have had our water tested with alarmingly dangerous results. Seemingly, it would be irrational to then to direct 2.8 million gallons of contaminated water to an area known by the Town to be "at risk." Since Health Risk = Dose x Duration, the estimated length of the Project is compounded by the assessed steady increases in nitrate concentration from the Cloverleaf waste-system. Thus, future generations will be subject to a larger dose for a longer period of time, and thus we are concerned not just for ourselves **but for our grandchildren**. If the Project has a 99-year life span, and it will take 2 years to build, the effluent will add to the neighborhood's health risk for roughly 97 years, thereby affecting approximately 4 generations of Pond Village residents.

We were in shock to learn that in order to allow for the requested increase in size of the Cloverleaf Project, the ZBA must consider a risky and unproven pilot waste-water treatment system for the up-gradient Cloverleaf Project. As the word has spread through the neighborhood, more and more people have attended ZBA meetings. In each meeting many questions are asked by the Public and too often they are in-sufficiently answered by the team assembled by the ZBA.

I would ask the members of the Zoning Board of Appeals to examine their ability to consider new information with the energy and open-mindedness it deserves. We have 114 signatories on our last letter to you and the list is growing. Those 114 people are counting on you to "heed the science." If this is no longer within your "bandwidth," please slow this process down or recuse yourself from the remainder of these proceedings.

Thank you,
Karen MacDonald Ruymann
Bay View Drive

Zoning Board of Appeals

Town of Truro
Truro, MA 02666

Nov 2, 2020
via email

As residents of Pond Village have become more familiar with the latest sewage treatment plan proposed by the Cloverleaf applicant and presented in late August, we must wonder if all possible options have been explored and if there are systems other than the pilot treatment plant now proposed that would achieve better results. The plan presented just two months ago for a Small Wastewater Treatment Plant (SWWTP), a pilot system incorporating a BioMicrobics HSMBR 9.0-N, is the third iteration of a wastewater treatment plan, so it seems reasonable to ask if there are better options that would reduce the risk to Pond Village residents' health.

An important aspect of the sewage plant — aside from the treatment technology itself — is how the 2.8 million gallons/year of contaminated discharge is routed and/or managed. We know, per Horsley & Witten, that it will run downgradient through Pond Village and Pilgrim Pond toward the bay, past our wells. Is there some alternate means to discharge the output from the SWWTP? We understand now that the plume of discharge is more like a slow-motion shotgun than a rifle. It may miss some wells but may hit others more directly, as Horsley & Whitten acknowledged during the October 22 ZBA meeting. But it is not possible to know exactly which wells will be hit for about three to six years when the leading edge of the plume arrives under the most inhabited areas of the Village. Instead of discharging 2.8 million gallons per year through the groundwater, an alternative would be bypass our drinking water wells and pipe the effluent directly into the Bay. But such a solution would create new kinds of problems, so we don't see this happening. Another suggestion voiced earlier was to split the discharge so that some moved east to the Ocean and some moved west to the Bay. But again, this doesn't seem feasible.

So my question is simple: Are there any other improvements or alterations to the SWWTP and/or its discharge that can reduce the downgradient contamination and serious health risks to our community? Is a BioMicrobics HSMBR 9.0-N really the best solution possible? Is there anything else about the treatment plant that we and the Board should know to help us evaluate possible mitigation to the unquestionable health risks our community faces from this proposed sewage treatment plant?

Respectfully,



David Kirchner
P.O. Box 144
North Truro, MA 02652

Zoning Board of Appeals

Town of Truro
Truro, MA 02666

Nov 2, 2020

via email

Dear ZBA Chair and Members:

It has become obvious to many in Pond Village that we have serious issues and concerns about the potential impacts to our health and safety from the contaminated wastewater to be generated by the proposed Cloverleaf Project. We have therefore sought clarification from the applicant, the Town, and our own research to address and mitigate these concerns. Yet many of our concerns and questions remain unanswered.

We fully understand that in 40B applications such as this, the ZBA acts upon waivers of regulations that would otherwise be addressed by the Board of Health. Therefore, you, the members of the ZBA, are directly responsible for ensuring the health and safety of current and future generations of residents of the Pond Village watershed.

We understand that the ZBA is trying to do what it can but is operating in conditions under which it is understaffed by town management, i.e., in the absence of both a full-time planner and a full-time town manager, and with a health agent who is dealing with the serious consequences of the COVID pandemic.

Nonetheless, we need answers to the serious and complex questions we have raised in our previous letters, not only to ensure the health and well-being of those who currently live in Pond Village, but also to protect the generations that will follow us during the 99-year life of this project. We sincerely hope that these remaining questions can be addressed soon. They cannot be forgotten or ignored.

We have done what we can to provide the data needed to understand the facts to the best of our ability. We brought the Docs for Truro report on *Private Wells and Truro Safe Water* to the ZBA's and the developer's attention so that the science can be properly applied. We initiated a water testing program and have sampled more than 50 wells in the past three months — more wells in our neighborhood than the town has sampled in 10 years.

Importantly, our resident scientists and environmental professionals have been able to pitch in and analyze the data. We now know, as does the ZBA, that the current level of contamination is symptomatic of the Pond Village sub-watershed being stressed beyond its capacity to sustain even the current level of nitrogen loading from existing homes and from runoff from the Route 6 overpass and impervious surfaces upgradient from us.

We also now know that the Cloverleaf project as currently proposed will cause us great harm in the near- and long- term future if approved. But we gather some ZBA Members are not yet convinced of the risk and the realities we face from the proposed sewage plant and the impacts of the related waivers you are contemplating.

In 2016, when the original 12-to-16-bedroom Cloverleaf project was being planned, we voted for it in full support for those in need of affordable housing. However, this public hearing process has

alerted us to the realities and risks of the Select Board's decision to greatly enlarge the project and to build a 39-unit complex complete with parking for 80 vehicles, municipal water, a sewer system, a small wastewater treatment plant, and more residents per acre than the City of Boston.

A project of this size will generate wastewater at such a rate that no treatment technology apparently exists — not even the risky and minimally tested pilot system that has been proposed — that can safely handle the volume of sewage that will be generated. Added to the pre-existing nitrogen load Pond Village now carries, we are skeptical that the proposed wastewater treatment plant can reliably and consistently deliver the needed operating results over the 99-year life of the project to provide adequate protections to our drinking water and health.

It is for these reasons that we request an opportunity to summarize to the Board the issues that remain unaddressed, including new information that has come to our attention since the last ZBA meeting.

We will commit to preparing this for the ZBA by the next hearing continuation date, which we understand to be November 19. In a spirit of community participation and cooperation, we respectfully request that you allocate 30 minutes on your agenda to take stock of where we are in this process as it relates to our overarching concern for our health and safety going forward. Can we count on this time during the meeting? Please let us know so we can prepare an efficient and informative presentation for the Board.

Respectfully,

Members of the Pond Village Community
(Signatories on next page)

LIST OF POND VILLAGE SIGNATORIES

Name

Street

Vicki Abrahamson	Twine Field Rd
Terry Abrahamson	Twine Field Rd
Claire Aniello	Bay View Dr
Mauro Aniello	Bay View Dr
Nancy Bean	Shore Road
Patricia Bellinger	Pond Road
Harry Bogdos	Pond Rd
Nancy Boyles	Bay View Rd
Ronald Boyles	Bay View Rd
Elisabeth Bradfield	Professional Heights Rd.
James Brown	Bay View Rd
Julie Brown	Bay View Rd
Will Bullard	Pond Rd
Luther Bumps	Bay View Dr
Lora Bumps	Bay View Dr
Barbara Cardinal	Pond Rd
Robert Cardinal	Pond Rd
Camille Cardinal	Twine Field Rd
JanIs Christensen	Twine Field Rd
Richard Christensen	Twine Field Rd
Raymond Clarke	Priest Rd
Jil Clark	Bay View Rd
Sophia-Grace Clark	Bay View Rd
Sheila Coleman	Pond Rd
Carolyn Collins	Highland Rd
Barbara Connolly	Bay View Rd
William Connolly	Bay View Rd
Steve Corkin	Merryfield Path
Barbara Coughlin	Pilgrims Path
Robert Coughlin	Pilgrims Path
Janine Cote*	Priest Rd
Bryan Cote*	Priest Rd
Theresa Daigle	Bay View Dr
Tom DeFranco	Pond Village Rd
Francine DeFranco	Pond Village Rd
Glenna Descy*	Bay View Drive
Don Descy*	Bay View Drive

POND VILLAGE SIGNATORIES (con't)

Damian DeWolf	Bay View Dr
Shelly DeWolf	Bay View Dr
Roger Dias*	Pond Rd
Barry Donahoe	Paines Way
Denise Donohoe	Paines Way
Rob DuToit	Shore Rd
Ellen English	Pond Rd
Laura English	Pond Rd
Andy English	Pond Rd
Sam English	Pond Rd
Pamela Fichtner	Pilgrims Path
Ronald Fichtner	Pilgrims Path
Michael Gagne	Pond Rd
Kathy Gagne	Pond Rd
Jeanne Gaarder*	Hughes Rd
Joe Gareau	Pond Village Ave
Pauline Gareau	Pond Village Ave
Jim Gillman	Bay Village Rd
Sandy Gillman	Bay Village Rd
Nita Giordano	Twine Field Rd
Alan Giordano	Twine Field Rd
Jeff Goldenberg	Pilgrim Pond Road
Eric Goss	Pond Rd
Amy Graves	Francis Rd
Marne Hodgins	Pond Road
Tony Hodgins	Pond Road
Elizabeth Hulick	Shore Rd
Charles Hutchings	Sage Ridge Rd
Carolyn Hutchings	Sage Ridge Rd
Eric Johnson	Twine Field Rd
Gwen Kazlouskas-Noyes*	Pond Rd
Scott Kazlouskas-Noyes*	Pond Rd
Hank Keenan	Highland Rd
Mindy Kingston	Pilgrim Pond Road
David Kirchner	Twine Field Rd
Deborah Kmetz	Professional Heights Rd.
Mary Ann Larkin	Pond Rd
Mary Ellen Laughlin	South Highland Rd
William F Laughlin	South Highland Rd
Gail Lebowitz	Pond Village Ave.
Julia Bergmark Lester	Pilgrims Path
Dan Maddalena	Merryfield Path

POND VILLAGE SIGNATORIES (con't)

Jill Mays*	Priest Rd
Eric Mays*	Priest Rd
Matthew McCue	Bay View Rd
Paula Passi McCue	Bay View Rd
Jack McMahon	Professional Hts
Laureen McVay,	Amber Way
Marilyn Miller*	Pond Rd
Brigid Moynahan	Priest Rd
Chris Nagle	Pond Rd
Christina O'Brien	Shore Road
Patric Pepper	Pond Rd
David Perry	Pond Rd
Louise Fournier Perry	Pond Rd
Gigi Porges*	Hughes Rd
Janice Redman	Shore Rd
James Rudd	Priest Road
Jane Rudd	Priest Rd
Karen M. Ruymann	Bay View Dr
Frederick W. Ruymann	Bay View Dr
Mallory A. Ruymann	Bay View Dr
Lisa Sette	Professional Heights Rd.
Kathy Sharpless	Bay View Path
Gary Sharpless	Bay View Path
Jake Sharpless	Bay View Path
Ellynne Skove	Bay View Dr
Santina Smith	Bay View Dr
Frank Smith	Bay View Dr
Barry Tandler	Pond Rd
Suzanne Tandler	Pond Rd
Scott Warner	Twine Field Rd
Lesley Weller*	Bay View Dr
Lynn Williamson	Priest Road
Lee Williamson	Priest Road
Barbara Wolhgemuth*	Twine Field Rd
Diana Worthington	Pond Rd
Peter Burgess	Friendship Way
Karen Feldman	Turnbuckle Way

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- Signatories to Oct 5 submission to ZBA. Unavailable at time of submission. Confirmation pending. Additional signatories will continue post-submission.

Elizabeth Sturdy

From: Pamela Wolff <wolff.pamela@gmail.com> on behalf of Pamela Wolff
<pamela@angel.net>
Sent: Monday, November 2, 2020 1:32 PM
To: Elizabeth Sturdy
Subject: Fwd: Cloverleaf

Hello Liz, Could you please add this letter to the ZBA packet for the Thursday meeting? Thank you, Pamela
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>>>> Not that it matters a damn, but here's what I think:

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>>>> I think the town of Truro is about to commit an irretrievable, catastrophic error.

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>>>> The ZBA, with every good intention, appears ready to go the whole nine yards and grant waivers for all of the 24 or so requests. Last week they approved the first five.

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>>>> This for-profit builder, a perfectly nice guy, will build his partially for-profit subdivision (call it what it is) on what may be the single most compromised parcel of land in Truro: topographically challenged, (one of the 24 or so waivers has to do with the road incline being too steep) and hydrologically challenged (the 3.9 acres site sits in the middle of the Highland outwash plain,) the flow from which Pond Village gets its drinking water.

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>>>> The proposed filtering system to clean up the domestic sewage from this completely inappropriate subdivision is in experimental stage, (they call it "pilot") being tested in three locations off-Cape where the soil conditions are quite different from ours.

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>>>> What are the consequences when (not if) this title 5 on steroids fails, and nobody notices for a few months? Twenty five years down the road where is the responsible entity, a private company, to be found? Sold, bankrupted, dissolved?

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>>>> Upon whose shoulders will fall the burden of cleaning up the super fund-like contamination of every well between route 6 and the bay along the Highland plume? That is a job that could take decades. As one ZBA member noted, it would make more sense just to abandon our precious aquifer and bring public water to every house in the Village. We would be paying for that, of course.

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>>>> If that same stream of water still flowed above ground every citizen along its banks would have riparian rights to clean water.

>>>> The developer is not responsible for notifying townspeople of failures in the system. It is up to the residents to do their own testing...at their own expense.

>>>>

>>>> Who the hell thought up the idea of bringing water piped from Truro to Provincetown and back again to this site in order to allow it to expand from 12-16 units to 39?

>>>> Please, bust it back to the original plan. Eliminate the urban apartment building. Avoid all of the additional bells and whistles required to make it viable.

>>>> I've read that 25 percent, or 10 units are all the state requires. The developer proposes four 1 and 2 bedroom units at the lowest income level, and seven 3 and 4 bedroom units at market rate, with a range of income levels in between.

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>>>> So if the economy shifts, does everybody realize that after all the struggle to squeeze this thing into that tiny site, the town might conceivably get only 10 units of affordable housing?

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>>>> The thoughtful, careful detail oriented Boards of Truro have worked hard for four years on this problematic project. It's a great idea, looking to fill a great need. Scaling back the scope by eliminating the apartment building could still help fill that need and reduce the risk of jeopardizing our precious, irreplaceable water source.

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>>>> Pamela Wolff

>>>> Truro

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First I want to re-affirm my total support for the 12-16 affordable units I thought I was voting for at Town Meeting, and to repeat that I believe 39 units poses a health and safety risk to the community, including the intended residents of Cloverleaf housing. I am concerned that the waivers being granted by the ZBA—because they are all supposed to be based on a determination by the Board that they are not and will not be a detriment to the community—may open the Town, as owner of the Cloverleaf parcel, and its taxpayers to future liability claims. The Town of Truro is the owner of the land. The Truro Zoning Board, acts on behalf of the Town of Truro and its taxpayers. It must do nothing to jeopardize the health and safety of its residents.

I ask that the Zoning Board consider the following:

Liability:

In the future, since the Town of Truro owns the land, and it would have been a Town of Truro Zoning Board that provided the waivers that made Cloverleaf Housing possible, could the Town of Truro be held liable for anything that might occur in the development?

If and when constructed, the buildings on the Cloverleaf parcel would be privately owned by Community Housing Resource, but on land publicly owned by the Town of Truro

The ZBA is a Truro Town Committee with members appointed by the Select Board.

If (1) the Town (ZBA) determines that the Cloverleaf housing development will not be detrimental to the health and safety of the community, and provides the waivers that make its construction possible; and if

(2) it is built and occupied; and if

(3) at some time in the future Community Housing Resource changes hands or ceases to exist altogether; and if

(4) something fails such as the waste water treatment system, or a fire that spreads to other properties; then

(5) who would be liable in the event of potential harm to the community or to an individual outside or within the Cloverleaf parcel?

Transparency:

What precisely are the Town's financial commitments and legal responsibilities and liabilities with respect to and in agreements with Community Housing Resource? Are all documents, agreements, and contracts between The Town of Truro and Community Housing available to the public, and if not, why not?