

Key Findings:
Port Cortlandt Technical Memorandum
Noise Impact Assessment (9/17/20)

AKRF's initial assessment of the potential for noise impacts during operation of the Port Cortlandt project within the Town of Cortlandt (the Town) estimates the potential for the project to generate noise that would be perceptible and/or disruptive at surrounding sensitive uses (e.g., residences, churches, open space, schools) and determine if such operations will conform with Town Code noise level limits. As part of the preparation of the Draft Generic Environmental Impact Statement (DGEIS), an assessment of the potential noise and duration during construction will also be prepared.

- Existing noise levels in the Town of Cortlandt were documented by conducting noise level measurements near sensitive uses in the project area in addition to considering noise level measurements previously conducted in the project area. Newly measured noise levels were compared with the previously measured levels to evaluate the potential effects on noise levels associated with reduced traffic and other activity during the COVID-19 pandemic.
- While there are currently transient trespassing trail bikes on the site, the noise levels from such were conservatively not included in the baseline assessment or initial impact analyses. The Port Cortlandt project would eliminate trail bike noise from the site, since the area around the manufacturing facility and port areas would need to be fenced off.
- The potential for noise level increases from vehicular traffic along routes to and from the Port Cortlandt site (see the Traffic Impact Assessment), was examined using proportional modeling of vehicular traffic noise.
- Noise emissions from on-site operational equipment (e.g., manufacturing equipment, tools, vehicles, and building mechanical equipment) and noise levels resulting from manufacturing operations on the site at nearby sensitive uses were estimated using the CadnaA state-of-the-art noise calculation model, which AKRF has successfully employed in planning and design for over 15 years.
- The proposed employee parking area is over 1,000 feet away from 11th Street and over 800 feet away from the nearest residence. The maximum predicted increase in noise levels from project employee and truck traffic above the existing condition would be less than 2 A-weighted decibels (dBA)¹. This increase would be considered imperceptible to barely perceptible and would not exceed the New York State Department of Environmental Conservation (NYSDEC) threshold of 6 dBA. In the future with the project, the absolute levels would not exceed 65 dBA, which is NYSDEC's recommended level for residential use and the Town of Cortlandt's noise level restriction during daytime hours.
- In the modeling of indoor manufacturing operations and outdoor transport, outdoor equipment used to move materials between the manufacturing building and the waterfront was found to be the dominant source of on-site noise during the daytime. The predicted noise levels resulting from daytime on-site manufacturing operations as experienced at the nearest sensitive uses would range from the low 40s dBA to the mid-60s dBA depending on the proximity and line of sight to the site. Without any noise or visual barrier measures (e.g. berms/barriers), these levels would be barely perceptible or imperceptible at surrounding sensitive uses and would not exceed NYSDEC thresholds, plus would comply with Town Code noise level limits. In

¹ A-weighting simulates the response of the human ear. For most noise assessments, the A-weighted sound pressure level in dBA units is used in view of its widespread recognition and its close correlation with perception. In this analysis, all measured noise levels were reported in dBA or A-weighted decibels.

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addition, there would be no nighttime outdoor operations associated with the upland portion of the facility, and there would be flexibility to halt such limited movements of materials during daytime also to avoid times that are sensitive to the adjacent community, e.g., church events/funerals at the adjacent St. Patrick's Church.

- Predicted nighttime noise levels, primarily driven by the potential to allow outdoor port (not upland) operations after dark, if necessary, would have the potential to result in barely perceptible to readily noticeable noise levels only at residences at the west end of 9th or 10th Streets with direct line of sight to port operations. These sensitive uses are predicted to experience noise levels in the range of 39 to 52 dBA during nighttime, which would not exceed NYSDEC thresholds, and would comply with Town Code noise level limits.
- Physical barriers on the project site could include a combination of earthen berms planted with mature trees and the use of "green screens" (structural screening elements intentionally covered by vegetation) to reduce visual impacts, which may have an added benefit of reducing off-site noise. Continuous noise monitoring during operations at the site's perimeter near sensitive uses, to demonstrate compliance with the Town Code noise level limits during operations will also be committed to as part of the proposed project.