

MEMORANDUM

To:	Franklin B. Greiner, Jr.	Date:	September 15, 2026
From:	Kyle Costello (ALL4 LLC)		
Subject:	Special Exception Application – Environmental Performance Standards - Sensitivity Analysis		
CC:	Ethos Development LLC, James S. Snyder, P.E., Roy Rakiewicz (ALL4 LLC)		

ALL4 LLC (ALL4) has prepared this specialized scenario analysis environmental technical memorandum on behalf of Ethos Development LLC and Franklin B. Greiner Jr. for the Greiner Development Project located at 2843 Mount Pleasant Road, Mt. Joy, Pennsylvania (the Facility). This analysis builds upon the initial memorandum prepared on November 13, 2025, and serves as a stress-test scenario to evaluate the impact of a hypothetical increase in net traffic. This memorandum documents compliance with Mount Joy Zoning Regulations § 135-326(F-L) regarding non-residential performance and design standards.

The proposed Facility is a light-industrial development comprising three separate buildings totaling approximately 1.228 million square feet for warehousing, manufacturing, and distribution. Site infrastructure includes dedicated truck courts for circulation and loading, as well as paved parking areas. All access and parking operations will occur on asphalt or concrete surfaces.

This assessment analyzes the potential environmental impacts of a theoretical traffic volume that is significantly higher than the originally proposed warehouse operations. This 'stress test' was conducted as a sensitivity analysis to identify the specific threshold at which environmental conclusions from the November 12, 2025, memo might change. It does not represent anticipated or projected tenant traffic. Future operations will be required to maintain compliance with local performance standards and applicable state and federal air quality regulations. The opinions expressed in this report are provided to a reasonable degree of professional certainty.

F. Flammable and Explosive Materials

§ 135-326(F) All activities and all storage of flammable and explosive materials at any point shall be prohibited unless adequate safety devices against the hazards of fire and explosion are provided.

The volume of site traffic is independent of the Facility's safety protocols and storage infrastructure; therefore, a projected increase in net traffic has no material impact on fire and explosion hazard compliance.

G. Radioactive Activities

§ 135-326(G) No activities which emit radioactivity at any point are permitted.

The proposed project will not utilize or store radioactive materials or ionizing radiation sources during normal operations, and a projected increase in traffic has no bearing on this status

H. Electrical Activities

§ 135-326(H) No electrical disturbances adversely affecting the operation of any equipment other than that of the creator of such disturbance shall be permitted.

Reference is made to a separate letter report from Mr. Charles C. Carlson, P.E., Electrical Engineer, which discusses and certifies the absence of any electrical disturbances occasioned by the operation of the Facility to sources other than the user.

I. Soiling

§ 135-326(I) No fly ash, dust, fumes, vapors, gasses or other forms of air pollution emissions which can cause any excessive soiling upon another property shall be permitted.

The potential for soiling from fugitive dust is directly correlated to the total annual vehicle miles traveled on-site. While the 'stress test' traffic volumes increase these calculated miles, the resulting emissions remain well below all applicable regulatory and permitting thresholds, consistent with the findings of the initial memorandum. Furthermore, these vehicles are classified as mobile air contamination sources and emissions from their engines are explicitly exempt from stationary source permitting requirements.

To confirm continued compliance, a stress-test analysis was conducted using a projected 50% increase in net traffic over the volumes cited in the original Traffic Impact Study. The original Traffic Impact Study includes a larger volume of truck traffic which is the larger source of PM emissions from roadway traffic. Thus, the original study's traffic volumes increased by 50% present a more conservative estimate for the stress test than the Business Park scenario.

- Emission Thresholds: Under this increased traffic scenario, total PM₁₀ emissions from all roadway sources are calculated to be less than 0.7 tons per year.
- Regulatory Benchmark: Fugitive emissions from in-plant roadways are not regulated at minor sources.

Conclusion

Based on this analysis, it is my opinion to a reasonable degree of professional certainty that a 50% increase in traffic volume will have no material effect on the Facility's compliance status. The

conclusions of the original evaluation remain unchanged: the Facility will not result in any excessive soiling upon adjacent properties and its operational impact on fugitive roadway dust emissions remains negligible under the analyzed traffic scenario.

J. Vibration

§ 135-326(J) No vibration which is discernible to the human sense of feeling on an adjacent property for three minutes or more in duration is permitted in any hour of the day between 7:00 a.m. and 7:00 p.m. or for 30 seconds or more between the hours of 7:00 p.m. and 7:00 a.m.

The conclusions regarding vibrational impacts remain unchanged under the revised traffic scenario. threshold of 147.6 feet (45 meters), the distance at which vibrations from individual vehicle pass-by events become imperceptible to the human sense of feeling. Beyond this threshold, vibrations from individual vehicle pass-by events are imperceptible to the human sense of feeling and remain negligible, regardless of the increase in total traffic volume.

While the updated evaluation considers a net increase in truck traffic volume, the fundamental conclusions remain unchanged. At the original site-wide peak rate of 44 truck trips per hour, the average spacing is 1.36 minutes per truck circulating throughout the property. Focusing on the 80-foot (24.4-meter) boundary at the Northeast corner of Building 1, the point of closest approach to a potentially receptive property line, truck traffic is estimated at 14.6 trips per hour, or one vehicle every 4.09 minutes.

Under the revised scenario, which accounts for a 50% increase in volume, the site-wide peak rate rises to 66 truck trips per hour. At the Northeast corner of Building 1, this results in approximately 21.9 trips per hour, (~33.3% of total peak traffic, based on an even distribution across three buildings) or one vehicle passing every 2.74 minutes. As the spacing associated with this increased traffic (2.74 minutes) remains significantly greater than the 30-second regulatory duration limit, the projected traffic increase has no material impact on the vibration determination.

Accordingly, it is my opinion to a reasonable degree of professional certainty that the Facility maintains an extraordinary margin of safety and will not cause vibrations discernible to the human sense of feeling for the regulated durations under the analyzed traffic scenario.

K. Atmosphere

§ 135-326(K) No activities producing heat, cold, dampness or movement of air are permitted which shall produce any material effect on the temperature, motion or humidity of the atmosphere at the lot line or beyond.

The proposed 50% increase in traffic volume does not alter the Facility's compliance.

- **Stationary Sources:** Atmospheric influences remain limited to internal heating systems and emergency generators, which are localized and situated at significant distances from the property boundaries.

- **Mobile Sources:** Heat and air movement generated by increased vehicle throughput is transient and dissipates rapidly within the site interior.

Conclusion

Because the Facility's atmospheric footprint is governed by stationary design and site setbacks rather than traffic volume, the 50% increase in vehicle activity has no material effect on the atmosphere at or beyond the lot line. The Facility remains in full compliance.

L. Odorous Emissions

§ 135-326(L) No emission of odorous gasses or other odorous matter in such quantities as to be detectable to the human sense of smell when measured at the lot line shall be permitted.

The proposed increase in traffic volume does not alter the Facility's compliance with § 135-326(L), which prohibits the emission of odorous gases or other odorous matter in quantities that are offensive at or beyond the lot line. There are generally no odorous emissions associated with the proposed facility. Any potential odorous emissions would be associated with mobile sources and mobile source emissions are regulated at the federal level under Section 2 of the Clean Air Act.

- **Emission Controls:** Modern heavy-duty vehicles utilize Selective Catalytic Reduction (SCR) and Diesel Exhaust Fluid (DEF) systems, which significantly mitigate the ammonia and particulate matter associated with traditional diesel exhaust odors.
- **Atmospheric Dispersion:** Any transient odors generated by increased vehicle throughput are subject to rapid atmospheric dispersion within the site interior and across established setbacks.
- **Operational Baseline:** The Facility does not engage in the processing of organic waste, chemical manufacturing, or other high-odor stationary activities that would be exacerbated by higher traffic frequency.

Conclusion

Because the primary drivers of odor compliance are stationary site operations and modern vehicle emission controls, the projected 50% increase in traffic has no material effect on the odor profile at the property boundary. The Facility remains in full compliance with the standards defined in § 135-326(L)

Conclusion

The analysis presented herein establishes that the proposed light industrial development for the Greiner Development Project remains in full compliance with all Township of Mount Joy Environmental Performance Standards (§ 135-326 F-L), even under expanded operational scenarios.

Specifically, this scenario analysis demonstrates that a theoretical increase of 50% in traffic volume above the anticipated project levels would not alter the original environmental conclusions. Even at

these increased activity levels, the Facility's impacts regarding soiling, vibration, atmosphere, and odorous emissions will not result in any adverse off-site impacts or violations of local, state, or federal regulations.

The design's use of best management practices and substantial buffer distances ensures that the health, safety, and general welfare of the community are protected. Consequently, it is my opinion, to a reasonable degree of professional certainty, that the Facility satisfies all applicable performance and design standards, with a significant margin of safety to accommodate future tenant operations.

Should you have any questions about this submittal, please feel free to contact Kyle Costello at (610) 422-1152 or kcostello@all4inc.com.