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Office of the Chief Clerk

Texas Commission on Environmental Quality

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Austin, Texas 78711-3087

Electronic submission via <http://www14.tceq.texas.gov/epic/eComment/>

RE: Comments on Air Quality Standard Permit for Concrete Batch Plants Proposed Registration No. 157195 for Rocket Materials LLC at 914 Pinafore Lane, Houston, Harris County, Texas

Dear Executive Director,

Air Alliance Houston (AAH) submits these comments on Rocket Materials LLC's application Registration No. 157195, which would authorize the addition of two (2) silos at a permanent Concrete Batch Plant authorized under the Air Quality Standard Permit (the "Standard Permit") for Concrete Batch Plants, located at 914 Pinafore Lane, Houston, Harris County, Texas (in the community of Aldine).

In general, the TCEQ Standard Permit is not sufficiently protective of public health and the environment because it lacks adequate compliance monitoring, facility inspections, dust control measures, and other best management practices. In the case of Rocket Materials' application, the inadequacies of the Standard Permit requirements, coupled with the impact of

pollution from the Hardy Toll Road, and other nearby sources of pollution, any further added pollution to this community from the two proposed additional silos will further increase negative health impacts within these communities to devastating effect. For this reason, Commenters respectfully request that the TCEQ deny Rocket Materials LLC's permit application.

Additionally, these statements must be taken with the knowledge that we remain in a global pandemic. COVID-19 exacerbates the effects and harms of air pollution. Various studies including one from 2020 study conducted by the 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 in the Aldine area experience disparate rates of COVID-19 deaths and illnesses that are often correlated with decades of exposure to harmful air pollutants.

I. COMMENTERS

Air Alliance Houston (AAH) is a Texas 501(c)(3) non-profit advocacy organization working to reduce the public health impacts of air pollution and advance environmental justice through applied research, education, and advocacy. AAH takes a strong stance against disproportionate exposure to air pollution in overburdened communities of color and lower income by focusing attention on health equity and environmental justice.

II. INTRODUCTION

Rocket Materials LLC has proposed the modification of a Concrete Batch Plant located at 914 Pinafore Lane, Houston, Harris County, Texas 77039 in the community of Aldine. The facility is situated in a heavily residentially populated area with 156 residences within a 0.5-mile radius,

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>

912 residences within a one (1) mile radius, and 9,283 residences within a two (2) mile radius. The proposed facility will emit Particulate Matter (PM) including (but not limited to) aggregate, cement, and road dust. This PM has a diameter of 10 microns or less including fine particulate matter with diameters of 2.5 microns or less. This type of PM is particularly harmful to human health and already proliferates in Aldine and across Harris County as described further below.

Environmental Protection Agency (EPA) data compiled by the *Houston Chronicle* show that there are at least 188 Concrete batch plants (CBPs) in Harris County alone, the most in Texas.² 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, volatile organic compounds, nickel, formaldehyde, etc.³ 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 (PM2.5) can significantly increase the likelihood of heart attacks, pulmonary disease, and other grave health defects.⁴ The American Cancer Society determined that mortality rates among a population increase by 6% for every 10 micrograms per meter cubed of PM2.5. The World Health Organization corroborates the relationship between high concentrations of PM10 and PM2.5 with increased morbidity.⁵ Additionally, the trucks that access CBPs are often diesel-fueled and frequently idle outside the 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.

² Houston Chronicle . See electronically at: <https://www.houstonchronicle.com/about/item/Map-Explore-concrete-batch-plants-in-Harris-75177.php>

³ 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.

⁴ *Id* at p.6

⁵ 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)

⁶ *Id* at p.2

People who live within a 1-mile radius of a CBP experience the most harm from air pollution. Children, pregnant women, immunocompromised, and elderly individuals are at the highest risk of developing complications related to pollutants emitted by CBPs. Additional day-to-day health impacts may include headaches, nausea, dizziness, and other symptoms.⁷ Emissions from CBPs are especially harmful when plants are placed in residential areas, as pollution and increased heavy diesel traffic combine to further impact the health and quality of life of residents.

III. CONCERNS REGARDING THE PERMIT APPLICATION

A. The Proposed Facility is Located Near and Around Numerous Sensitive Land Uses

There are numerous public spaces including places of worship, schools, parks, museums, and community resource centers within one (1) mile of Rocket Materials LLC. Specifically, there are at two (2) schools near proposed location and at least seven (7) places of worship (See Figure 1 below). There are also 912 residences within one (1) mile of the facility.

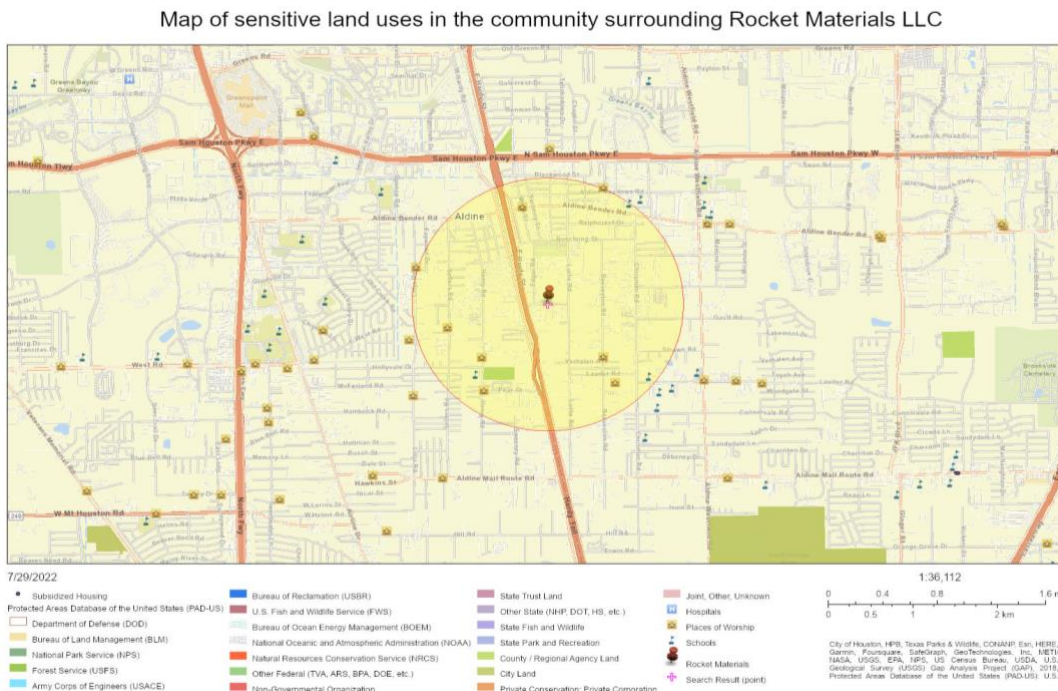


Figure 1: Map of Sensitive Land Use in the Community Surrounding Rocket Materials LLC

⁷ 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>

However, the Standard Permit only requires the central baghouse of a CBP to be 440 yards from those sensitive areas, which is a wholly insufficient buffer. As mentioned above, CBPs release PM in various forms that are harmful to human health and the environment, and people who live within one (1) mile of a facility (and not 440 yards) are most at risk.

There are also several additional industrial air pollution sources already located within the one (1) mile radius of the proposed Rocket Materials LLC expansion (See Figure 2).



Figure 2: Map of Industrial Burden in the Community Surrounding the Facility

B. The Standard Permit for Concrete Batch Plants is Not Protective of Public Health

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. However, the

determination that the standard is met is made using EPA method 22,⁸ which states that no more than 30 seconds of dusty air is observed in any six (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.⁹ 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.¹⁰ The permittee simply has to create a report within two (2) weeks of the emissions event, which is then kept on site.¹¹ 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 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 to 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. Moreover, 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.

⁸ Method 22 is described in more detail in 40 CFR, Pt. 60, Appx. A-7.

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

¹⁰ 30 Tex. Admin. Code § 101.201.

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

3. Hours of Operation

The standard permit allows for 24/7 operation for CBPs. TCEQ must set limited hours for operation. To do so, TCEQ must also define what “operation” means. Perhaps, plant maintenance, for example, could occur outside of “operational” hours.

4. Truck Idling

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 and this pollution would not be occurring if the CBP permit had not been approved. CBPs are magnets for heavy-duty vehicles. Diesel-fueled vehicles within the heavy-duty fleet emit black carbon and NOx.¹² Diesel exhaust contains both very small particles and forty (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. An idling vehicle releases harmful chemicals, gases, and soot into the air, contributing to ozone, regional haze, and global climate change. This is in addition to the PM being emitted by the CBP itself.


IV. CONCLUSION

For reasons related to the impact of Rocket Materials LLC on air pollution in the Aldine community, exacerbated by the inadequacies of the standard permit itself, commenters respectfully request that the TCEQ deny this permit application outright. We see no compelling reason for the necessary addition of two (2) additional silos (sources of pollution) when the Aldine community is already subjected to significant PM pollution exposure and the adverse health conditions that it causes. We urge TCEQ to prioritize the health of the community in its decision-making on this

¹² Environmental Defense Fund. Finding Pollution. *See electronically at:* <https://www.edf.org/airqualitymaps/houston/findings>

permit. We also request the opportunity for impacted community members to provide meaningful input on the Draft Permit in the form of a public meeting. Should there be any questions about these comments, please feel free to contact the undersigned representative at any time. We appreciate your urgent attention to these matters.

Respectfully submitted,


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