

Request for Air Emissions Expert to Verify or Disagree with GFI's Experts Regarding the Proposed Excavation Operation, Major of Mt. Decatur

Phil Fiore
19 Cardinal Ln.
Gales Ferry, CT. 06335
07/17/24

Liz Burdick
741 Colonel Ledyard Hwy.
Ledyard, CT. 06339

Dear Ms. Burdick

I am a retired process development scientist from the pharmaceutical industry with experience in process safety engineering. One of my responsibilities as a scientist was to develop safe processes that would not compromise emissions standards (EPA) and the safety of the workers. After reading the application of GFI, LLC for a special use permit (SUP), and specifically the Verdanta's LLC report dated April 5, 2024, I am proposing that at the expense of the applicant, the city of Ledyard hire an expert in the field of air emissions modeling to agree or disagree with that report.

The computer aided air quality model is an American Meteorological Society / Environmental Protection Agency Regulatory Model (AERMOD) that uses external data for the program that generates results mathematically. Therefore, these are not actual real time air flow emissions results and require careful consideration. The results listed in table 14 are very close to the allowable limit of dust particles at PM_{10} and $PM_{2.5}$ at the property borders and concludes that the facility particulate concentrations at the property boundary would comply with the National Air Quality Standards (NAAQS). However, one data source comes from Fort Griswold which is several miles south from Mt. Decatur. The two terrains are very different and will give a different air flow result as the wind moves up the river and deflects off Mt. Decatur.

Silica dust is an inhalation hazard, and over time can permanently damage one's lungs. Each inhalation no matter the concentration is considered an exposure. Since this operation is predicted to be completed in approximately a ten-year time frame, there will be at times micro dust particles that will leave the property and can pose a serious health risk to residents. The sources of silica dust are from the mountain itself containing granite that will be generated from all the blasting, crushing, screening, conveyer transfers, roadways, drilling, and drop operations. Please hire the air emissions (modeling) expert to confirm or refute this report. All or some of the listed operations could be a health hazard to many and is not worth the risk.

Sincerely,

PHIL FIORE JULY 17, 2024

Notes:

1. The report is located in (EX#2 24-8SUP24-9CAM Zoning Compliance Manual Dated 032824 Rec070924; pgs. 311 - 350).
2. If an expert is hired, I would like to view the conclusions. If other experts are hired, a spreadsheet listing their names, area of expertise, and results would be very helpful.