

## Why put a Gravel Pit / mining operation that creates a known carcinogen (cancer-causing) right next to homes and a school?

You won't find the answer to that here, or anywhere else for that matter. It's a bad and lethal idea.

### What's in the dust created by a Gravel Pit operation?

It is not the same as the dust created by farming or other periodic natural events. The killer is the fine particles of dust you cannot see. The mining and crushing of gravel creates and releases fine particulate matter called Crystalline Silica into the air which will be carried by the wind towards homes and schools. These dangerous particles will permeate homes, neighborhood parks, schools, and playgrounds.

Adults and vulnerable children and seniors will be exposed to this harmful carcinogen every day, all day. Why the City and County would **CHOOSE** to allow the creation of a toxic environment for our neighborhoods and these neighborhood schools when they do, *in fact*, have state and local government statutory and federal regulatory authority, and Texas Attorney General and Supreme Court ruling precedence to use their authority to deny the permit in order to protect public health, safety, economic development, and quality of life is inexcusable, incomprehensible, and UNACCEPTABLE.

### So what's wrong with Crystalline Silica?

Crystalline Silica, a known carcinogen (cancer causing agent) which has been found to cause lung cancer, silicosis, and other health hazards!

#### SOME FACTS:

- Some of the Crystalline Silica can be of the most dangerous variety with a designation as a PM2.5 particle. These are particles that measure less than 2.5 micro meters in size
- Once these tiny particles enter the lung *they stay there*. The body's natural defense encapsulates them *causing permanent lung damage or cancer*.
- Winds can carry these fine particles over great distances.
- The closer you are to the source, the higher the concentration and danger
- Health effects can range from Silicosis, lung cancer, tuberculosis increased lung irritation
- There is no cure for silicosis
- Once these fine particles enter the lungs, the body has no means to expel them
- Crystalline Silica clings to inanimate objects like homes, outdoor and playground equipment, trees, plants, and grass and vehicles / cars, so you and your families will come into contact with it.
- Crystalline Silica will infiltrate home and schools' heating and cooling system and there is no viable way to stop it or mitigate it.
- The dust is cumulative; each day over the 20 or more years the pit is in operation more and more of this hazardous dust will accumulate inside and around homes and the schools.
- Our neighborhood homes and the new middle school is adjacent to and/or sits downwind of the proposed pit and its loading and hauling facilities
- They don't call this "Wind Country" for nothing. Most days of the year the wind speed exceeds 15 mph and is often much, much higher in our neighborhoods.

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Below are some links and excerpts from articles that address this serious hazard.

[http://www.osha.gov/OshDoc/data\\_General\\_Facts/crystalline-factsheet.pdf](http://www.osha.gov/OshDoc/data_General_Facts/crystalline-factsheet.pdf)

### What is crystalline silica?

Crystalline silica is a basic component of soil, sand, granite, and many other minerals.

Quartz is the most common form of crystalline silica. And we are NOT talking countertop grade. Cristobalite and tridymite are two other forms of crystalline silica. **All three forms may become respirable size fine particles when workers chip, cut, drill, or grind objects that contain crystalline silica.**

### What are the hazards of crystalline silica?

Silica exposure remains a serious threat to nearly 2 million U.S. workers, including more than 100,000 workers in high risk jobs such as abrasive blasting, foundry work, stonecutting, rock drilling, **quarry work** and tunneling. The seriousness of the health hazards associated with silica exposure is demonstrated by the fatalities and disabling illnesses that continue to occur in sandblasters and rockdrillers. **Crystalline silica has been classified as a human lung carcinogen. Additionally, breathing crystalline silica dust can cause silicosis, which in severe cases can be disabling, or even fatal. The respirable silica dust enters the lungs and causes the formation of scar tissue, thus reducing the lungs' ability to take in oxygen. There is no cure for silicosis. Since silicosis affects lung function, it makes one more susceptible to lung infections like tuberculosis.**

[http://www.airinonow.com/html/ed\\_particulate.html](http://www.airinonow.com/html/ed_particulate.html)

Particles can come in almost any shape or size, and can be solid particles or liquid droplets. We divide particles into two major groups. These groups differ in many ways. One of the differences is size, we call the bigger particles PM10 and we call the smaller particles PM2.5.

**BIG.** The big particles are between 2.5 and 10 micrometers (from about 25 to 100 times thinner than a human hair). These particles are called PM10 (we say "P M ten", which stands for Particulate Matter up to 10 micrometers in size). These particles cause less severe health effects.

**SMALL.** The small particles are smaller than 2.5 micrometers (100 times thinner than a human hair). These particles are called PM2.5 (we say "P M two point five", as in Particulate Matter up to 2.5 micrometers in size).

**The smaller particles are lighter and they stay in the air longer and travel farther. PM10 (big) particles can stay in the air for minutes or hours while PM2.5 (small) particles can stay in the air for days or weeks.**

### **And travel?**

- **PM10 particles can travel as little as a hundred yards or as much as 30 miles.**
- **PM2.5 particles go even farther; many hundreds of miles.**