

Response to comments on the proposed new limestone quarry on 711 Burnett Road, Old Hickory,
Tennessee

The Metro Public Health Department (MPHD) is grateful for your participation in this permit application review process. We are fundamentally committed to a participatory process and value the engagement of our communities on issues that may potentially impact health.

A complete application for a new Limestone quarry on 711 Burnett Road, Old Hickory, Tennessee was received by the Pollution Control Division (PCD) on May 19, 2016. We began the process of reviewing the permit application immediately. And, since then, we have had several consultations with both the applicants and members of the community.

We do not regulate blasting specifically and many of the aspects of operating this facility are outside of the purview of MPHD. However, there are aspects that fall within a number of our Air Pollution control regulations. Those are the ones that were considered in reviewing the permit application.

All construction permits require a notice in the Tennessean followed by a 30-day public written comment period. These draft permits were ready for public notice on July 1. Public comment period began on July 1, 2016 and closed on August 1, 2016. We began review of the written comments immediately. Responses to the comments and decision on the permit application are discussed in this document.

Based on a thorough review of the permit application, it is our determination that applicable regulatory requirements are met and thus a decision has been made to issue a construction permit. In issuing the permit, MPHD considered very strongly the concerns of citizens. In response, MPHD is ensuring:

1. That appropriate processes are in place to minimize emissions;
2. That more stringent practices have been instituted where possible; and
3. Stringent monitoring for compliance during operation.

The primary concern is with dust from blasting operations and vehicular traffic. We are requiring the company to pave key roads, ensure frequent cleaning of roads, and institute appropriate wet suppression technologies. MPHD will deploy resources needed to ensure adequate monitoring of Air Pollution related activities in this site during construction and operation. These control measures should reduce exposures to levels that are not expected to present a significant risk to the public.

All health and air pollution-related comments, received by the public, were reviewed and are addressed in one or more of the broad categories below.

National Ambient Air Quality Standards

The Clean Air Act (CAA) requires the Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for pollutants that may harmful to public health and the environment when present at a high level in the air. The CAA identifies two types of national ambient air quality standards. **Primary standards** are intended to protect public health, including health of

"sensitive" populations such as asthmatics, children, and the elderly. **Secondary standards** provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Air Pollution Control Agencies achieve and maintain the NAAQS by promulgating, implementing and enforcing regulations, approved by EPA, that impose emission restrictions, control techniques and work practices on different types of industrial sources. Therefore, by implementing and enforcing the requirements outlined in the air pollution permits, the NAAQS should be protected, thus protecting public health and welfare.

Truck Traffic

In the Process Permit Application submitted by Industrial Land Developers, LLC, potential emissions for vehicle traffic at the site were based on a maximum of 136 trucks per day driving onto the site, being loaded with crushed stone, and then leaving the site. According to the application, the proposed quarry will have maximum production rates of 600 tons per hour and 850,000 tons per year of crushed stone, and a maximum operating schedule of 6 days per week and 52 weeks per year.

This assumes that truck loading at the facility operates at maximum capacity, six days a week, for the entire year. It does not account for seasonal fluctuations in the demand for crushed stone, or for times when the facility is shut down. These calculations also assume that all of the stone that is processed is promptly shipped off-site, and is not stockpiled for future use.

The estimate of a maximum of 136 trucks per day entering and leaving the site is relevant to the Air Pollution Permit because it affects the amount of particulate matter generated at the facility. However, these potential particulate emissions are within regulatory limits. The Air Pollution Control Division does not have any regulatory authority over the exhaust from these vehicles or the additional traffic they represent.

Dust

With respect to rock quarries, 40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants addresses crushing, grinding, screening, conveying and storage activities at the facility. Quite often, a federal regulation may not address all activities at a facility. There are also general, local provisions that apply to many, if not all, stationary sources.

Section 10.56.190, "Controlling Wind-Borne Materials" of Chapter 10.56, "Air Pollution Control" of the Metropolitan Code of Laws requires facilities to take adequate precautions or measures to minimize atmospheric pollution during the handling, transporting or disposition of any substance which is likely to be scattered by the wind. Vehicles carrying such materials are required to be covered prior to operating on public streets. Facilities are also required to take all reasonable measures as may be necessary to prevent particulate matter from becoming airborne, including, but not limited to, paving, or frequent cleaning of roads, application of dust-free surfaces, or frequent watering to control fugitive emissions.

Section 10.56.270, “Visible Emissions” of Chapter 10.56 requires a source to comply with a visible emission standard of 20% opacity. Compliance with this requirement is determined using EPA Reference Method 9 which requires evaluation of the plume, by a certified observer, over a six minute average.

While dusts are inherently produced as part of activities planned in this application, the control measures are expected to reduce exposures to levels that should not present a significant risk to the public. We are requiring the company to pave key roads, ensure frequent cleaning of roads, and institute appropriate wet suppression technologies. MPH D will deploy resources needed to ensure adequate monitoring of Air Pollution related activities in this site during construction and operation.

Respirable Silica Dust

A limestone composition analysis performed on the rock at the proposed Burnett Road quarry shows a silica, or silicon dioxide, content ranging from 8.91% to 14.59%. The dust control measures detailed earlier will significantly reduce exposure levels to dust and respirable silica dust and no significant risks are expected.

As stated above in the “Health Protection” section, the air pollution regulations are in place to maintain compliance with the NAAQS. By complying with the applicable requirements, any offsite environmental exposure to silica is expected to be below levels of concern.

Noise

The Metro Public Health Department, Pollution Control Division does not have any regulatory authority with respect to noise pollution. Section 11.12.070, “Excessive Noise” of the Metropolitan Code of Laws states, in part, *“No person or persons owning, operating, or having the care, custody, or control of any business or commercial facility shall be permitted to operate any equipment, vehicles, or heavy machinery incident to performing business or commercial functions, or engage in any other business or commercial activity between the hours of 9:00 p.m. and 6:00 a.m. which would emit, cause to be emitted, or permit the emission of any noise in excess of seventy Db(A) as measured from a point as close as possible to the outside walls of any residential structure located within a residential zoning district affected by the noise at a height of four feet above the immediate surrounding surface.”*

There may be other Metro Codes not under the purview of Pollution Control Division that are relevant. Although there is no evidence to suggest that environmental noise levels will exceed regulatory levels, if this becomes a problem in the future, Metro may require additional noise control measures.

Public Comment Period

Section 10.56.020(N), of Chapter 10.56, “Air Pollution Control” of the Metropolitan Code of Laws and Regulation No. 3 of the Metro Public Health Department require the Director to notify the public, by advertisement in a local newspaper, of the applicants seeking to obtain a permit to construct or modify an air pollution source. The Director shall consider all written comments submitted in making a final decision. When a facility has the potential to emit more than one hundred (100) tons per year of a

pollutant and becomes subject to Regulation No. 13, "Part 70 Operating Permit Program," the public notice must include the opportunity to request a public hearing. The proposed facility does not meet these regulatory thresholds. However, on the invitation of Councilman Hagar, MPH D staff attended a community meeting to answer questions from the community. We have also been unfailingly responsive to questions from the community and have made several visits to the site and called operators of the site following complaints or concerns from the community. It is our intention to keep doing so. The process followed in this case included the applicable public comment period and went above and beyond regulatory requirements for a facility this size by meeting with the community and alerting concerned community members directly, regarding updates throughout the process.

Blasting

All matters associated with Health, Safety and Environmental Protection related to Blasting and Explosives are regulated by the Tennessee Department of Commerce & Insurance, Fire Prevention/State Fire Marshal's Office under Title 68, Chapter 105 of the Tennessee Code.

Previous Use of Property (environmental assessment)

We reviewed existing information about previous use of this site from a couple of environmental assessments. They are available for public review. The conclusion from the assessments is that no significant risks exist as a result of the historical use of this property.

Conclusion

The Metro Public Health Department wants to reiterate their appreciation for the public's participation throughout the permitting process. We took all health-related comments and concerns very seriously in the review of this application. It is the Health Department's mission to protect the health and well-being of everyone in Nashville. By operating in compliance with all applicable permit conditions, we believe that the proposed quarry would be able to operate without threat to the public health.

Comments	Response Topic
<p>I'm not happy at all with the proposed Quarry in our area. I think all of Old Hickory is opposed to it simply because it's too close to the beach and recreation area that we frequent.</p> <p>I'm concerned about the dust and debris that will settle in the lake and the beach area. I kayak on the lake frequently and I'm very concerned about the effect that blasting will cause to our health.</p> <p>There will be up to 180truck per day creating extensive exhaust in addition to other heavy equipment that will operate up to 24 hours a day seven days a week.</p> <p>There is a residence only 400 feet from the proposed sight. Also, there is wildlife in the area and the potential for dust clods and hazardous debris is not healthy for any of us. The Sulfur Sulfur dioxide byproduct from ANFO (ignition fuel for blasts) is a listed carcinogen as well as pollutant. We live in a 100yr old village with a significant aging population that may suffer from exacerbated new breathing problems due to silica dust, etcSilica dust will and has worsened asthma. Studies show it is a high risk factor in the occurrence in non-smoking lung cancer and disease.</p> <p>Please help us stop this quarry for the sake of our health. It's just too close to people trying to enjoy our natural resources.</p> <p>I'm writing this letter in response to the public comment period for the application of Industrial Land Developers for Process Permit Application. I am further writing this letter, not only for myself, but a majority of my constituents in Old Hickory, Tennessee. My District and this community are adamantly opposed to any type of air permit being granted to Industrial Land Developers in regards to the proposed mineral extraction plant on Burnett Road.</p> <p>In reviewing this application I was quite amazed that based on previous discussions with these developers, they in no way disclosed that they would produce 850,000 pounds per year of product. The primary type of air pollution is the silica dust produced by this type of operation. It is my understanding that normally the emissions for these types of operations are 15 tons per year. Based on their projections it indicates they are going to be emitting 32,443 pounds or approximately 16 tons of particulate in the air per year. It is a known fact that silica dust when breathed into the lungs is irreversible and is a primary cause of cancer. As such, the total amount of particulates based on the total product in their application will be approximately 49,239 pounds or 25 tons per year of particulate in the air. In addition, there are approximately 2 residents within 600 feet of this operation on Cinder Road. Depending on the wind currents these particulates present a danger to the nearby residents and the Corps of Engineers Park next door.</p> <p>There is a Corps of Engineers park located directly behind this proposed quarry is within 600 feet of the quarry. This park hosts over 80,000 visitors annually. The winds in this area typically blow out of the west causing the park to be in the direct path of any dust that does escape the quarry property. People come from all over the United States to visit Old Hickory Lake. Old Hickory Lake is rated in the top five most visited Corps of Engineers lakes in the United States.</p> <p>It is further my understanding from several people near the Vulcan Quarry on Old Hickory Blvd. in Hermitage that many people with allergies and asthma have had to move away from the Vulcan Quarry area due to respiratory issues.</p> <p>Also, I am inquiring as to why a public hearing was set up for the gas compression station in Joelton and no such meeting was set up for us. I had been told you did not have to have a public hearing for an air permit. Are we not as important in regards to air pollution as Joelton? In that regards I am attaching a copy of the Notice of the Public Hearing on the Proposed Joelton Gas Compressor Station.</p>	<p>Dust</p> <p>Truck Traffic</p> <p>Blasting & Respirable Silica Dust</p> <p>Respirable Silica Dust</p> <p>Public Comment Period</p>

This will further confirm that the letters that have been sent to Public Works concerning total number of trucks per day coming in and out of the facility for the quarry are 110 trucks per day, 55 in, 55 out; these trucks carry approximately 20 tons loaded. Approximately 42,000 truckloads of product in one year will leave that area which is approximately 160 loaded trucks per day coming out of the property. As such, their estimate of 110 trucks per day is flawed based on the air permits and the information that they have provided to public works. As such, it is my firm belief that this particular company is not providing sufficient data and is giving erroneous estimates as to the pollutants that they are going to produce based on their figures provided to the Metropolitan Government Health Department. As such I am opposed to any type of Air Permit being rendered to this particular company until the health department has had discussions with other departments as the true amount of pollutants that will escape into our atmosphere in our community.

Truck Traffic

My request for a meeting to discuss the draft permit reflects my unfamiliarity with the Air Regulations under which this part of the permit is being considered. While requiring written comments, the Water regulations provided for public input in the form of a meeting after the draft permit was published. This provided an opportunity for the public to ask questions regarding the specifics of the proposed permit.

Public Comment Period

As you well know but I didn't, the Air Pollution Control Division divides permits into major and minor sources of pollution applications. It appears the numbers presented by this application mean that it falls under the category of a "minor" source of pollution and as such, comments are only accepted in writing. I didn't dream that the proposed permit was a "minor" source of pollution since the dust and toxins from truck traffic, blasting and mining has the potential to bring great harm in the form of health dangers and a destruction of a way of life to the community. While it may be a "minor" source of pollution in terms of an arbitrary number, the impact on the community is "major". It is my understanding from the permit that the company is proposing a minimum life for the mine of 20 years. Few of the people in the community will still be alive 20 years from now and I suspect the members of the community who remain will have a shortened life expectancy if the mine is allowed to go forward.

On June 29, 2016 when I inquired about the status of the permit, the draft version that opened the public comment period had not yet been published. Director John Finke and others from your division met with the community on June 30, 2016 to provide an opportunity to discuss the issues involved but the permit was not published until July 1, 2016 so at the time of the meeting, the attendees from the community had not had an opportunity to review the draft permit to develop any questions. Since few of us have the technical understanding of the permitting process or the ability to understand many of the technical terms of the proposed permit, I thought we were within our rights to request a meeting with the engineers so that any questions we had regarding the permit could be discussed and parts that we did not understand could be explained.

Mr. Finke sent an email to Ms. McLaughlin on July 11, 2016, explaining why it was not appropriate to have an additional public meeting as outlined in this letter and her email of July 1, 2016. In that email, Mr. Finke invited Ms. McLaughlin to send any questions she had regarding the proposed permits to the Department so they could be answered in writing.

On the official website of the Tennessee Department of Environmental Control (TDEC), Air Pollution Control Division the stated policy of TDEC is to protect the normal health, general welfare and physical property of the people.

My first introduction to the workings of the Industrial Land Developers, LLC (ILD) was at a Metro Council Meeting in October or November of 2015 where their lawyer, Tom White, got up and said ILD had hired a scout to find a piece of property upon which to put their strip mine. According to Mr. White, the scout told them he found the perfect spot “in the middle of nowhere”. I hope they didn’t pay the scout a high fee as he did not adequately research a suitable piece of property. Rather than being in the “middle of nowhere” the property they are proposing for the strip mine is above the headwaters of the source of drinking water for the city of Nashville and in a location that experienced a disaster of major proportions in 2010 that if repeated in any form in the coming 20 years the facility is proposed for, would spell disaster to the capital city of Tennessee. While the disaster of 2010 was a flood, the process of mining creates enormous air pollutants that would be washed into the drinking water for the capital city as well as the potential to carry those toxins into the downtown area.

The name of the proposed permit is: **A Permit to Construct an Air Pollutant Source** so by definition, the facility is designed to produce air pollution.

The mine abuts a recreational facility on Old Hickory Lake that serves over 80,000 visitors a year. It is located across Cinder Rd from an horse and livestock farm and less that .6 miles from the gate of the facility to houses and a trailer park on Swinging Bridge Rd.

The land was zoned Industrial General (IG) for DuPont to produce ammunition for World War I, zoning that was based on a national crisis decision. Ammunition was needed by DuPont which built the munitions factory at the site of the proposed strip mine. Although DuPont owned that property and other property across the street, DuPont has not been an active industry in this community for some years.

Since the closing of the munitions factory in 1919, a community has grown up around the site, environmental laws have changed and our knowledge of air pollutants has increased significantly.

The ILD property borders roads that provide much needed access to Old Hickory Lake. There are two roads to the public boat ramps, one is Burnett Rd which is the road that fronts the ILD proposed facility and Cinder Road which borders the back side of the ILD property. Cinder Rd provides access to a boat ramp on the Cumberland River and Burnett Rd provides a boat ramp access to Old Hickory Lake. Both roads provide access to the Corps of Engineers park at Old Hickory Lake. The Old Hickory lake access will largely be inaccessible to the public because the company is proposing to run trucks that are oversize 365 days a year, 24 hours a day. Even if the public could get to the lake, the amount of flyrock and limestone dust will make using the boat ramps, lake shore, swimming and picnic areas unusable.

Right across from the back gate of the proposed facility is a horse ranch where they have a variety of farm animals in addition to horses. That is their home. Flyrock and blasting mere feet from their front yard is not conducive to the air the animals breathe or the good health of their animals.

There are trailer parks and homes where people live right along Swinging Bridge Rd as close as six tenths of a mile with many elderly people who have breathing problems such as COPD and Asthma. There is a whole community built up around the area ILD is proposing for a strip mine.

An early step in the surface or strip mining process is the removal of topsoil and other overburden materials, including sandstones, shales, limestones, and unconsolidated soils. Removal of these materials may require drilling holes into the rock formation to accept explosive charges for blasting. After blasting, the debris is cleared with earth-moving equipment.

The quarry is upstream of Metro’s water treatment facilities and would not affect the city’s drinking water.

Blasting

National Ambient Air Quality Standards

Mine workers must wear respirators and safety equipment and they have limits on the amount of time they can be exposed. The community is near enough to this proposed facility to have their houses filled with dust from the mining operation and silicon dust from the trucks going up and down the road 24 hours a day/ 365 days a year as well as the air pollution emissions from the trucks themselves. The community will actually be exposed to the same health effects as the mine workers except that they will be on site around the clock because they are home and yet they will not be protected with safety equipment. (pictures of limestone quarries such as the Robinson Road Quarry in West Nashville shows dust covering everything along the road where the trucks travel).

If a community builds up around a quarry, they are making a decision to take the risks involved in living near a quarry and experiencing its attendant dangers. However, bringing a quarry into an existing community without the community's permission is a violation of the community's property rights and the rights to living without threat of adverse living conditions. TDEC has a responsibility to protect existing land owners from the intrusion of facilities such as ILD.

ILD has a history of acting in bad faith and litigational acts that violate good business practices and terms of agreement stipulations. See court case 2002-3. THE COURT OF APPEALS OF TENNESSEE AT NASHVILLE, July 9, 2002 Session, HOOVER, INC. v. METROPOLITAN BOARD OF ZONING APPEALS OF METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY, ET AL. An Appeal from the Chancery Court for Davidson County, No. 98-619-II Carol L. McCoy, Chancellor, No. M2001-00924-COA-R3-CV - Filed March 11, 2003)

The company initially applied for a permit on the property at Burnett Rd. in Old Hickory from the Metro Planning Board and TDEC Mining but used the name Industrial Land Developers, LLC. so that no red flags would be raised by finding out it was really Hoover, Inc. Mining applying for the permits so no one would see what they were planning to build at the site. ILD only had a post office box as an address and no listing as to who was the president or anyone to contact except the lawyer for the company, Tom White.

The company purchased the property and then proceeded to clear cut wetlands. While this is not an air issue, it does show the disregard of regulation and an attitude this company has which seems to be that they do what they want to regardless and then say, "opps, sorry". The clear cutting of wetlands violates 16 U.S. Code § 4408 - Restoration, management, and protection of wetlands and habitat for migratory birds on Federal lands. They also violated the Endangered Species Act. The Endangered Species Act requires that a business apply for a "take permit" if its actions will impact an endangered species. This company failed to secure such a permit prior to clearing approximately 33 acres of land and I think it is more land than that now because they have continued to clear cut the land in preparation for trying to establish they are already a facility on the site but it is clearly violating many acts and regulations. Local wildlife has already been either eradicated or displaced due to the desecration of its habitat.

ILD also had a cease and desist order issued against them at the Burnett Road site because they were selling mining materials in violation of the temporary NPDES permit.

<p>I use these facts to show IDL's complete disregard for regulation and their attitude that, as property owners, they can do what they want to do and begin digging a quarry before getting the proper permits. They are too interested in establishing their "vested" interests in the property to abide by regulation and think they will not be held accountable. What do they think about the other businesses, housing development and existing homes that are already surrounding the property they want to destroy? The businesses have been vested for many years, the housing development is going to be made valueless because of IDL's illegal intrusions, the homes people have lived in for years will be destroyed by dust and blasting and made worthless on the housing market yet the community has a vested interest both financially and emotionally. The recreational facilities are all "vested" and used by hundreds of citizens but the quarry will make these unusable from the air pollution, dust, flyrock and blasting. The air will be damaged beyond what a community can survive. The emissions of dust and fly rock combined with excessive traffic of oversize trucks using diesel oil, emitting toxic fumes and spreading toxic dust will destroy the community by making it uninhabitable.</p>	<p>Blasting, Dust & Truck Traffic</p>
<p>Blasting the limestone will create fine dust particles that permeate the air which, through normal weather patterns, will be carried for miles and affect a multitude of neighboring communities. Fine dust particles will coat automobiles, outdoor furniture, patios and decks, swimming pools, and will seep into homes through the tiniest of cracks and enter into the air ducts of HVAC systems.</p>	<p>Blasting & Dust</p>
<p>The 1990 Clean Air Act amendments estimates that the benefits of reducing fine particle and ground level ozone pollution will reach approximately \$2 trillion in 2020 while saving 230,000 people from early death in that year alone. It is estimated that in 2010 alone the reduction of ozone and particulate matter in the atmosphere prevented more than 160,000 cases of premature mortality, 130,000 heart attacks, 13 million lost work days and 1.7 million asthma attacks. Many people in the community surrounding the proposed strip mine have COPD and asthma already. This facility would insure their premature mortality.</p>	<p>National Ambient Air Quality Standards</p>
<p>Next door to the Hoover property is a company that has been successfully thriving in this community without harming other occupants. Adesa is a car auction but they will not be able to survive the opening of the quarry due to the rate of truck traffic making access to their facility nearly impossible and the fine dust particulate that will cover their cars as well as damage to their cars by airborne flyrock resulting from blasting.</p>	
<p>Air pollution includes noise pollution. Combined blasting and drilling at the quarry will create horrible noise pollution around the clock, sounds of explosions, drilling, crushing, loading, dumping, back up alarms, the sound of large trucks entering and exiting the quarry area, and general truck traffic on local streets. The proposed mining operations plan to implement around the clock shifts, will create light pollution resulting from bright working lights, trucks, and other machinery working at night.</p>	<p>Noise</p>
<p>Air pollution includes flyrock. A leading cause of injuries and fatalities from blasting continues to be inadequate blast area security. Even though significant improvements in technology have been made, insuring adequate blast area security remains a challenge and requires constant vigilance. The advances in technology have created safer blasting products and have improved productivity and economics by enabling large, more efficient and effective blasts. However, as blasts grow larger in size, the complexity of adequately securing the blast area increases even more. The close proximity of the strip mine to existing residences, businesses and the public recreational areas means that any flyrock created by the strip mine is much more likely to do great harm.</p>	<p>Blasting</p>

<p>Factors such as flyrock and toxic fumes must be taken into account to insure the safety of persons and property from the results of a blast.</p>	<p>Blasting</p>
<p>One thousand one hundred and thirty-one blasting-related injuries were reported by the mining industry during the period 1978-2003 [Verakis & Lobb, 2003 with updated data]. Blast area security accounted for 50.1% of these injuries followed by premature blast (11.4%), flyrock (10.8%), misfires (9.9%), and fumes (8.5%).</p>	<p>Blasting</p>
<p>During 1978-2003, blast area security accounted for 41% of all blasting related injuries reported by surface mines. Injuries due to inadequate blast area security continue to be a major safety concern. The injuries primarily result from failure to identify and clear the blast area, inadequate guarding, failure to communicate or follow instructions, and inadequate or improper cover. Compliance to an effective blast area security protocol plays a key role in preventing injuries to miners, visitors, neighbors, and trespassers.</p>	<p>Blasting</p>
<p>One of the greatest challenges which a blaster faces in mining and construction blasting, is to accurately determine the bounds of the blast area. This is particularly true in geologically disturbed rock. A blaster's decision in estimating the bounds of the blast area is greatly influenced by the engineering design of the blast, geology of the blast, regulatory requirements, and company policy. A blaster must make an estimate of the maximum possible distance flyrock could travel from a shot. Furthermore, a blaster should not assume that a shot being fired will behave like other shots previously fired at the same operation.</p>	<p>Blasting</p>
<p>For surface and underground metal-nonmetal mines, Title 30 Code of Federal Regulations (30 CFR) § 56.2 and § 57.2 defines blast area as the area near blasting operations in which concussion or flying material may cause injury.</p>	<p>Blasting</p>
<p>The Federal Office of Surface Mining (OSM) regulations [30 CFR § 816.67 and 817.67] help to characterize the bounds of the blast area by specifying that flyrock shall not be cast from the blasting site.-more than one-half the distance to the nearest dwelling or other occupied structure, -beyond the area of control required under 30 CFR § 816.66(c), or -beyond the permit boundary.</p>	<p>Blasting</p>
<p>The bounds of a blast area should be adequately determined for each blast. Flyrock could travel beyond an inadequately defined blast area and cause injury. In Campbell County, TN, flyrock traveled beyond the blast area resulting in a fatal injury to a motorist traveling on interstate 75 [Shea & Clark, 1998]. The bounds of the blast area were not adequately determined for this blast.</p>	<p>Blasting</p>
<p>During a construction blasting operation near Marlboro, NY, flyrock was showered on passing motorists on Route 9 W about 180 feet from the blast pit. This incident resulted in property damage and injury. There are numerous instances where the bounds of the blast area were not accurately determined, resulting in injury, or property damage. There are many cases of close calls where accidents were narrowly missed. Flyrock from a limestone quarry traveled about 930 ft and fatally injured a resident who was mowing grass on his property [MSHA 1990b].</p>	<p>Blasting</p>

<p>The OSM regulations in 30 CFR § 816.66 (c) and 817.66 (c) require that “Access within the blast area shall be controlled to prevent presence of livestock or unauthorized persons during blasting and until an authorized representative of the operator has reasonably determined that – (a) No unusual hazards, such as imminent slides or undetonated charges, exist; and (b) Access to and travel within the blasting area can be safely resumed.” Several accidents were related to inadequate access-control to the blast area. A neighbor was fatally injured when he inadvertently entered the blast area through an access trail before the blast [MSHA, 1999]. Guards were not posted for access control. The access trail was in a wooded area and not visible from the firing station. This incident underscores the need for an effective access control protocol.</p>	<p>Blasting</p>
<p>The farm on Cinder road has livestock just feet from the strip mine boundary and they could easily be hit and killed with flyrock. The first greenway trail in the Nashville system of walking paths exists right at the edge of the proposed mine and anyone hiking that trail would be in danger from flyrock in the event of blasting. There is boating and swimming within 100-200 feet of the proposed facility where families go to swim and get on the water. Airborne flyrock could easily injure or kill park attendees.</p>	<p>Blasting</p>
<p>The strip mine includes plans to blast on the exact site of the old DuPont munitions factory. There is even a historical marker indicating the site which closed in 1918. DuPont was supposed to destroy all of the remaining munitions but it was before the Resource Conservation and Recovery Act (RCRA), enacted in 1976 requiring any type of hazardous waste that was buried to be documented so that the area could be handled with proper care. There is no guarantee there are no unexploded ordnances or munitions components on the site that could be ignited with blasting, causing great harm and even death to anyone within a large radius in and surrounding the facility. No one really knows what is below the surface of the ground that would be airborne upon blasting. That certainly seems to be eligible to be considered a type of air pollution. Even the fire marshal who issues the blasting permits said although his department would have to issue blasting permits if the facility is permitted by TDEC, his office was of the opinion that it was a really bad idea to allow blasting at the old munitions site and dangerous to the surrounding community regardless of whether or not there are residuals from the munitions plant.</p>	<p>Previous Use of Property (environmental assessment)</p>
<p>Finally, the company is listed as a Limited Liability Corporation. If things go wrong and the facility closes the strip mine, who will be responsible for the remediation and clean up of an area? Huge numbers of people will be displaced out of their homes and even more citizens will be denied a valuable recreational facility.</p>	
<p>The housing industry in and around Nashville has suddenly experienced an enormous growth in housing costs but those who live around the proposed strip mine, if approved, will not be able to sell their property if they wanted to or would have to sell at such a loss as to be unable to relocate within Middle Tennessee.</p>	
<p>Remember, the Tennessee Department of Environmental Control (TDEC), Air Pollution Control Division’s stated policy is to protect the normal health, general welfare and physical property of the people, not ensure their early demise by permitting a facility that has a public record of disregard for following the rules and regulations. Even if the strip mine were to follow the rules and regulation and run a safe, well run facility, the normal health, general welfare and physical property of the people living and working in the community would not be protected.</p>	<p>National Ambient Air Quality Standards</p>

My final comment is that this facility should not be permitted for the stated reasons in the above comments. Limestone is not a scarce commodity in Middle Tennessee and thus the company would not be denied a living by having to find another location more suitable for their mining operations. The monies they have already invested would not have been a problem if they had followed proper regulation and procedure. They cannot claim they didn't understand the regulations because Hoover Mining has a history of running a mine and is familiar with what the regulations require. The surrounding communities and possibly Metropolitan Nashville will suffer irreparable harm, displacement and quality of life.

We are greatly concerned about the effect a rock quarry would have on the air quality in our community. No amount of silica dust from the quarry would be acceptable for us to breathe. Clean air is essential for good health, as you are aware. This quarry would be the death of our community, and you have the power to save us. Please don't take this lightly.

Many people live in our area and even more people come to the park, beach, lake, and walking trails for recreation. No one wants to go for recreation to a place that is unsafe, unhealthy, and dusty. Neither do we want to live in such a place. The immediate area around where the quarry is planned is a rare jewel in Davidson county. Not only will the people be affected, but the wildlife and fish will be also.

There are many other spots that would be more appropriate for a rock quarry. The community has been snared by inappropriate zoning that should have been changed years ago. No one took initiative because, in the past, it seemed people cared more for the welfare of one another. While we know the zoning is not your fault, it should emphasize to you how out of place a quarry would be on Burnett Rd.

Please, carefully consider the gravity of this decision and help us. Feel free to contact us personally, if you would like.

I have major concerns I'd like to share with you concerning the threat to air quality that the proposed quarry at Old Hickory Lake Recreation area and Nature trails poses. This proposed development is dangerously situated closely between major water sources for all of Middle Tennessee, a park enjoyed by at least 80,000 visitors annually, neighboring homes, and threatened flora and fauna.

Through research I've come across expert findings, including some contained in U.S. Geological Survey Open-File Report OF-01-0484 and research this report cites. The report states that risk can possibly be mitigated through proper controls and especially housekeeping, but this particular developer has been cited multiple times for permit violations, traffic violations and poor housekeeping **before** their mining permit has been granted. They have proven to be unconcerned with protections and will be even less concerned if the permit is granted. Here's some excerpts from my research.

Dust is one of the most visible impacts associated with limestone quarrying due to the drilling, crushing and screening of the rock. (Howard and Cameron, 1998).

Dust may occur as fugitive dust from excavation, from haul roads, and from blasting, or can be from point sources, such as drilling, crushing and screening. This airborne dust can travel long distances from a mining site and affect urban and rural residential areas downwind. (Langer, 2001).

Respirable Silica Dust

Site conditions that affect the impact of dust generated during extraction of aggregate and dimension stone include rock properties, moisture, ambient air quality, air currents and prevailing winds, the size of the operation, proximity to population centers, and other nearby sources of dust. Dust concentrations, deposition rates, and potential impacts tend to decrease rapidly away from the source (Howard and Cameron, 1998).

In some situations, dust on quarry floors and nearby areas can clog pores in the ground thus altering recharge rates. In other situations, dust can enter conduits and smaller openings, and can be transported and deposited into caves (Gunn and Hobbs, 1999).

Dust can negatively impact karst biota. Dust, if uncontrolled, may spread over the surroundings during dry weather, leach into the soil during storms, and create harmful conditions for the flora and fauna (Vermeulen and Whitten, 1999).

When dust smothers leaf surfaces, vegetation can be damaged through the blocking of leaf stomata, thus inhibiting gas exchange and reducing photosynthesis (Howard and Cameron, 1998)

Predicting the level of dust emission is extremely difficult because of the complex nature of mineral operations and the variable dispersion and dilution characteristics of dust in the air. Heavy reliance is made on minimizing dust production through "good practice" and monitoring actual dust emissions. (Julius Banez, Sarah Mae Ajon, Jan Rose Bilolo, , Jhocel Marollano, Daily Nivero, 2010

I implore you to deny this permit and protect the safety of middle Tennessee. The proposed site is too close to parks and homes, and major water sources. The developer has proven to intentionally ignore state and local laws, has been cited for carelessness ahead of permit, and is even outwardly hostile to park visitors and nearby residents.

I am adamantly against building this quarry. Please build it in an area where people do not live. I can't believe the proposal has gotten this far. Please stop it. The threat to the entire city is frightening. Don't do it.

I am a resident of Old Hickory and live 1/2 mile away from the proposed Hoover Quarry. We are down-hill from the site in the river bottom proper. There is very little wind flow in this area unless we have a storm blow in and refresh the air for awhile.

This area is currently high in pollen, humidity and industrial emissions, that linger. It would be a tragedy to add to this with silica dust. OSHA states, **'Silica dust is hazardous when very small (respirable) particles are inhaled. These respirable dust particles can penetrate deep into the lungs and cause disabling and sometimes fatal lung diseases, including silicosis and lung cancer, as well as kidney disease'**.

Rayon City/Old Hickory is comprised of many retired individuals. On my street alone, several people are treated medically with oxygen. I can't fathom the exponential health effects a quarry operation, in the middle of a neighborhood, would have on its population!!

My petition to you is: pass my plea along...test our air quality now, and determine a rejection for a air quality permit to Hoover in Old Hickory.

<Included copy of "Assessment of ANFO on the Environment", Technical Investigation 09-01 and "Phase II Environmental Site Assessment, Old Hickory Powder Plant Site, Rayon City, Tennessee, September 1999">

National Ambient Air Quality Standards

Respirable Silica Dust

National Ambient Air Quality Standards

<p>My name is Cory Sharp. I have been researching this project since day 1. I understand that Metro Health Department only regulates the air quality in this permit. Many of the things I'm going to tell you in this don't pertain to air quality per say, but do cause this project to be an environmental nightmare. Rock quarries are major contributors to air pollution in numerous ways, with the main issue being dust. Dust not only effects human health, but natural environment as well. I understand that remediation factors are put into place to ensure minimal dust leaves the site, but much of the contaminants are never seen.</p> <p>This particular site is very unique. The site was the location of the DuPont gun powder plant for WWI in 1918, which was long before the EPA was ever thought of. Industrial Land Developers was asked for an environmental assessment on this property, and turned in an assessment that was performed in 1999, which I have attached at the bottom. I strongly urge you to read in depth this assessment as it has a lot of compelling information of the history and contaminations of the location. There are 3 superfund sites that are within a half mile from the site, two being adjacent.</p> <p>The recent studies that have been preformed on the soil only went down 5 feet. One particular spot tested positive for PCBs, and were extracted from the area. I honestly don't believe the depth of these test are relevant when considering the quarry has a 20 year plan. God only knows what they will get into deeper in the soil, and in return be administered into the air by excavating and blasting.</p> <p>There is a Corps of Engineers park located directly behind this proposed quarry. This park hosts over 80,000 visitors annually. The winds in this area typically blow out of the west causing the park to be in the direct path of any dust that does escape the quarry property. People come from all over the United States to visit Old Hickory Lake. Old Hickory lake is rated in the top five most visited Corps of Engineers lakes in the United States. Once again I understand there are measures that are took to ensure dust control, but these measures don't ensure 100% perfection certainly.</p> <p>I have also attached a link to an assessment of ANFO on the environment performed by Canada. ANFO stands for Ammonium Nitrate Fuel Oil which is involved in blasting. ANFO will be administered through the air to the park and Old Hickory lake which is adjacent to the property. We as a community, Nashville, have many concerns regarding this quarry. Air quality is definitely one of our main concerns. I honestly don't think that our air quality is worth risking just to pad the pockets of a shell company, ILD.</p> <p>I have been a resident of Old Hickory Village for 25 years. My wife and I have been big proponents of the community. We are proud of the the improvements and restoration we have done to our historical home.</p> <p>In light of the newfound bump in interest and value our historical community is getting due to Nashville's overall growth, and people's desire to be a part of something with unique roots - it breaks my heart that we are in imminent danger of taking a huge step backwards.</p> <p>Old Hickory Village is experiencing positive growth and interest like I have never seen. We can't afford to lose our quality of life due to the negative environmental impact on our air, water, and noise. It is a travesty to risk the negative impact a rock quarry could have if it is allowed to operate so close to our community.</p>	<p>Dust</p> <p>Previous Use of Property (environmental assessment)</p> <p>Blasting</p>
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As a 20 plus year resident of Old Hickory Village, my husband and I have seen a lot of changes, the majority of them positive. However, the proposed quarry is certainly the worst change that could be imposed on our amazing community. The residents of Old Hickory do not want this quarry in their backyard, nor do we want all the problems that will come with it.

We pray that all involved will consider not only themselves, but the negative impact this proposed quarry would have on the quality of life to Old Hickory residents.

I'm writing in regards to the proposed surface mining operation at 771 Burnett Rd in Old Hickory. TN and the air quality permit they have applied for.

I am appealing to you and your colleagues to deny this permit, and to take into consideration the following reasonings as to why.

Old Hickory is a community that has been around for nearly 100 years, with multiple generations living here. As such, we do have an aging population that may be facing health issues such as COPD, asthma, lung cancer, bronchitis, and other related respiratory illnesses that will be affected by the pollution created by the quarry if they are granted this permit.

On the other end, we have many young children here who would be affected by this pollution creating respiratory issues as well as possible lowered immunity created by chronic inflammatory response from the pathogens. Such pathogens will be silica dust created from the crushing, processing, and transporting of the limestone.

Despite mitigating measures, there will be dust that will accumulate, creating eye and breathing hazards particularly when disturbed by wind, rain, and human movement. These tiny particles will cause eye issues for all in proximity as well as contaminate water, clog air intakes, and destroy property. Hoover/Industrial Land Developers has stated there will be an estimated 180 trucks per day, and they will operate 24/6 unless peak production then 24/7. Please consider the long term impact, 20 plus years according to them, this will have on the residents and property over this span.

From a health standpoint, this is a set up for multiple health issues that can be prevented. That if allowed to happen will burden the taxpayers of this county and state, unnecessary and preventable.

Another very serious pollutant is the by product of ANFO (ammonium nitrate fuel oil), nitrogen dioxide, which can turn into nitric acid in a person's lungs once inhaled. These orange clouds do occur and do not dissipate quickly, causing residue to accumulate on property as well. These clouds can cause serious issues including lung irritation, eye irritation, aggravate existing heart disease, and premature death, issues supported by the EPA. These issues are another preventable health burden that will be put upon not only this community, but the county and state.

I've included a link as well as files to substantiate the claims I have laid within my comments. Please keep this information in mind while you are making a decision as to whether the pollutants created over the 20 plus years this mine want to be in operation are worth the health of the immediate residents as well as the people who will be affected downwind as well.

Thank you for your time and consideration in this very important and pivotal matter.

National Ambient Air
Quality Standards &
Respirable Silica Dust

Blasting

A waste of time and taxpayer money when you say a permit is automatic! By the way the sign at 771 Burnett Rd. says hoover! Hope you are getting your payout. To say massive truck traffic will not add to ozone and pollution in general. Dust from trucks, blasting, and all other work will add much to our dirty air. Just ask anyone near a quarry how much they love it. And this info is available even to you. Why do you exist if this is automatic? Sleep well .

hoover is at 771 burnett rd. not i.l.d.llc. Anyone who thinks these people are not liars-thieves-crooks are pitiful as they are. How ludicrous to say this will not add to Nashville air quality problems ,ozone dust, blasting residue, and anything else they choose! There are many other reasons, but who cares. Its automatic. How sick! There is no justice if you buy people. Wish this was next to you. Go to work for t.d.e.c. (sic) Automatic

Automatic What a waste of my taxes. Sorry system. No thanks

Mr. Finke, When can a public meeting to review the draft permit and discuss the details be requested? I would guess it would be near the end of the 30 day comment period? Please advise us on the proper procedure for this process. I am interested in having such a meeting and I am sure many more citizens would also be interested in discussing the details of the draft permit.

Thank you for coming to an informal discussion meeting re: the Industrial Land Developers, LLC permit application. After the public has had an opportunity to study the permit, I would like to request a formal public meeting and I am sure most of the people at the informal meeting as well as others in the community would also be interested in a public discussion of the permit in a timely manner.

Your assistance in this matter is appreciated.

Please help us keep our air clean. Hoover does not care since he does not live here nor has he reached out to any one in the community to assure he will do whatever possible to protect the air to remain clean for the people who live here. Please deny. Please help. Linda

Mr. Finke sent an email to Ms. McLaughlin on July 11, 2016, explaining why it was not appropriate to have an additional public meeting as outlined in this letter and her email of July 1, 2016. In that email, Mr. Finke invited Ms. McLaughlin to send any questions she had regarding the proposed permits to the Department so they could be answered in writing.