



Dawn Emerson <demerson@winthropmaine.org>

Re: Letter to the Planning Board

1 message

Dawn Emerson <demerson@winthropmaine.org>
To: Gil Soucy <gsoucy@live.com>

Wed, Nov 15, 2023 at 11:25 AM

Thank you Gil. I will make sure the Board members receive this input.

Dawn

On Wed, Nov 15, 2023 at 9:36 AM Gil Soucy <gsoucy@live.com> wrote:

Dawn,

The correspondence below to you, Betty, and the Planning Board cannot be inserted via the Town's website for some reason. I suspect it may be because of the links associated with this letter. Can you ensure that Betty and team are copied on this e-mail?

If that's not possible, please let me know and I will send them all letters via the Postal Service.

Thank you very much.

-gil

Dear Betty, Dawn, and Planning Board Members

Thank you all for your dedication to making and preserving Winthrop's quality of life. This is a pretty good town given all that's happening around us.

I'd like to take this opportunity to revisit the open pit mining ordinance that is now being reviewed by the Planning Board.

When we first started questioning the safety of such operations over a year ago, a couple of items of interest surfaced, which led to the organization of a group (Winthrop Area Residents Against the Quarry) numbering well over 600 residents. Some of the items of concern were the small, invisible to the naked eye, carcinogenic particles referred to by the EPA and others as PM2.5. In addition, serious environmental concerns were raised as to the location of such an operation being uphill and close to water sources such as Hoyt's Brook and Nancy's Bog. Not to be set aside, the issue of blasting and the damage it may cause to wells, water, foundations, etc. was also of critical importance.

This leads us to where we are today, looking for a strict ordinance, one that will protect the environment, protect the health and welfare of nearby residents, and protect the quality of life we all cherish, while still allowing for this type of open pit mine to operate safely. The ordinance template from KVCOG, though well-meaning in its administrative application of permits, fails to address the primary issues, which are a major concern to the residents. Our concerns have to do with the above-named impact issues.

PM 2.5

These particles are generated by the drilling, blasting, crushing and transport of the material being mined/quarried. The Maine DEP has a standard, the eyeball test, yet does not have any type of measuring equipment to detect the volume of these particles. At the risk of sounding like a broken record, these carcinogenic particles easily become airborne, travel in the direction of the prevailing winds, and over time cause all sorts of health issues such as heart attacks, strokes, lung issues, etc.

As the EPA states in their July 11, 2023 published fact sheet: "People with heart or lung diseases, children, and older adults are the most likely to be affected by particle pollution exposure."

(<https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>)

The ordinance template does not address how an operation is to minimize this. Are we to take someone's word that they will do the best they can to alleviate these pollution particles? That has not worked well in the past for Winthrop or any other town. We need air monitoring/sampling at the edges of the operations in order to determine the level of this type of pollution, and we need standards to abide by. We also need a technical measure of how much water misting is applied at the crusher to reduce these particles and how the runoff is to be handled. This needs to be included in the ordinance. The EPA has initiated new rulemaking in regard to PM2.5, whereby they are looking at a further 25% reduction in many industrial processes. These polluting particles are not to be taken lightly. <https://www.epa.gov/pm-pollution/national-ambient-air-quality-standards-naaqs-pm> and <https://www.epa.gov/system/files/documents/2023-01/PM%20NAAQS%202022%20-%20Standards%20-%20Fact%20Sheet.pdf>

Blasting

Another area of concern is blasting. A common measure of blast impact is called Peak Particle Value (PPV), which is the strength of the blast at various points away from the initial discharge. Currently the template utilizes numbers that were developed by the Bureau of Mines in the 1960's when they were in operation. Since then, new developments, scientific studies, etc. have led some states to reduce the values currently posted in our template by up to 60%! Not a small reduction as you can see. The original numbers assumed that localities would be OK with a blast that only produced 5% damage to structures. Many Western states over the years found that number to be unacceptable and have since adopted lower values, values that still allow for blasting, but greatly reduce the harm to structures, water, and other environmental factors.

https://www.oregon.gov/ODOT/GeoEnvironmental/Docs_GeologyGeotech/Material-Source_Blasting-White-paper.pdf

In addition to requesting lower PPV values be included in the template, the issue of the blasting medium itself is called into question. Currently the most popular chemical mixture is one of Ammonium Nitrate and Diesel Fuel (ANFO). An average blast of 100 holes can use up to 1000 lbs of ANFO. While most blasting procedures detonate all the holes, there remains a certain number of blasts whereby not all holes detonate. At a typical quarry, over time, 5% of the holes need to be cleaned out and started over again. This is a problem, as the only way to safely clean out a hole is to flush out 20lbs+ of ANFO into the environment, and in some cases, it eventually trickles down stream to a bog, brook, or lake. Unfortunately, there is no easy solution to this matter without putting the workers at serious risk. Monitoring wells on the periphery of the operation can indicate to the Town whether ANFO is leaking into the watershed and/or aquifers. It's a "close the barn doors after the horses have left" solution, but it's better than not knowing what's happening underground. Therefore, we request monitoring wells in the area where blasting will occur. This is not a new concept. New Hampshire DOT installs monitoring wells to monitor water when they add a new exit off interstates and sometimes they experience blasting related issues in their wells...

PDF NEWS RELEASE - NH.gov

A **monitoring well** deployed by the **New Hampshire** Department of Transportation has detected elevated levels of substances associated with **blasting** operations in the immediate vicinity of the Interstate 93 Exit 3 improvement project in Windham. Testin...

The group, Winthrop Area Residents Against the Quarry would like to be involved in the development process of this ordinance, but we realize there is a previously established process that you need to follow. However, we need an advocate on the Planning Board to bring these issues to the forefront before the Ordinance is finalized and submitted to the Town Council. Asking the residents for input once the draft is finalized is not a recipe for success. Betty, I'm requesting that you, as the Chairperson of this Board, please bring these issues to the forefront and ensure that they are addressed before the final iteration of the ordinance is submitted.

Respectfully,

Gil Soucy
Winthrop, ME



Health and Environmental Effects of Particulate Matter (PM) | US EPA

Particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even get into your bloodstream. Fine particles (PM_{2.5}) are the main cause of reduced visibility (haze).

www.epa.gov