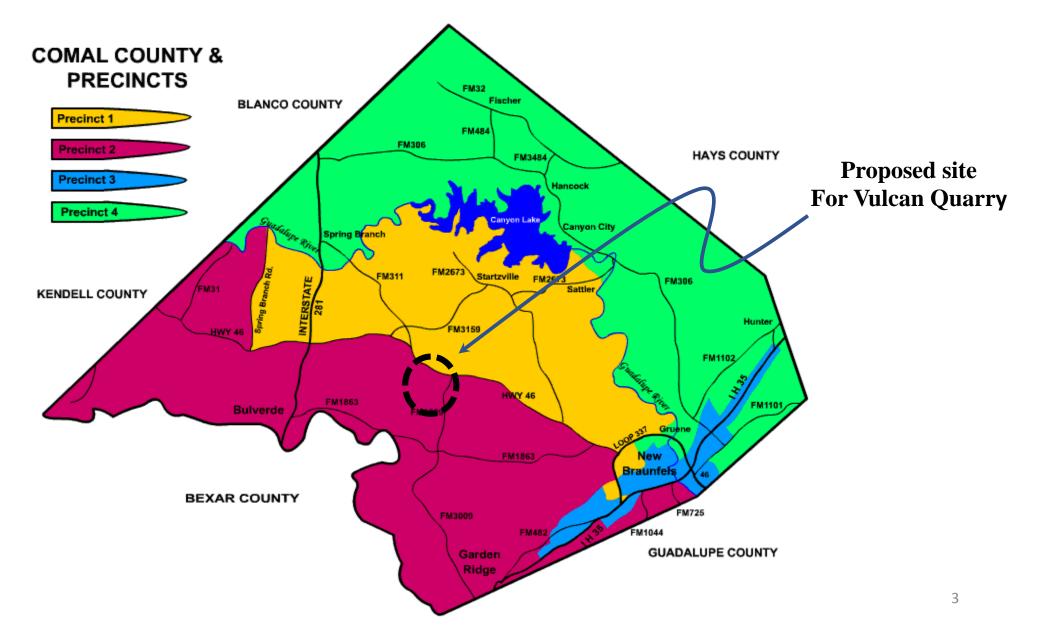


Who Is Affected? ALL OF US...

Our Air Quality (vis a vis our long-term health) Our Water Quality and Availability Our Property Values Our Traffic & Our Roads

Say So Long to our Beloved Hill Country As You Know It!

FOR THE NEXT 80 YEARS!

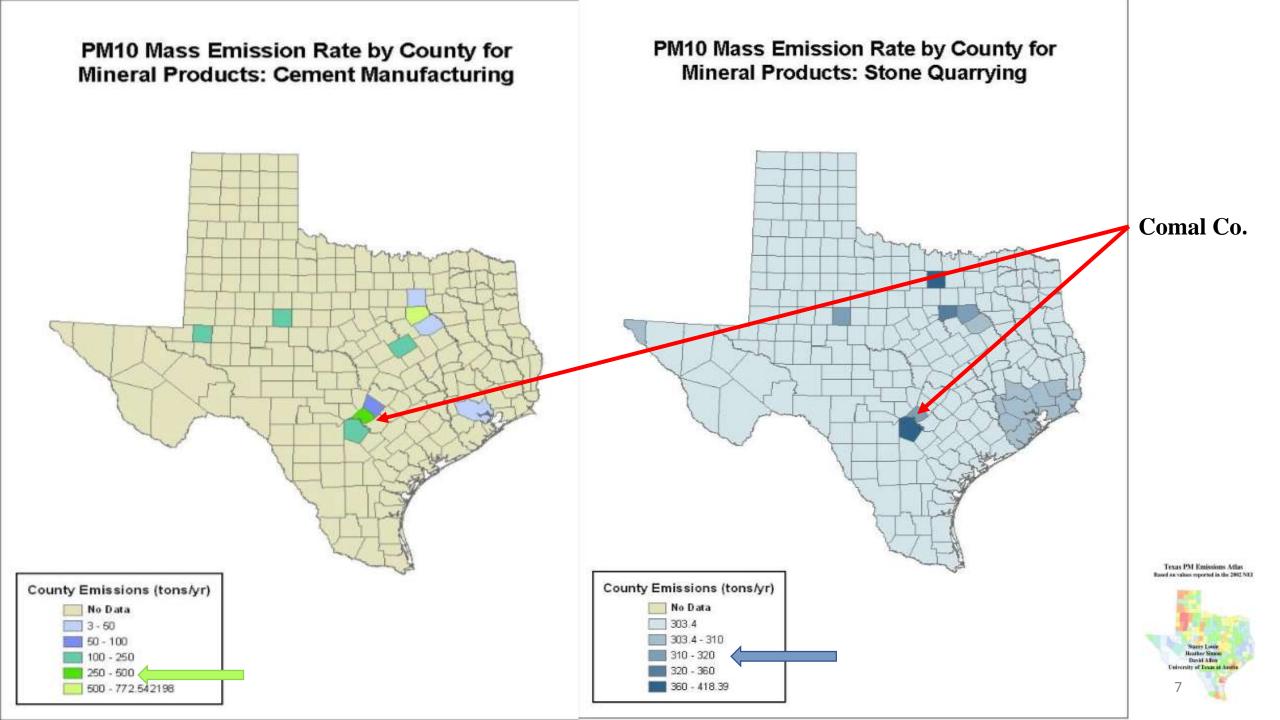




Limestone Quarrying Produces Harmful Airborne Dust Particles & Pollution







Quarrying Operations Produce Invisible Pollutants

Human Hair 50-70µm (microns) in diameter ● PM₁₀

Fine beach sand

90µm (microns) in diameter

PM_{2.5}
Combustion particles, organic compounds, metals, etc.
< 2.5µm (microns) in diameter

PM₁₀ Dust, pollen, mould, etc. < 10µm (microns) in diameter

PM_{2.5} Particle

Human Hair Magnified 1000x

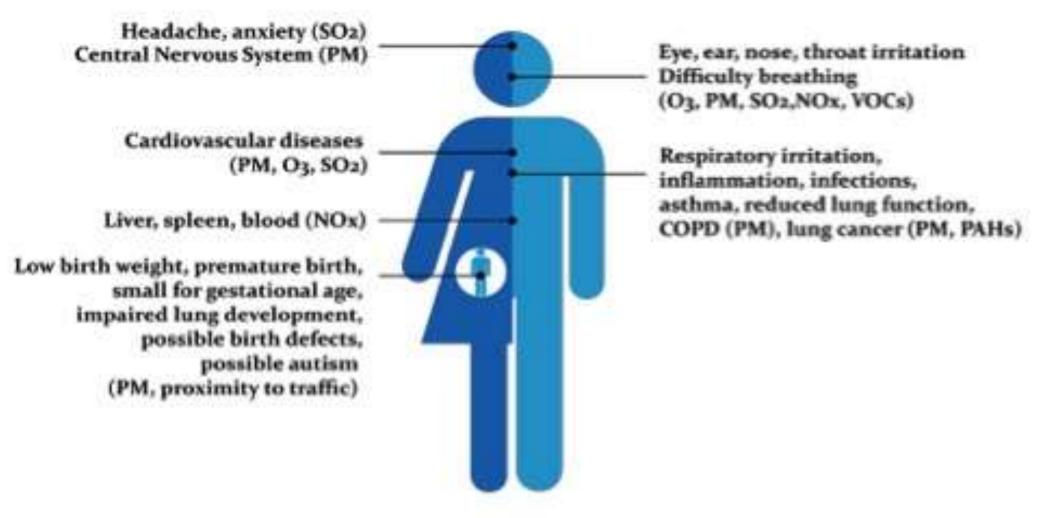
Environmental Exposure to PM2.5 and PM10 has been extensively studied

Health risks are proportional to exposure (proximity and time).

- Long term quarry workers have highest risk.
- Significant health risks for individuals living close to quarry operations

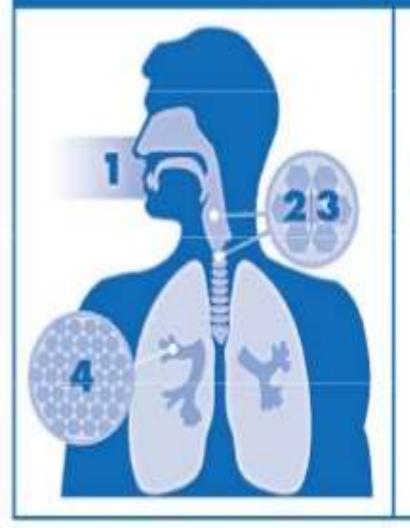
PM2.5 and PM10 Health Risks

Health Effects of Air Pollution



Physiology of PM 2.5 Inhalation

How Particulate Matter Enters Our Body



- Particulate matter enters our respiratory (lung) system through the nose and throat.
- 2/3 The larger particulate matter (PM10) is eliminated through coughing, sneezing and swallowing.
 - 4 PM2.5 can penetrate deep into the lungs. It can travel all the way to the alveoli, causing lung and heart problems, and delivering harmful chemicals to the blood system.

How and Where is Water Used In a Quarry?

- Dust Suppression
 - Crusher the only location that TCEQ is concerned about regarding dust and PM
 - Excludes Conveyers, Stock Piles, Unpaved Internal Roadways
- TECQ DOES NOT CONCERN ITSELF WITH WATER USAGE!

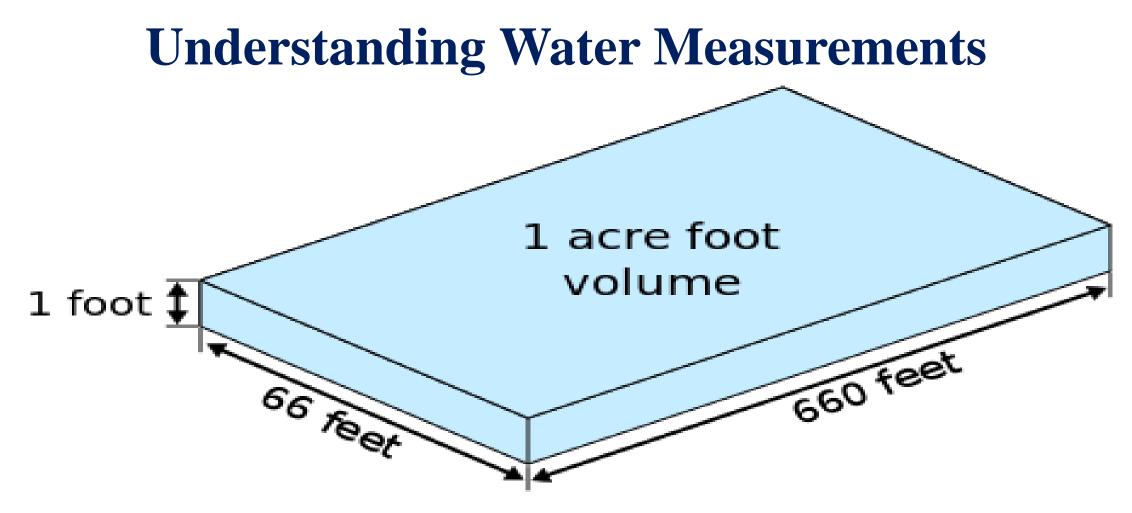
EAA, the County, nor our current Groundwater District can control the water usage!

- How much more water is used during drought?
- How much more water is used during 100 degree days? ("Natures Cut" from evaporation of 23% and of that water that is left there is surfactants to recycle in a water plant is necessary but not provided, so left with 50% of starter values)
- What happens when they pump dry the water wells of their neighbors?
- What happens when Vulcan doesn't have enough water for sufficient dust suppression?
 - More dust that is only measured at the crusher no where else!
 - More track out onto roads
 - No dust cloud is measured or tracked via monitors beyond the fence line

Science and Effect of Water for Dust Control

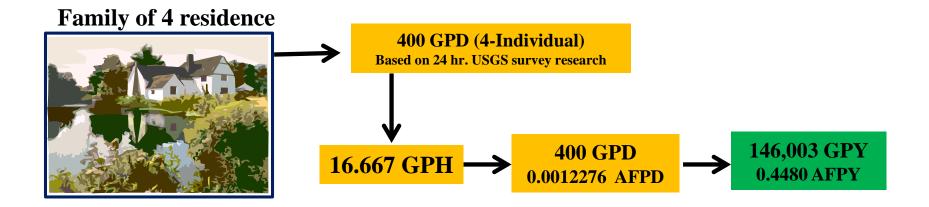
If droplets are similarly in size to the suppressing droplets they will collide with them and dust suppression will be more successful

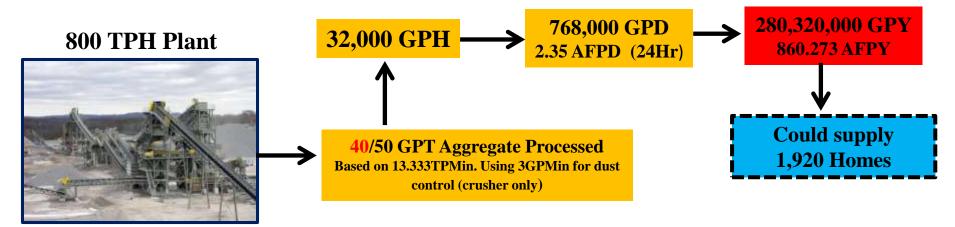
If droplets are too big then dust particles will tend to move around the droplet as air moves around them. This will impede successful dust suppression



- ▶ 1-acre foot = 43,560 Cubic Feet = 325,850 US Gallons /22,000 gallon swimming pool = 14.79 swimming pools
- Average family of 4 Uses 400 Gallons per Day (Home)
- One Acre Foot Would Supply Water to 2.23 Homes Annually
- ➢ 800 TPY crusher uses 280,320,000 Gallons per Year or 5,714 swimming pools

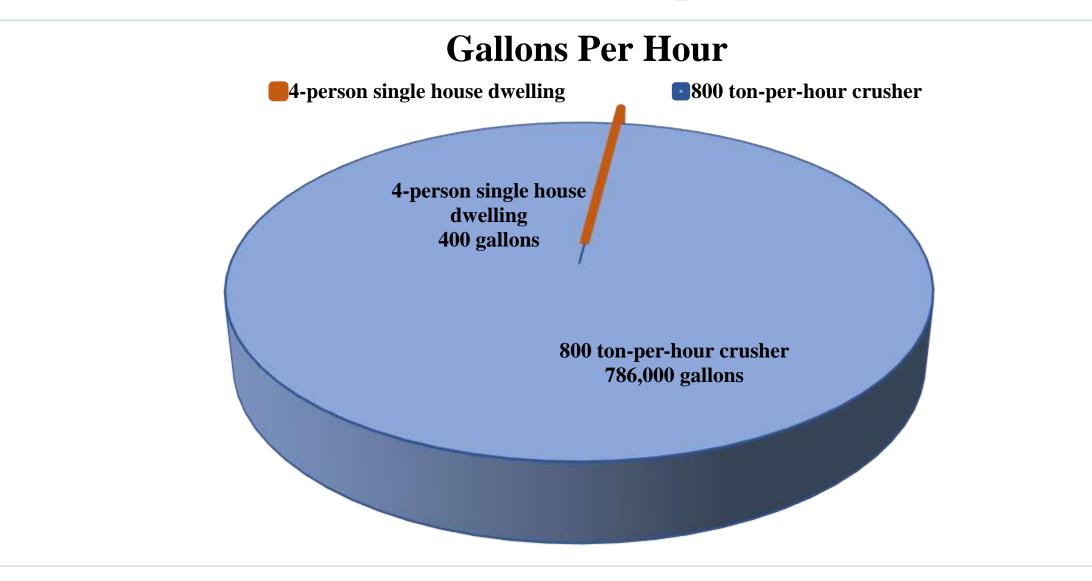
Total Annual Water Consumption 4 Person Residence Vs. 800TPH Crusher



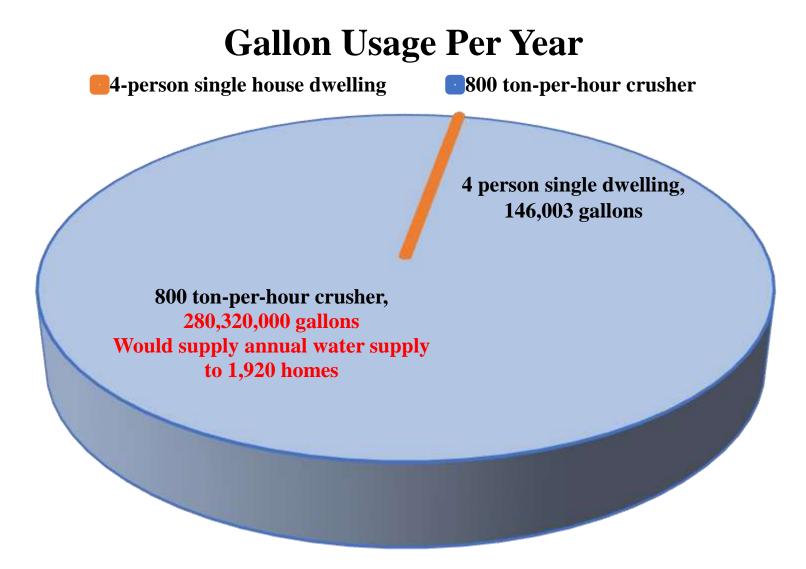


Dust control by water varies from 1-5 GPM by source Aggregate engineering plant plan & climatic cond. Determine total usage and may vary from data presented

Total Annual Water Consumption: 4 Person Residence Versus 800 ton per hour (TPH) Crusher*



Total Annual Water Consumption: 4 Person Residence Versus 800 ton per hour (TPH) Crusher*

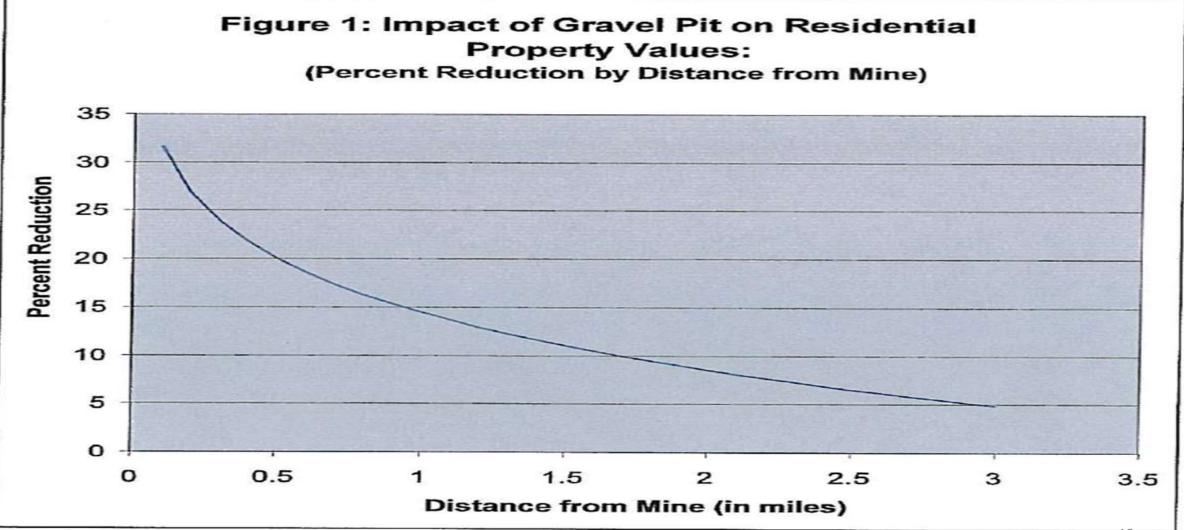


Quarrying Consumes Large Quantities of Water



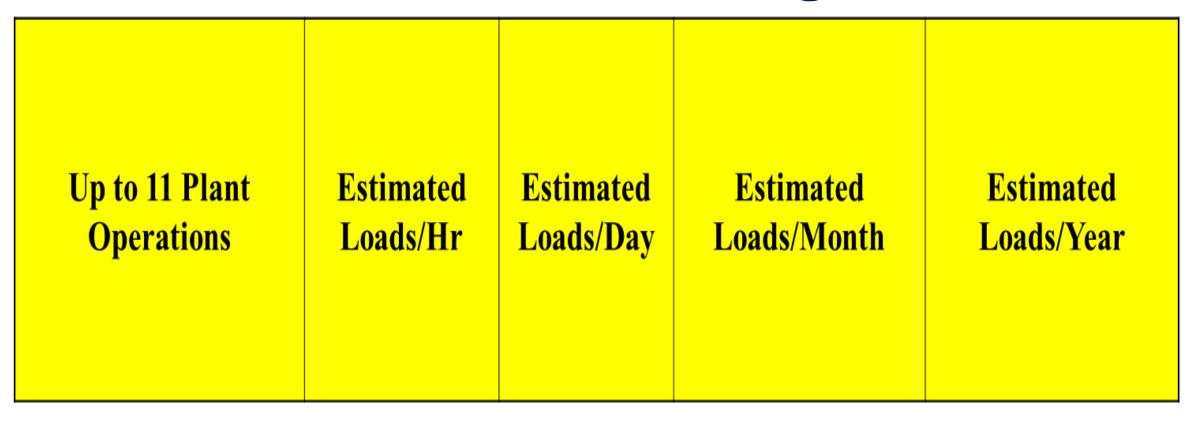
Primary ways of dust suppression are water and or water and chemical suppressants. This sample suppressant boasts that it only uses 28 liters/minute. That's 7.4 gallons/minute or 3.3 millions gallons a year or 151 swimming pools a year! TCEQ only monitors air quality from crusher – Water is not a Consideration in an air permit!

Limestone Quarrying is Predicted to Lower Residential Home Values



19

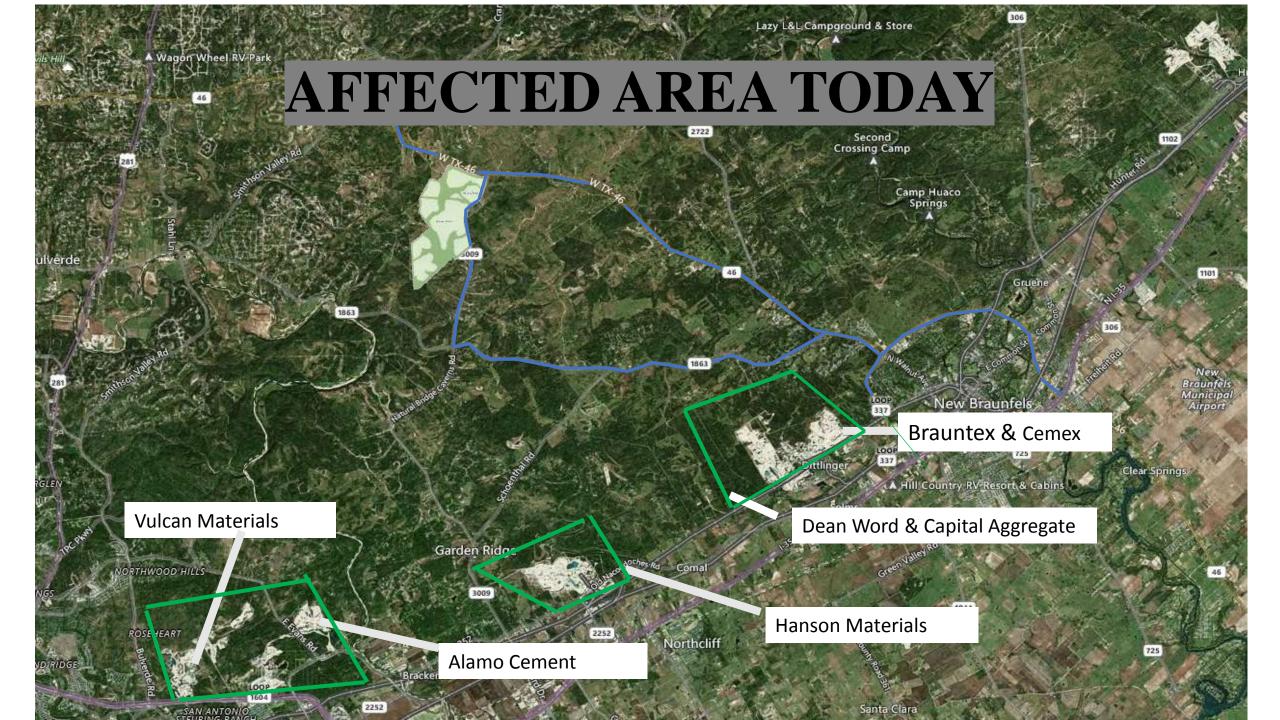
Limestone Quarrying Requires Heavy Truck Traffic for Hauling

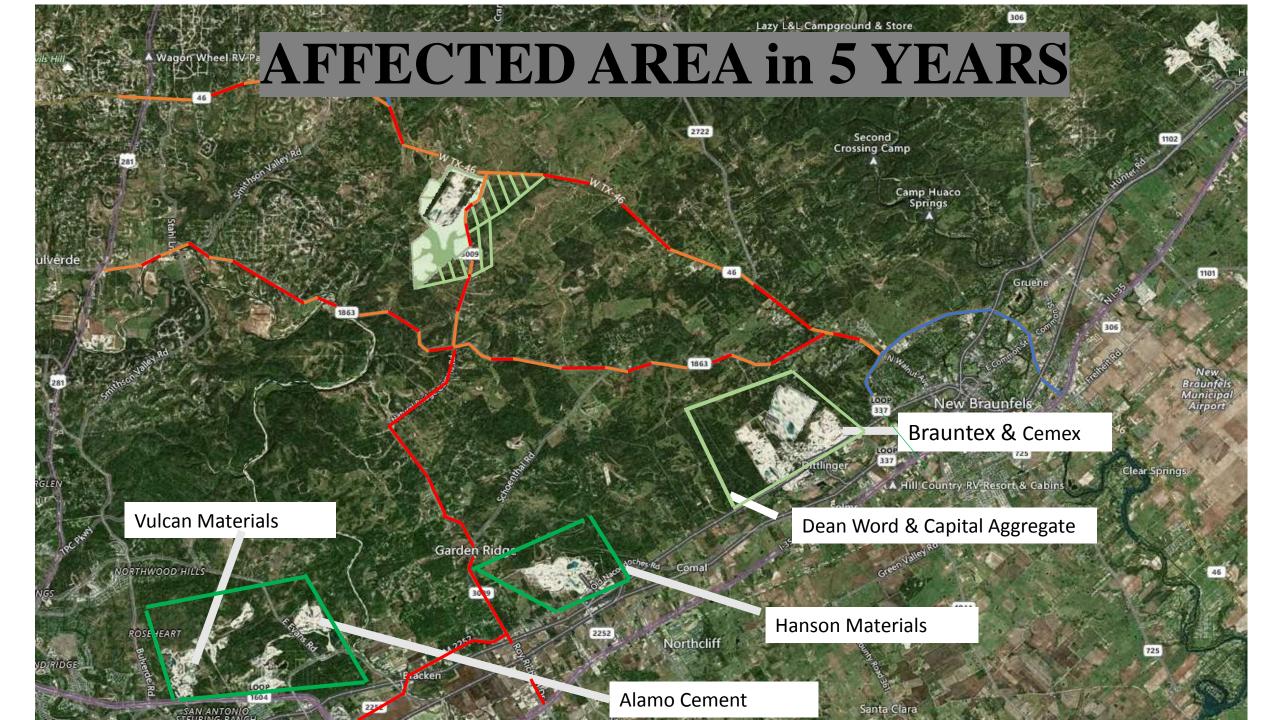


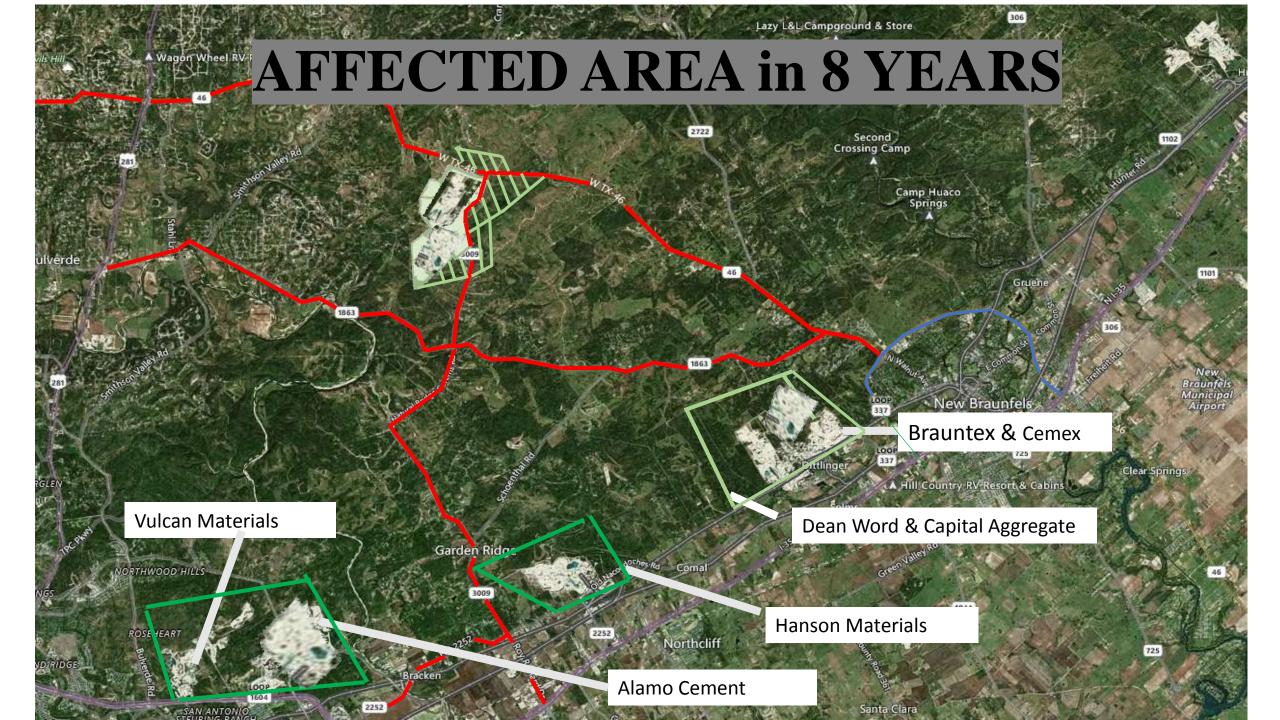


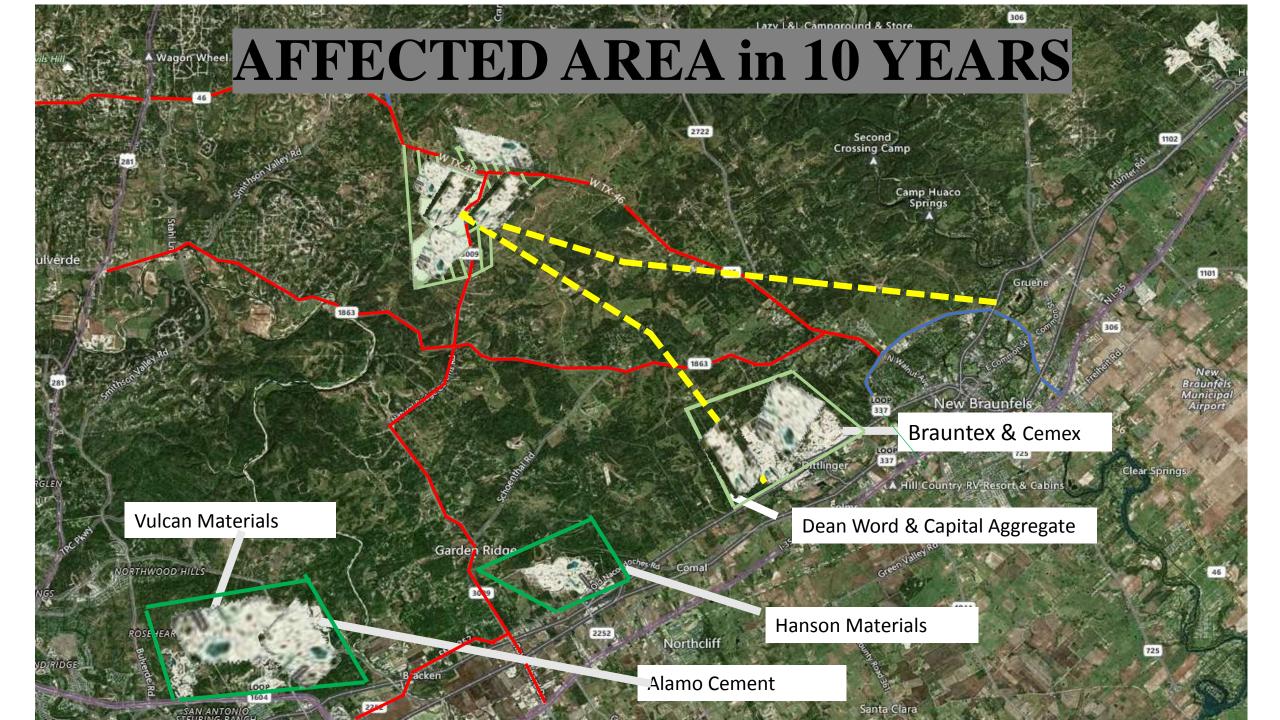
The Quarry is an IMMINENT DANGER!

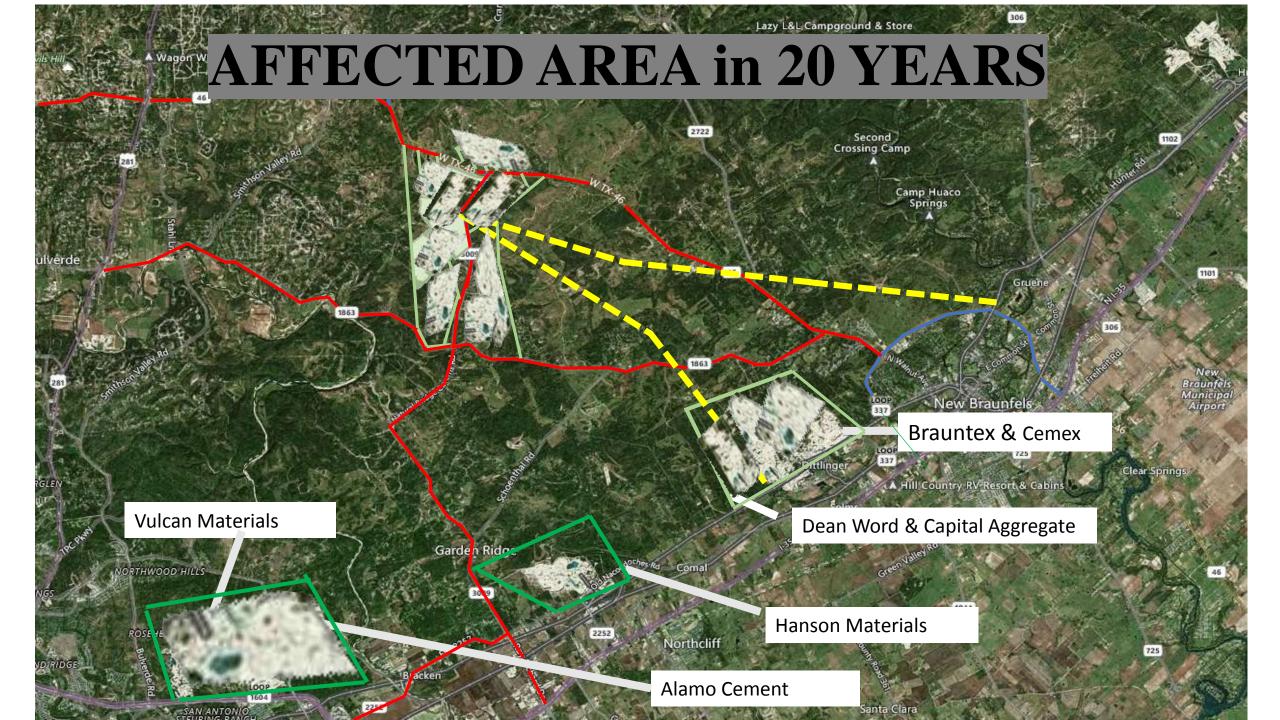
The Shape of Things to Come











Where Are We Now?

- > Public commenting period closed 2/27/18.
- The ED will issue a Response to Comments (RTC) along with a Notice of Application and Preliminary Decision (NAPD) and Intent to Obtain Permit
 - This NAPD will provide option for a "hearing request" or Contested Case Hearing. If a hearing request is filed timely in Response to this Notice of Receipt of Application and Intent to Obtain Air Permit, the time period for requesting a contested case hearing will be extended to thirty days after the mailing of the executive director's response to comments.
- > Awaiting RTC. Anticipate mid-summer

What's Next?

- Upon issuance of NAPD, applicant must post in local newspaper and everyone who filed comment online and/or spoke at public meeting will receive copy of RTC and NAPD in the mail
- Persons will have '30 days' only to file a request for a "Contested Case Hearing" and to be named as an 'Affected Person"

What's Next? Key Terms

Contested Case Hearing: A request based on issues that were raised by the hearing requester during the comment period, in comments that were not withdrawn later. To help the TCEQ determine the number and scope of issues to be referred to a hearing, the requester should, to the extent possible, specify any of the ED's responses to comments that the requester disputes (and the factual basis of the dispute, and also list any disputed issues of law

Affected Person as an Individual: Rule 55.103 and 55.203

(1). Give the name, address, and daytime telephone number of the person who files the request..

(2). In determining whether a person is an affected person, all factors shall be considered, including, but not limited to, the following:

- a. whether the interest claimed is one protected by the law under which the application will be considered;
- b. distance restrictions or other limitations imposed by law on the affected interest;
- c. whether a reasonable relationship exists between the interest claimed and the activity regulated;
- d. likely impact of the regulated activity on the health and safety of the person, and on the use of property of the person;
- e. likely impact of the regulated activity on use of the impacted natural resource by the person;
- f. for a hearing request on an application filed on or after September 1, 2015, whether the requestor timely submitted comments on the application that were not withdrawn;

Affected Party as a group (i.e. GEAA, Friends of Dry Comal Creek). Same as above.

NOW is the Time for a Pre-Emptive Strike By Our Elected Officials!

- Political Call To Action- Our County, City and ISD's CAN engage in these activities. Do NOT let them tell you otherwise as there is precedent
 - Comal County Commissioners
 - Write a Resolution NOW asking for a Contested Case Hearing and to be named an affected party
 - Work with constituents and Representative Biedermann to write language addressing need for 'local control'
 - > City of New Braunfels
 - Write a Resolution NOW asking for a Contested Case Hearing and to be named an affected party
 - > Comal ISD
 - Write a Resolution NOW asking for a Contested Case Hearing and to be named an affected party

NOW is the Time for a Pre-Emptive Strike!

Contact Your Representatives Senator Donna Campbell **Representative Kyle Biedermann**

OUR QUALITY OF LIFE WONT PROTECT ITSELF!

- > Letters from constituents DEMANDING that they take steps to address this **AGGREGATE AND POOR PERMITTING PROCESS locally and within their** districts
 - > Support & assist in writing legislation for & obtaining 'buy in' from **Commissioners and the Governor for local control. Sign 'local control' into** legislation NOW.
 - > Support & assist in bringing the permitting process by TCEQ into question
 - > Publicly and actively support your constituents by including them in the aforementioned processes

HOW DO WE MOVE FORWARD LEGALLY?

≻Fundraising

Legal and Expert Representation is NEEDED NOW

~\$70,000

Needed to FIGHT this with Vulcan in a Contested Case Hearing