



MEMORANDUM

DATE: October 8, 2019

To: John Arnau, OC Waste & Recycling

FROM: Jason Lui, Associate Senior Noise Specialist, LSA

SUBJECT: Noise and Vibration Analysis for the Continuation of Operations at the Olinda Alpha Landfill

BACKGROUND

Final Environmental Impact Report (EIR) 588, which was approved by the Orange County Board of Supervisors on April 17, 2007, analyzed the significant environmental impacts and provided mitigation measures for the build out of the Olinda Alpha Landfill development plan, including a 33-acre (ac) expansion area, to a maximum landfill design elevation of 1,415 feet (ft) above mean sea level. Final EIR 588 concluded that the landfill would likely reach capacity in 2021; however, the EIR also indicated this would depend on when the landfill reached the 1,415 ft elevation and thereby completed the landfill development plan.

Since the approval of Final EIR 588, the Great Recession has resulted in decreased tonnage along with significant increases in recycling, thereby further diverting solid waste from the Olinda Alpha Landfill. Similarly, OC Waste & Recycling has employed more efficient landfill operating practices, including the use of tarps to cover refuse at the end of the working day, thereby saving additional landfill capacity. As a result, the landfill has considerably more capacity in 2019 than was originally envisioned. As a result, the landfill will operate many additional years past the 2021 closure date projected in Final EIR 588.

Based on the current and continued average daily tonnage of approximately 6,900 to 7,000 tons per day (tpd), the Olinda Alpha Landfill will reach capacity on approximately December 31, 2036. The landfill currently also receives approximately 5,700 tpd of exempt waste (i.e., soil, asphalt, and processed green material). The daily volume of exempt waste tonnage is not anticipated to increase in the future.

PROJECT DESCRIPTION

OC Waste & Recycling proposes to evaluate the potential impacts related to the extension of the life of the Olinda Alpha Landfill. With the anticipated closure in 2036, OC Waste & Recycling would like to determine whether there are any new significant environmental impacts that were not identified in Final EIR 588.

EXISTING ENVIRONMENTAL SETTING

Please refer to Section 5.7 of Final EIR 588 for a summary of the existing environmental setting related to noise and vibration. Section 5.7 is based on the Noise Impact Analysis prepared by LSA

Associates, Inc. (2004). A total of 10 short-term ambient noise level measurements and existing traffic noise levels along Valencia Avenue, Imperial Highway, Carbon Canyon Road, Birch Street, and Rose Drive were modeled to establish the existing noise environment in the project area.

FINAL EIR 588 NOISE AND VIBRATION ANALYSIS

The noise and vibration analysis in the Final EIR (Section 5.7—Noise) examined potential noise and vibration impacts under existing (2004) and future (2021) conditions. Future year 2021 represented build out of the surrounding land uses and circulation network.

Final EIR 588 found that construction noise levels would not exceed the County of Orange (County) noise standards. In addition, high single-event noise levels generated by passing trucks on roadways leading to the project site would cause annoyance but would not be considered significant based on the County and City of Brea (City) long-term noise standards for transportation-related noise. Implementation of Mitigation Measures N-1 through N-4 (Section 5.7.5) would further reduce short-term construction-related noise levels even though project construction would not result in significant noise impacts.

Final EIR 588 found that construction vibration levels would be lower than the human perception threshold of 65 vibration velocity decibels (VdB) for buildings where low ambient vibration is essential for interior operation. Construction vibration levels at the landfill site would not result in annoyance or damage to nearby buildings. In addition, vibration levels generated by trucks along access roads leading to the project site would generate a vibration level of 60 VdB (0.06 peak particle velocity [PPV] inches per second [in/sec]) at a distance of 25 ft. In the project area, there are no residential structures within 25 ft of a roadway centerline along the travel routes for trucks to the landfill site. Therefore, no vibration impacts would occur from project construction activities.

Final EIR 588 found that the project-related traffic noise increase would be 3 A-weighted decibels (dBA) or less, except along Valencia Avenue north of Carbon Canyon Road. The project-related traffic noise increase along Valencia Avenue north of Carbon Canyon Road would reach up to 12 dBA. However, existing residences along this roadway segment have 6 ft high walls so that outdoor noise levels would not exceed the City's 65 dBA Community Noise Equivalent Level (CNEL) noise standard. In addition, the developer of future residences would comply with the City's 65 dBA CNEL noise standard. Also, traffic noise levels at the future planned school along Valencia Avenue would be lower than 65 dBA CNEL, and classroom interior noise levels would be lower than 45 dBA CNEL and the California Department of Transportation (Caltrans) interior noise standard of 52 dBA equivalent continuous sound level (L_{eq}). The implementation of Mitigation Measure N-5 would further reduce traffic noise impacts on existing and future residences along Valencia Avenue north of Carbon Canyon Road. The implementation of Mitigation Measure N-5 through host fees meets the fair-share requirement through a Cooperative Agreement with the City and was approved in 2009.

Final EIR 588 found that the operations of the project would not exceed County and City daytime and nighttime maximum noise standards for residential land uses. In addition, noise levels from the operations of the project would also be lower than the City's daytime and nighttime L_{50} (30-minute) noise standard. The future planned school is farther from the closest residence to the project, and

noise levels from the operations of the project would not be perceptible. Also, noise levels from the operations of the project would be below the existing traffic and other community noises combined. Therefore, no significant noise impacts would occur from project operations.

Final EIR 588 found that the operations of the project would generate low to moderate vibration levels and that vibration levels would not be perceptible at any off-site sensitive receptor location.

ANALYSIS OF PROJECT CHANGES

Based on the current project description, the landfill is estimated to close in 2036. Final EIR 588 anticipated that the landfill would reach capacity in 2021. Since approval of Final EIR 588, the economic recession has resulted in decreased tpd and increases in recycling have diverted waste from the landfill. Similarly, OC Waste & Recycling has employed more efficient landfill operating practices that preserve landfill capacity. For these reasons, the landfill has more capacity in 2019 than initially projected. As a result, the landfill may operate many years past the Final EIR 588 closure date.

Although the project would be extending the closure date by approximately 15 years, this is due to the fact that the landfill processes less tpd and generates less traffic than originally analyzed in Final EIR 588. Because the project would not be increasing the tpd, additional traffic would not be generated to or from the project site. Therefore, continuation of landfill operations at the Olinda Alpha Landfill would not result in any new significant traffic impacts. Furthermore, the required construction noise mitigation measures identified in Final EIR 588 have been implemented.

The Environmental Checklist questions provided in the County Local CEQA Procedures Manual (2014) have been answered below to demonstrate that noise and vibration impacts associated with the extension of the life of the landfill would not be substantially different from what was disclosed in Final EIR 588.

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The project would not include any change in the existing operating schedule, number of employees, or types and maximum numbers of pieces of equipment at the landfill. The continuation of landfill operations would not change or increase noise levels and would not change or increase the maximum tpd or traffic volumes to and from the project site. As such, the project would not exceed Caltrans' 52 dBA L_{eq} interior noise standard for classroom building and the County and City's noise ordinance standards. In addition, no construction noise would occur from the proposed extension of landfill operations, and construction noise mitigation measures identified in Final EIR 588 have already been implemented. Therefore, the proposed extension of landfill operations would not result in a new significant impact or a more severe impact related to noise generated by construction, operations, and traffic noise.

b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The project would not include any change in the existing operations or types and maximum numbers of pieces of equipment at the landfill. The continuation of landfill operations would not change or increase vibration levels. Vibration levels generated by project operations at the landfill site would be low to moderate and would not be perceptible at any off-site sensitive receptor location. However, truck traffic to and from Olinda Alpha Landfill on access roads leading to the landfill site would still generate a maximum vibration level of approximately 60 VdB (0.06 PPV [in/sec]) at a distance of 25 ft. In addition, no construction vibration would occur from the proposed extension of landfill operations. Although the vibration level may be perceptible, vibration levels would not result in annoyance or damage at the closest building structure. Therefore, the proposed extension of landfill operations would remain less than significant and would not result in a new significant impact or a more severe impact related to vibration.

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The continuation of landfill operations would not change or increase noise levels. Mitigation Measure N-5 for the increase in traffic noise identified in Final EIR 588 has been implemented through host fees, which meets the fair-share requirement, through a Cooperative Agreement with the City approved in 2009. Therefore, the proposed extension of landfill operations would not result in a new significant impact or a more severe impact related to permanent increase in noise.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The continuation of landfill operations would not result in a temporary or periodic increase in ambient noise levels in the project vicinity because the project is already constructed. As discussed above, construction noise Mitigation Measures N-1 through N-4 identified in Final EIR 588 have already been implemented because construction is complete. Therefore, the proposed extension of landfill operations would not result in a new significant impact or a more severe impact related to construction noise.

e. For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The location of the project remains the same, and the project is not within 2 miles of an existing public airport and is not within an adopted airport land use plan. Therefore, the project would not expose people in the project area to excessive aviation-related noise levels.

- f. *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

The location of the project remains the same, and the project is not within the vicinity of a private airstrip. Therefore, the project would not expose people in the project area to excessive aviation-related noise levels.

FINDINGS

Based on the previous analysis and information, none of the conditions identified in State *CEQA Guidelines* Section 15162 exist that would trigger the need to prepare a Subsequent EIR, a Supplemental EIR, or other environmental documentation to evaluate project impacts or mitigation measures with regard to noise and vibration. Specifically, there have not been (1) changes to the project that require major revisions of the previous Final EIR 588 due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances in which the project is undertaken that require major revisions of the previous Final EIR 588 due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effects or mitigation measures or alternatives that was not known and could not have been known when Final EIR 588 was certified as complete.

Based on the discussion above, no new significant impacts or more severe impacts would occur by extending landfill operations.