



Feb 14, 2022

Laurie Gharis
Office of the Chief Clerk
Texas Commission on Environmental Quality
P.O. Box 13087, MC 105
Austin, Texas 78711-3087

RE: Comments Air Quality Standard Permit for Concrete Batch Plants Proposed Registration No. 167453 for Avant Garde Construction Co at 10945 Eastex Freeway, Houston, Harris County, Texas 77093

Dear Texas Commission on Environmental Quality,

Air Alliance Houston submits these comments on the proposed Standard Permit for a concrete batch plant, (the “Standard Permit”) Registration No. 167453, which would authorize the construction of a permanent concrete batch plant located at 10945 Eastex Freeway, Houston, Harris County, Texas 77093.

Avant Garde is proposing to construct a concrete batch plant in the Aldine community - a low-income, minority community that already has eight concrete batch plants spread throughout its residential neighborhoods. Generally, the TCEQ Standard permit is not protective of public health and the environment because it lacks adequate compliance monitoring, facility inspections, dust control measures, and other best management practices. However, in this case, the inadequacies of the standard permit requirements, coupled with the proposed location of the facility and the cumulative impact of pollution from the Eastex Freeway and other sources of pollution, will further contribute to the overburdening of the community to sources of pollution exposure.

Additionally, the statements above must be taken with the knowledge that we are amid a pandemic. COVID-19 exacerbates the effects and harms of air pollution. Various studies including a 2020 study by Harvard T.H. Chan School of Public Health found that people with

COVID-19 who live in U.S. regions with high levels of air pollution are more likely to die from the disease than people who live in less polluted areas.¹ Residents are experiencing disparate rates of COVID-19 deaths and illnesses within their community that is often correlated with decades of exposure to harmful air pollutants. The Commenters request that TCEQ and the applicant consider these impacts.

For all of these reasons, Commenters respectfully request that the TCEQ deny the permit to have the applicant choose a location that does not expose the community to further harm.

I. COMMENTERS

Air Alliance Houston (AAH) is a Texas 501(c)(3) non-profit advocacy organization working to reduce the public health impacts from air pollution and advance environmental justice through applied research, education, and advocacy. AAH takes a strong stance against disproportionate exposure to air pollution by emphasizing an agenda centered on equity and environmental justice.

II. INTRODUCTION

Avant Garde Construction Co has its offices in 950 Shore Acres Boulevard, La Porte, Texas 77571-7129. Avant Garde has proposed its concrete batch plant (the “Facility”) at 10945 Eastex Freeway, Houston, Harris County, Texas 77093. The proposed facility would be situated in the Aldine community which has an estimated population of 15,999² and covers approximately 7.8³ square miles for its city limits. The proposed facility will emit the following air contaminants: particulate matter including (but not limited to) aggregate, cement, road dust, and particulate matter with diameters of 10 microns or less including fine particulate matter with diameters of 2.5 microns or less.

Environmental Protection Agency (EPA) data compiled by the Houston Chronicle show that there are at least 188 plants in Harris County alone, the most in Texas.⁴ Concrete batch plants (CBPs) generate a host of dangerous air pollutants. On-site diesel internal combustion engines create a plethora of malignant, air-bound compounds: carbon monoxide, nitrogen oxides,

¹Air Pollution And Covid-19 Mortality In The United States: Strengths And Limitations Of An Ecological Regression Analysis. See electronically at: <https://projects.iq.harvard.edu/covid-pm>

²United States Census. Aldine ADP. See electronically at: [Census - Geography Profile](#)

³ United States Census. Aldine ADP. See electronically at: [Census - Geography Profile](#)

⁴ Houston Chronicle . See electronically at: <https://www.houstonchronicle.com/about/item/Map-Explore-concrete-batch-plants-in-Harris-75177.php>

volatile organic compounds, nickel, formaldehyde, etc.⁵ Additionally, the trucks that access the facility are often diesel-fueled and frequently idle outside concrete batch plants waiting to load for long amounts of time.⁶ The presence of loading and unloading trucks means that the presence of CBPs in communities causes direct environmental harm that is not accounted for in TCEQ's environmental permitting process. Though largely invisible, if inhaled, particulate matter of 10 micrometers in diameter or less (PM₁₀) and particulate matter of 2.5 micrometers in diameter or less (PM_{2.5}) can significantly increase the likelihood of heart attacks, pulmonary disease, and other grave health defects.⁷ The American Cancer Society determined that mortality rates among a population increase by 6% for every 10 micrograms per meter cubed of PM_{2.5}.⁸ The World Health Organization corroborates the relationship between high concentrations of PM₁₀ and PM_{2.5} with increased morbidity: air pollution poisons, debilitates and kills.⁹

People who live within a one-mile radius of a concrete batch plant, face higher rates of harmful air pollution. Children, pregnant women, immunocompromised, and elderly individuals are at the highest risk of developing complications related to pollutants emitted by concrete batch plants. Additional day-to-day health impacts may include headaches, nausea, dizziness, and other symptoms. Emissions from concrete batch plants are especially harmful when concrete batch plants are placed in residential areas, as pollution and increased heavy diesel traffic can affect the health and quality of life of residents.

The community that will be harmed if the proposed CBP is approved is Aldine. By nearly every standard, Aldine meets the definition of a socioeconomically vulnerable environmental justice community. Aldine is a largely Spanish-speaking and low-income community. Eighty percent of households speak Spanish at home, while only 17.3% of households speak English exclusively.¹⁰ 87.4% of Aldine residents identify as Hispanic or Latino, 2% of residents identify as African-American/Black, and 8% identify as White only. In regards to education, 53.6% of people have less than a high school diploma, 28.5% have at least a high school diploma, and the

⁵ Frederick, David. (2018). "Guide to Air Quality Permitting for Concrete Batch Plants." *The University of Texas at Austin: Environmental Clinic: School of Law*. Retrieved January 27, 2022.

⁶ *Id* at p.2

⁷ *Id* at p. 6

⁸ Hales, S., & Howden-Chapman, P. (2007). Effects of air pollution on health. *BMJ: British Medical Journal*, 335(7615), 314–315. See electronically at: <http://www.jstor.org/stable/25689996>

⁹ World Health Organization. "Ambient (Outdoor) Air Pollution." *World Health Organization*, World Health Organization, 22 Sept. 2021, See electronically at: [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

¹⁰ United States Census Bureau. See electronically at: [Census - Geography Profile](#)

remaining 17.9% have some college education.¹¹ Finally, in Aldine, the median household income is \$38,925 with 30.2% of people living in poverty.¹²

Additionally, residents of Aldine are already cumulatively overburdened by sources of pollution. The Eastex Freeway cuts straight through the local neighborhood and proximity to areas with a high density of pollutant emitting vehicles is a known factor in increased exposure to air pollutants, and thus, increases morbidity and mortality of nearby residents.¹³ Higher levels of air pollution have been linked to increased school absences, hospital visits, and even premature deaths. These cumulative harms must be addressed.

III. CONCERNS REGARDING THE STANDARD PERMIT

As mentioned above, the proposed facility will harm the community if the permit is approved. Specifically, there are two main concerns regarding the Standard Permit that the TCEQ should consider:

A. The Proposed Facility Is Located Near And Around Numerous Sensitive Use Facilities

It is well established that nearly a third (29%) of concrete batch plants in the Houston area are located within a half-mile of at least one school or childcare center.¹⁴ There are numerous public spaces including places of worship, schools, parks, museums, and community resource centers within a mile of the proposed location. The standard permit only requires the central baghouse to be 440 yards from those sensitive areas- a wholly insufficient buffer. As mentioned above, CBP's release PM in various forms that are harmful to human health and the environment and people who live within a 1-mile radius are most at risk.

1. Schools

Several schools are situated within a harmful distance from the proposed location. The closest school, Scarborough Elementary School, like others in this community, is considered a Title I school. Schools with a lower-income student base are provided with Title I funding to help those who are behind or at risk of falling behind, aiming to bridge the gap between low-income students and other students. Other schools in the

¹¹ United States Census. Aldine CDP. See electronically at: [Census - Geography Profile](#)

¹² United States Census. Aldine CDP. See electronically at: [Census - Geography Profile](#)

¹³ World Health Organization. (2015). Transport. In *REDUCING GLOBAL HEALTH RISKS: Through Mitigation Of Short-Lived Climate Pollutants* (pp. 49–56). World Health Organization. See electronically at: <http://www.istor.org/stable/resrep33063.9>

¹⁴ cite edf

surrounding area include Coop Elementary, Kids Plus Academy, a daycare center, which was approximately 1.34 miles away and Garcia Elementary School is 1.11 miles southwest.

2. *Community Resource Facilities*

Northeast Houston Community Center is approximately 500 feet from the proposed location. Harris County Community Supervision & Corrections Department and Harris County Social Services are less than a mile south and southwest of the proposed site, respectively, and Eastex Shopping Center is less than a mile north of the proposed site.

3. *Places Of Worship*

Within a mile of the proposed location, there are many places of worship. Many of these institutions provide food, shelter, and resources for the community. Placing a CBP in close proximity might cause these places to limit services available to avoid harm from noise and dust. Other nearby places of worship include New Direction Baptist Church, St. Agnes Church of Hope, Iglesia la Luz del Mundo, Victory Temple Church, Grace Primitive Baptist Church. In addition, the Apostolica Iglesia Church and the Masjid Jensen mosque are both within two miles of the proposed site.

4. *Parks*

According to the TCEQ GIS mapping tool¹⁵, the proposed location of the facility is located within a few hundred feet of James Driver Park. James Driver Park is an ADA-accessible park owned and maintained by Harris County that creates playspace children and adults of all abilities can use. James Driver Park has been expanded to accommodate children with all levels of abilities, including those with and without disabilities.¹⁶ TCEQ rules require that the dust collector for CBP facilities must be placed at least 100' from adjacent property lines. The plot plan for this facility indicates that the dust collector would be located exactly 100' and one inch from the nearest Harris property line associated with the park. While this one-inch difference is technically sufficient to comply with the 100' buffer requirement on paper, the margin-of-error for the practical siting of this critical piece of equipment requires verification in situ to assure compliance with the siting requirement. In addition, other emission sources with less

¹⁵<https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=db5bac44afbc468bbddd360f8168250f&marker=-95.328958%2C29.87385&level=12>

¹⁶ James Driver All Inclusive Park. <https://engage.hcp2.com/189/James-Driver-All-Inclusive-Park>

well-defined distance buffers such as material stockpiles of sand and stone and unpaved work areas would be immediately adjacent to Harris County property. Placing a CBP immediately adjacent to a park designed for the inclusion of children with varying degrees of mobility and other medical vulnerabilities shows an insensitivity - if not blatant disregard - for preexisting sensitive land uses that should be seriously reconsidered during the permit application process.

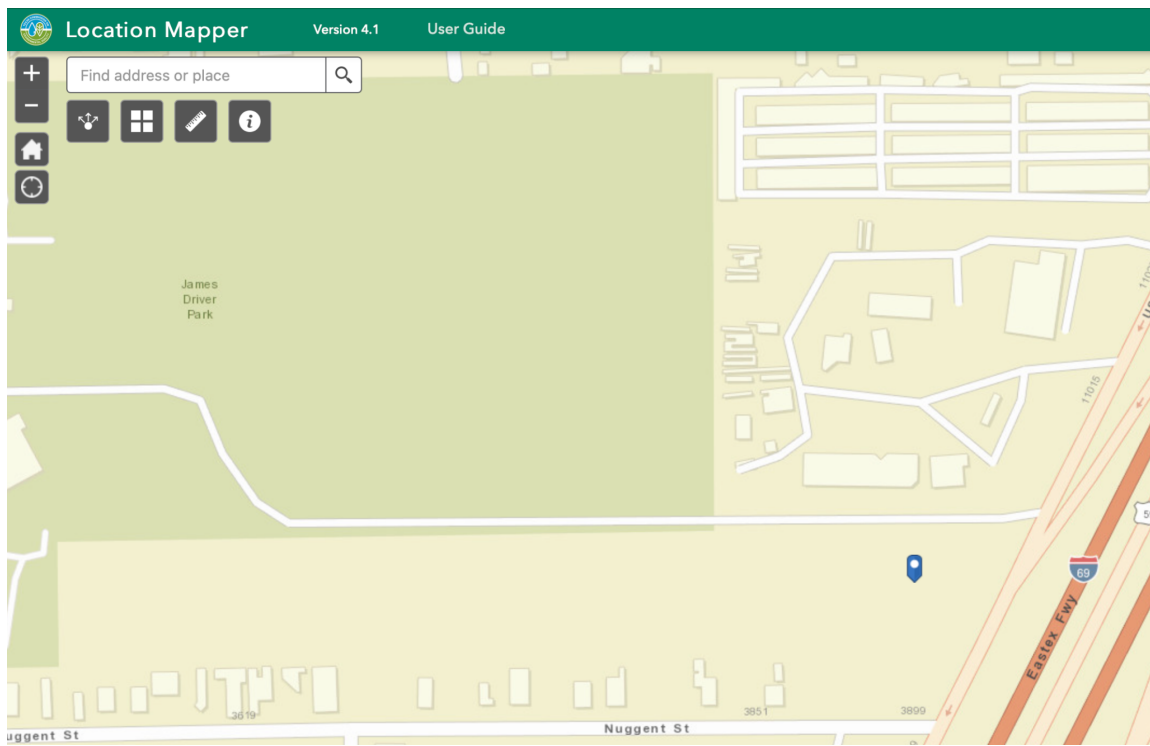


Figure 1: TCEQ's Location Mapper Showing The Location Of The Proposed Facility At 10945 Eastex Freeway, Houston, Harris County, Texas 77093

B. The Standard Permit For Concrete Batch Plan Is Not Protective Of Public Health And Safety

1. Compliance monitoring

The standard for dust emissions is “no visible emissions.” That standard applies at the property line, and it applies to the fabric or cartridge filter systems on-site. But, the determination that the standard is met is made using EPA method 22,¹⁷ which states that no more than 30

¹⁷ Method 22 is described in more detail in 40 CFR, Pt. 60, Appx. A-7.

seconds of dusty air are observed in any 6-minute period. The operator is required to perform this test only once a quarter, under what are supposed to be normal operating conditions. The “reportable quantity” for PM is 100 pounds per 24 hours.¹⁸ If an accident, such as a ripped baghouse or shroud at the truck-loading drop, results in PM emissions that are less than the reportable quantity, those emissions do not have to be reported at all.¹⁹ The permittee simply has to create a report within two weeks of the emissions event, which is then kept on site.²⁰ TCEQ must ensure that proper processes are in place to truly capture emission events and monitor compliance properly.

2. Dust Control And Measurement

The standard permit requires dust control but those requirements are extremely vague. For instance, the Standard Permit for Concrete Batch Plant (SPCBP) requires recordkeeping of water spraying, but it does not specify what the records have to contain. It also does not require the records to be made available to anyone other than state and local government inspectors. One way to address this shortcoming is to require the facility to submit a consistent schedule for water spraying or of the particular circumstances that trigger the need to spray and make those records readily available to the public. Additionally, Continuous emissions monitoring systems (CEMS) at selected sites in or near the facility would alert the operator of the need to spray that area. TCEQ must consider a wider buffer zone around stockpiles, hoppers, and staging areas. Requiring wider buffer distances will help protect the health and safety of communities by reducing their exposure to dust.

3. Hours Of Operation

The SPCBP allows for 24/7 operation for CBPs. TCEQ must set limited hours for operation. To do so, TCEQ must define what “operation” means. Perhaps, plant maintenance, for example, could occur outside of “operational” hours. Trucks should not be allowed to idle at any given time of the day. Facilities must learn to be good neighbors.

4. Car Idling

¹⁸ 30 Tex. Admin. Code §§ 101.1(88) and (89)(A)(ii).

¹⁹ 30 Tex. Admin. Code § 101.201

²⁰ 30 Tex. Admin. Code §§ 101.210(b) and (b)(2).

While TCEQ maintains that nuisances such as noise and traffic are out of its jurisdiction, arguably, the pollution caused by the trucks associated with the operation of CBPs should be. Researchers estimate that idling from heavy-duty and light-duty vehicles combined wastes about 6 billion gallons of fuel annually.²¹ Concrete batch plants are magnets for heavy-duty vehicles. Diesel-fueled vehicles within the heavy-duty fleet emit black carbon and NOx into many of Houston's residential neighborhoods.²² Diesel exhaust contains both very small particles and 40 chemicals that are classified as "hazardous air pollutants" under the Clean Air Act. The pollution in the exhaust can aggravate asthma and allergies, as well as cardiovascular and respiratory disease. Vehicle emissions are still present and harmful even when you can't see the exhaust. Children are more sensitive to air pollution because they breathe 50 percent more air per pound of body weight than adults. An idling vehicle releases harmful chemicals, gases, and particle pollution ("soot") into the air, contributing to ozone, regional haze, and global climate change. TCEQ must address this harm.

IV. CONCLUSION

For all of these reasons, Commenters respectfully request that the TCEQ deny the permit and encourage the applicant to choose a location that is appropriate for its intended use. Should there be any questions about the scope of these comments, please contact the undersigned representative.

Respectfully submitted,

/s/

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²¹ United States Department of Energy. 2015. Idling Reduction for Personal Vehicles. *See electronically at:* https://afdc.energy.gov/files/u/publication/idling_personal_vehicles.pdf

²² Environmental Defense Fund. Finding Pollution. *See electronically at:* <https://www.edf.org/airqualitymaps/houston/findings>