avoid analyzing health risk is an inadequate response to comments as well as an ongoing violation of CEQA.

Response O1-3, O1-11, and O1-12 claim that Dr. Clark's HRA is flawed and overly conservative. The Responses further claim that no modeling files for the analysis were provided. The FEIR claims that as a result of these errors, the DEIR adequately discloses the Project's health risks and no further analysis is required. 11 The FEIR's claims are not supported by substantial evidence. First, the FEIR's claim that no modeling files were provided is incorrect – all modeling files were provided to the City on March 20, 2024 along with CREED LA's comments. 12 The City's failure to review this expert evidence impacts is a violation of the City's duty to consider and respond to comments raising significant environmental issues and demonstrates the inadequacy of the FEIR pursuant to CEQA Guidelines Section 15088. 13 Second, the FEIR's claim that CREED LA's HRA contains methodological errors is not supported by substantial evidence. Dr. Clark explains that the HRA's input values are derived from the DEIR's own emission estimates. Dr. Clark further explains that the HRA's assumptions regarding emissions rates and concentrations are consistent with SCAQMD guidance for conducting HRAs. Third, the FEIR fails to demonstrate that the HRA's conclusions would be changed if the purported methodological errors were resolved – simply claiming that the HRA is overly conservative does not demonstrate that adjustments to the methodology would change the significance of the results. The FEIR fails to provide any substantial evidence that the Project's impacts would be less-than-significant should the parameters of the HRA be changed.

Regarding operational health risk impacts, Response O1-3 states (without quantifying TAC emissions) that an HRA is not necessary because the Project would generate negligible amounts of TACs. <sup>14</sup> The FEIR qualitatively reasons that the Project's sewer lift station would include an emergency generator and fire flow pump system, which would only be used during emergencies and would likely generate less-than-significant levels of emissions. <sup>15</sup> Dr. Clark explains that

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<sup>&</sup>lt;sup>11</sup> FEIR, pg. 2-77 ("As such the Draft EIR adequately discloses the potential impacts of the project in this regard and further analysis is not required").

<sup>&</sup>lt;sup>12</sup> The modeling files may be accessed at the following link, provided to the City on March 20, 2024: <a href="https://www.dropbox.com/scl/fo/54yg7c69gd54pxgndhv67/h?rlkey=yfennyunxyr1f03us84wxt9ay&dl=0">https://www.dropbox.com/scl/fo/54yg7c69gd54pxgndhv67/h?rlkey=yfennyunxyr1f03us84wxt9ay&dl=0</a>

<sup>&</sup>lt;sup>13</sup> See Berkeley Keep Jets Over the Bay Comm. v Board of Port Comm'rs (2001) 91 CA4th 1344, 1367, 1371 (conclusory responses to comments from experts and other agencies that criticized data and methodologies used to assess impacts and that were based on extensive supporting studies rendered EIR legally inadequate).

<sup>&</sup>lt;sup>14</sup> FEIR, pg. 2-70.

 $<sup>^{15}</sup>$  *Id*.

quantification of health risks from the Project's operations is necessary because the City must consider the health impacts from the construction and operational phases of the Project that occur concurrently. <sup>16</sup> Thus, the FEIR's argument that operational emissions alone would be less than significant is not supported by substantial evidence.

The magnitude of operational emissions also may be higher than assumed in the FEIR – the FEIR's response ignores whether land uses planned by the Project besides the sewer lift would require generators and fire pumps. The high-density residential, commercial, and hotel uses proposed by the Project commonly use backup generators to adapt to adapt to Public Safety Power Shutoff ("PSPSs") and extreme heat events ("EHEs"), as explained in CREED LA's DEIR comments.<sup>17</sup>

3 cont'd

In sum, substantial evidence still demonstrates that the Project's health risk impacts would be significant. The FEIR fails to introduce any quantitative analysis showing otherwise. The City must prepare a revised and recirculated EIR analyzing and mitigating this impact before the Project can be approved.

# 1. The FEIR Fails to Mitigate the Project's Significant Health Risk Impacts

In response to CREED LA's comments on health risk, Response O1-12 explains that the City will include off-road construction equipment standards in Section 2.14 of the proposed Specific Plan (without acknowledging the Project's significant health risk impacts). <sup>18</sup> Section 2.14 provides that an off-road construction equipment plan shall be approved by the Community Development Director prior to the issuance of the first grading permit for the Project. The plan must confirm that the construction health risk posed by the fleet of off-road construction equipment to be on-site to construct the project would be less than the SCAQMD threshold of 10 in one million.

This approach is inadequate for several reasons. First, the measure improperly defers analysis of the Project's health risk impacts. CEQA requires disclosure of the severity of a project's impacts and the probability of their occurrence before a project can be approved. <sup>19</sup> In *Bozung v. Local Agency Formation* 

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<sup>&</sup>lt;sup>16</sup> Clark FEIR Comments, pg. 3.

 $<sup>^{\</sup>rm 17}$  Letter from ABJC to City, pg. 12-13.

<sup>&</sup>lt;sup>18</sup> FEIR, pg. 2-77.

<sup>&</sup>lt;sup>19</sup> 14 CCR §§ 15143, 15162.2(a); Cal. Build. Indust. Ass'n v. BAAQMD (2015) 62 Cal.4th 369, 388-90 ("CBIA v. BAAQMD") (disturbance of toxic soil contamination at project site is potentially significant impact requiring CEQA review and mitigation); Madera Oversight Coalition v. County of Madera

Commission, the Supreme Court upheld "the principle that the environmental impact should be assessed as early as possible in government planning." A study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA. Here, the FEIR defers analysis of the Project's health risk impacts until after Project approval. The deferral is improper because health risk impacts can feasibly be evaluated prior to Project approval. It is also unclear whether any subsequent quantitative analysis of TACs in an HRA would be required by Specific Plan Section 2.14, as the City argues in the FEIR that quantifying exposure to TACs is unnecessary for construction activities. Under the current measure, the City's construction equipment plan may simply state that health risk impacts are deemed to be less than significant based on the flawed reasoning in the FEIR (which relies on LSTs and qualitative analysis).

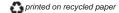
Second, although the FEIR does not identify the provisions of Section 2.14 as mitigation of a significant impact, this measure is not identified as binding mitigation in the Project's Mitigation Monitoring or Reporting Program ("MMRP"). <sup>23</sup> For this measure to constitute adequate mitigation of the significant health risk impact identified in CREED LA's comments, it would need to be included in the MMRP.

Third, although the FEIR does not identify the provisions of Section 2.14 as mitigation of a significant impact, reliance on Section 2.14 as mitigation would conflict with CEQA's rules regarding formulation of mitigation measures until after Project approval. As the courts have explained, deferral of mitigation may be permitted only where the lead agency: (1) undertakes a complete analysis of the significance of the environmental impact; (2) proposes potential mitigation measures early in the planning process; and (3) articulates specific performance criteria that would ensure that adequate mitigation measures were eventually implemented. <sup>24</sup> CEQA also requires that all proposed mitigation measures be

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<sup>&</sup>lt;sup>24</sup> Comtys. for a Better Env't v. City of Richmond (2010) 184 Cal.App.4th 70, 95; Cal. Native Plant Socy' v. City of Rancho Cordova (2009) 172 Cal.App.4th 603, 621.





<sup>(2011) 199</sup> Cal. App. 4th 48, 82; Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs. ("Berkeley Jets" (2001) 91 Cal. App. 4th 1344, 1370-71; CEQA Guidelines, Appendix G. <sup>20</sup> (1975) 13 Cal. 3d 263, 282.

<sup>&</sup>lt;sup>21</sup> Sundstrom v. County of Mendocino, supra, 202 Cal.App.3d 296, 307.

<sup>&</sup>lt;sup>22</sup> Id.; No Oil, Inc. v. City of Los Angeles, supra, 13 Cal.3d 68, 81; Environmental Defense Fund, Inc.

v. Coastside County Water Dist. (1972) 27 Cal.App.3d 695, 706.

<sup>&</sup>lt;sup>23</sup> Lotus v. Dept of Transportation (2014) 223 Cal. App. 4th 645, 651-52. (mitigation measures must be incorporated directly into the EIR to be enforceable).

supported by substantial evidence to demonstrate that they will be effective and enforceable.<sup>25</sup> The court in *Endangered Habitats League*, *Inc. v. County of Orange*, held that mitigation that does no more than require a report to be prepared and followed, or allow approval by a county department without setting any standards is inadequate.<sup>26</sup>

Here, Section 2.14 states that mitigation would be required if health risks would exceed the 10 in 1 million cancer risk threshold.<sup>27</sup> But the measure fails to specify whether the City would be required to conduct a quantitative analysis to determine whether the threshold would be exceeded in the first place. As explained earlier, the City claims in the FEIR that quantifying exposure to TACs is unnecessary for construction activities or for this Project's operations. Thus, Section 2.14 fails to set binding or enforceable standards for approval of the construction equipment plan.

In sum, substantial evidence still demonstrates that the Project's significant health risk impacts remain unmitigated. The Project cannot be approved before these impacts are fully mitigated in a revised and recirculated EIR.

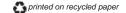
# B. The Project Still Conflicts with Applicable Policies Regarding Air Quality and Health Risk

CREED LA's comments on the DEIR explained that the Project would be inconsistent with the 2022 Air Quality Management Plan ("2022 AQMP") because the Project proposes to change the Project site's land use designation from "Institutional" to "Specific Plan," resulting in a population increase associated with the creation of a new residential land use not anticipated in the development assumptions that underlie the 2022 AQMP.<sup>28</sup> The FEIR responds that the Project would be consistent with various City land use plans – the General Plan identifies the project site as one of the City's Opportunity and Special Site Studies Opportunity Sites, and the project is identified in the City's 2021-2029 Housing Element as a proposed residential development project.<sup>29</sup>

This response misses the key issue, which is an inconsistency with the assumptions underlying the 2022 AQMP, not consistency with other land use plans. SCAQMD's criterion for determining project consistency focuses on whether or not

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<sup>&</sup>lt;sup>25</sup> Sierra Club v. County of San Diego (2014) 231 CA 4th 1152, 1168.

<sup>&</sup>lt;sup>26</sup> Endangered Habitats League, Inc. v. County of Orange (2005) 131 Cal.App.4th 777, 794.

<sup>&</sup>lt;sup>27</sup> FEIR, pg. 2-77.

<sup>&</sup>lt;sup>28</sup> Letter from ABJC to City, pg. 11.

<sup>&</sup>lt;sup>29</sup> FEIR, pg. 2-71.

the project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP.<sup>30</sup> As explained in CREED LA's comments on the DEIR, the 2022 AQMP relies on population growth projections identified by the Southern California Association of Governments ("SCAG") in its 2020 RTP/SCS. SCAG's forecasts rely on jurisdictional existing land use and general plan land use data.<sup>31</sup> But the 2022 AQMP does not reflect the land use designation for the Project site proposed in the DEIR, which would increase population by 2,764 residents – more than half of the City's forecasted population growth between 2022 and 2045.<sup>32</sup> Therefore, the population increase proposed by the Project would conflict with the 2022 AQMP.

The FEIR also argues that because the Project would account for more than half of the City's forecasted population growth between 2022 and 2045, the Project would not exceed the assumptions utilized in preparing the forecasts presented in the 2022 AQMP.<sup>33</sup> This argument fails because under the FEIR's reasoning, the Project would be consistent with SCAG's population growth projections even if it accounted for 99% of the City's forecasted population growth. SCAQMD's criterion does not call for analysis of whether a single project's population increase would exceed the entire City's projected growth. Rather, because the Project would generate a large increase in population *in addition* to the increase already forecasted from existing land uses, the Project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP. Thus, the Project would be inconsistent with the 2022 AQMP.

## C. The FEIR Fails to Mitigate the Project's Significant Construction Noise Impacts

CREED LA's comments on the DEIR explain that the City improperly assumes that construction noise impacts would be less than significant so long as construction takes place during permitted daytime hours. <sup>34</sup> In Response O1-6, the FEIR states that the City has substantial discretion to choose its thresholds of significance, pursuant to *King & Gardiner Farms, LLC v. County of Kern.* <sup>35</sup> The FEIR ignores that this discretion has a limit, which is reached when an agency ignores the magnitude of the increase in noise:

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<sup>&</sup>lt;sup>30</sup> DEIR, pg. 5.8-12.

<sup>&</sup>lt;sup>31</sup> SCAG, Connect SoCal Demographics and Growth Forecast (September 3, 2020), Pg. 23, available at <a href="https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal">https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal</a> demographics-and-growth-forecast.pdf?1606001579.

<sup>&</sup>lt;sup>32</sup> FEIR, pg. 2-71.

 $<sup>^{33}</sup>$  *Id*.

<sup>&</sup>lt;sup>34</sup> Letter from ABJC to City, pg. 13.

<sup>35 (2020) 45</sup> Cal.App.5th 814, 883.

We recognize our Supreme Court has described the discretion to choose thresholds of significance as "substantial," but that discretionary authority is not unlimited or absolute. (Center for Biological Diversity, supra, 62 Cal.4th at p. 228, 195 Cal.Rptr.3d 247, 361 P.3d 342.) In Center for Biological Diversity, the Supreme Court concluded the lead agency was required "to support its chosen quantitative method for analyzing significance with evidence and reasoned argument." (Ibid.) Thus, "when the agency chooses to rely completely on a single quantitative method to justify a no-significance finding, CEQA demands the agency research and document the quantitative parameters essential to that method." (Ibid.) Here, the County has not documented how the single quantitative method, which does not consider the magnitude of the increase in noise, accurately describes how changes in noise levels affect human beings. 36

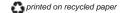
The Court explained the lead agency failed to "refer to evidence showing why the magnitude of an increase was irrelevant in determining the significance of a change in noise."37 Here, the DEIR's construction noise threshold fails to consider either the increase in noise or absolute noise level, without referring to any evidence showing why these metrics are irrelevant in determining the significance of a change in noise. The FEIR fails to correct this error. Response O1-6 fails to explain why the City believes the increase in noise or absolute noise level are irrelevant to evaluating noise impacts when CEQA requires this. Instead, the Response merely states that the DEIR adequately and conservatively characterized construction noise and ambient noise levels.<sup>38</sup> This Response ignores that these factors are not considered under the City's construction noise threshold – after characterizing the Project's construction noise, the DEIR states: "Project construction activities would occur within the allowable hours specified by the Municipal Code, and nighttime construction would not be required nor allowed... As such, impacts would be less than significant in this regard."39 In sum, the FEIR fails to explain why the increase in noise or absolute noise level are irrelevant to evaluating construction noise impacts. The Project's construction noise threshold is still not supported by substantial evidence.

Under a reasonable threshold that accounts for absolute noise level or the increase in noise over ambient levels, 40 the Project would likely result in significant

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<sup>&</sup>lt;sup>36</sup> *Id.* at 893-94.

<sup>&</sup>lt;sup>37</sup> *Id.* at 894.

<sup>&</sup>lt;sup>38</sup> FEIR, pg. 2-74.

<sup>&</sup>lt;sup>39</sup> DEIR, pg. 5.11-16.

<sup>&</sup>lt;sup>40</sup> Other applicable standards do exist for daytime construction noise impacts, such as in Section 7.1 of the Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual

construction noise impacts. The DEIR itself states that "typical construction noise levels would range from approximately 87 to 100 dBA at 15 feet and 81 to 94 dBA at 30 feet" and that the "closest sensitive receptors are the condominiums located at approximately 15 feet to the northwest corner of the project construction activities." <sup>41</sup> This absolute noise level is significant, as Exhibit 5.11-1 of the DEIR shows that noise levels above 80 dBA are "annoying – interferes with conversation," and no more than 15 minutes of exposure are recommended for noise levels of 100 dBA. <sup>42</sup> Further, 100 dBA is 20 dBA over the Federal Transit Administration's 80 dBA construction noise threshold for residential receptors <sup>43</sup> and 46 dBA over the ambient Leq at nearby residential receivers shown in Table 5.11-4 of the DEIR. A noise increase of 46 dBA, an increase of over ten times the ambient conditions <sup>44</sup>, would likely be considered a significant impact. As such, the EIR should be updated with a proper threshold, and in the likely chance of an exceedance, identify mitigation measures, such as temporary acoustic barriers.

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# D. The FEIR Fails to Disclose and Mitigate the Project's Significant Operational Noise Impacts

The FEIR fails to mitigate a significant operational noise impact apparent in the noise study. The FEIR sets a "daytime noise standards of 55 dBA." <sup>45</sup> The FEIR states that "parking activities can result in noise levels up to 61 dBA at a distance of 50 feet" and that the "nearest parking lot to sensitive receptors is located approximately 50 feet to the north (from the hospital to the south)." <sup>46</sup> The FEIR states that the project would provide a "minimum six-foot concrete-masonry-unit (CMU) wall" which "would provide a reduction of 5 dBA" <sup>47</sup> According to the FEIR's own data, the CMU wall would only attenuate levels to 56 dBA, which exceeds the 55 dBA threshold. This exceedance would be heightened if the combined noise of all operational noise sources (such as HVAC and other mechanical equipment) were considered together. Thus, the DEIR's conclusion that "noise impacts from parking lots would be less than significant" is unsupported by substantial evidence. The City must mitigate this impact in a revised and recirculated EIR before the Project can be approved. Mitigation, such as a taller wall that produces more attenuation, could

(FTA), available at <a href="https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf">https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf</a>.

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<sup>&</sup>lt;sup>41</sup> DEIR, pg. 5.11-16.

<sup>&</sup>lt;sup>42</sup> DEIR, pg. 5.11-2.

<sup>&</sup>lt;sup>43</sup> Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual, pg. 179.

<sup>44</sup> https://www.nps.gov/subjects/sound/understandingsound.htm

<sup>&</sup>lt;sup>45</sup> DEIR pg. 5.11-20.

<sup>&</sup>lt;sup>46</sup> DEIR pg. 5.11-20.

<sup>&</sup>lt;sup>47</sup> DEIR pg. 5.11-20.

reduce these levels to below impact thresholds, and should be included as a mitigation measure.

A related issue is that the CMU wall is not identified as a mitigation measure separate from the Project's unmitigated impacts. The FEIR states that the project would provide an at least six feet concrete-masonry-unit (CMU) wall along the northern property line that would reduce noise levels from HVACs and the parking lot by 5 dBA.<sup>48</sup> The FEIR then concludes that operational impacts would be less than significant without any mitigation required.<sup>49</sup> The FEIR's approach violates CEQA because it fails to disclose the significance of the noise levels prior to mitigation, and fails to include the CMU as binding mitigation, making it an unenforceable proposal.

In Lotus v. Department of Transportation, an EIR prepared by the California Department of Transportation contained measures to help minimize potential stress on redwood trees during highway construction, such as restorative planting, invasive plant removal, watering, and use of an arborist and specialized excavation equipment. The Court of Appeal held that the EIR improperly compressed the analysis of impacts and mitigation measures into a single issue because the EIR did not designate the measures as mitigation and concluded that because of the measures, no significant impacts were anticipated. The Court explained that a significance determination must be made independent of mitigation first, then mitigation can be incorporated, and the effectiveness of those measures can be evaluated. Absent a determination regarding the significance of the impacts to the root systems of the old growth redwood trees, it is impossible to determine whether mitigation measures are required or to evaluate whether other more effective measures than those proposed should be considered.

Here, the FEIR's approach violates the principles articulated in *Lotus* by including the CMU wall in its analysis of the Project's unmitigated impacts. As a result of this error, the CMU wall is not included in the MMRP as a binding mitigation. <sup>54</sup> The City must revise the EIR to disclose the Project's significant operational noise impact and include barrier walls as a binding mitigation measure in the MMRP before the Project can be approved.

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<sup>&</sup>lt;sup>48</sup> DEIR, pg. 5.11-19, 20.

<sup>&</sup>lt;sup>49</sup> DEIR, pg. 5.11-21.

<sup>&</sup>lt;sup>50</sup> (2014) 223 Cal.App.4th 645, 658 (compression of mitigation measures into project design without acknowledging potentially significant impact if effects were not mitigated violates CEQA).

<sup>&</sup>lt;sup>51</sup> *Id.* at 656.

<sup>&</sup>lt;sup>52</sup> Id. at 654-656.

<sup>&</sup>lt;sup>53</sup> *Id.* at 656.

<sup>&</sup>lt;sup>54</sup> Id. at 651-52. (mitigation measures must be incorporated directly into the EIR to be enforceable).

### III. THE CITY CANNOT MAKE THE REQUISITE FINDINGS TO APPROVE THE PROJECT'S ENTITLEMENTS

The Commission will consider whether to approve the Project's General Plan Amendment, Zone Change, and Zoning Text Amendment. However, the City lacks substantial evidence to make the requisite findings due to the Project's significant and unmitigated environmental impacts. Draft Resolution No. 24-07, which would approve the General Plan Amendment, states:

WHEREAS, all of the requirements of the Public Resources Code and the California Environmental Quality Act ("CEQA") Guidelines have been satisfied by the City in connection with the preparation of the Final EIR, which is sufficiently detailed so that all of the potentially significant environmental effects of the Project have been adequately evaluated; and

WHEREAS, the Final EIR sufficiently analyzes the Project's potentially significant environmental impacts and a reasonable range of feasible alternatives capable of reducing these effects to less than significant levels to the extent feasible.<sup>55</sup>

Similarly, Draft Resolution No. 24-08 (approving a Zone Change) and Draft Resolution No. 24-09 (approving a Zoning Text Amendment), provide that an EIR was prepared to address the potential environmental effects of the Norwalk Transit Village Specific Plan and impose mitigation measures to reduce potential impacts resulting from project implementation. <sup>56</sup> These findings are not supported by substantial evidence, as CREED LA has presented substantial evidence demonstrating that the Project has significant and unmitigated health risk, air quality, and noise impacts. The Project cannot be recommended for approval until these impacts are fully analyzed and mitigated in accordance with CEQA.

#### IV. CONCLUSION

As is explained herein, the FEIR's analyses remain substantially inaccurate and incomplete, failing to comply with the requirements of CEQA. As a result, the FEIR still fails to adequately disclose and mitigate the Project's significant impacts. As a consequence of these impacts, the City cannot make the requisite findings under CEQA to certify the FEIR or under the City's Municipal Code to approve the

<sup>&</sup>lt;sup>55</sup> Norwalk Planning Commission, Draft Resolution No. 24-07, pg. 2.

<sup>&</sup>lt;sup>56</sup> Resolution No. 24-08, pg. 1; Resolution No. 24-09, pg. 1.

Project's entitlements. CREED LA urges the Commission to recommend the City revise and recirculate the EIR before any further action is taken on the Project.

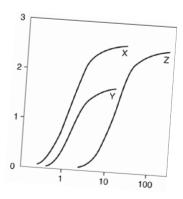
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Sincerely,

Aidan P. Marshall

Attachment APM:acp

# **EXHIBIT A**



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July 9, 2024

Adams Broadwell Joseph & Cardozo 601 Gateway Boulevard, Suite 1000 South San Francisco, CA 94080

Attn: Mr. Aidan Marshall

Subject: Comments On Final Environmental Impact Report (FEIR) Norwalk Transit Village, SCH Number 2022070103

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to the June 2024 City of Norwalk (the City) FEIR of the above referenced project.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the plan. If we do not comment on a specific item this does not constitute acceptance of the item.

According to the DEIR<sup>1</sup>, the proposed project would be constructed in one phase over a period of approximately six years with construction estimated to begin in the second quarter of 2024 and completed in second quarter 2030. The following activities would occur under the singular phase:

- Demolition (approximately five months);
- Grading (approximately five months);
- Paving (approximately seven months);
- Construction (approximately seven months for each building [over a period of approximately three years]); and
- Painting/Architectural Treatments (approximately four months for each building)

<sup>&</sup>lt;sup>1</sup> City of Norwalk. 2024. Draft Environmental Impact Report Norwalk Transit Village. Dated February 2024. Pg 3-20-21

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The DEIR proposes that the overall grading would involve approximately 35,252 cubic yards of cut and 2,348 cubic yards of fill1, necessitating approximately 60,510 cubic yards of soil to be imported.

In June 2024, the City published a FEIR of the Project that included responses to the comments provided previously on the DEIR. The responses provided in the FEIR are inadequate and fail to address the significant concerns raised in my comment letter. The City must revise its FEIR to address each of the concerns below.

#### **Specific Comments**

1. Response To O1-3/O1-11: The DEIR Fails To Disclose The Project's Potential Health Risk Impacts Associated With Toxic Air Contaminant (TAC) Emissions.

According to the FEIR, with regard to TAC emissions during project construction, the City asserts that it followed the SCAQMD guidance for the preparation of CEQA air quality analyses, which does not require preparation of an HRA for short-term construction activities. The City cites the SCAQMD's Final Localized Significance Threshold Methodology, June 2003, revised July 2008.

However, according to the SCAQMD's Localized Significance Threshold (LST) website, "LSTs are only applicable to the following criteria pollutants: oxides of nitrogen ( $NO_X$ ), carbon monoxide (CO), particulate matter less than 10 microns in aerodynamic diameter ( $PM_{10}$ ) and particulate matter less than 2.5 microns in aerodynamic diameter ( $PM_{2.5}$ ). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. For  $PM_{10}$  LSTs were derived based on requirements in SCAQMD Rule 403 – Fugitive Dust." Nowhere in the guidance cited is there a reference to toxic air contaminants and health risk.

In the SCAQMD's Air Quality Significance Thresholds, there are mass daily thresholds for criteria pollutants (NO<sub>X</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, CO and Lead). For TACs SCAQMD lists the thresholds based on their potential to cause risk, without a limitation on the emission duration.

Mass Daily Thresholds a			
Pollutant	Construction	Operation	
NO <sub>3</sub>	100 Ibs/day	55 lbs/day	
VOC	75 lbs/day	55 lbs/day	
PM <sub>II</sub>	150 lbs/day	150 lbs/day	
PM <sub>1.5</sub>	55 lbs/day	55 lbs/day	
SOx	150 lbs/day	150 lbs/day	
co	550 Ibs/day	550 lbs/day	
Lead	3 lbs/day	3 lbs/day	
Toxic Air Cont	aminants (TACs), Odor, and G	GHG Thresholds	
TACs (including carcinogens and non- carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 m 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)		
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402		
GHG	10,000 MT/yr CO2eq for industrial facilities		

In the SCAQMD's Risk Assessment Procedures For Rules 1401, 1401.1 & 212 (the SCAQMD's primary guidance on the preparation of HRAs), notes that the procedures outlined in the SCAQMD's guidance is based on the "Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments" (2015 OEHHA Guidelines) prepared by the Office of Environmental Health Hazard Assessment (OEHHA) and approved on March 6, 2015.<sup>2</sup> In the OEHHA guidance<sup>3</sup>, OEHHA recommended "that exposure from projects longer than 2 months but less than 6 months be assumed to last 6 months (e.g., a 2-month project would be evaluated as if it lasted 6 months). Exposure from projects lasting more than 6 months should be evaluated for the duration of the project." Since the Project construction phase is calculated to last for 6 years according to the FEIR, the duration of exposure from the construction phase should be evaluated for the total duration of the Project.

Additionally, the City must consider the health impacts from the construction and operational phases of the Project that occur concurrently. SCAQMD has commented on other development

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<sup>&</sup>lt;sup>2</sup> SCAQMD. 2017. Risk Assessment Procedures For Rules 1401, 1401.1, and 212. Version 8.1 Dated September 1, 2017. Pg. 1.

<sup>&</sup>lt;sup>3</sup> OEHHA. 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Pg 8-18

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projects that emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.<sup>4</sup> SCAQMD also notes that if a proposed project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment.

As I demonstrated in my initial comment letter, using the OEHHA's Toxic Hot Spot Emissions Guidance, the cancer risk to the most sensitive population, infants and children less than 3 years old was calculated. The maximum risk for exposure of infants and children less than 3 years old (assumed exposure of three years) to DPM from the construction activities north of the Project site during 3 years of construction is 38.7 in 1,000,000, much greater than the 10 in 1,000,000 threshold outlined by SCAQMD. The maximum risk for exposure of infants and children less than 3 years old (assumed exposure of three years) to DPM from the construction activities west of the Project site during 3 years of construction is 12.5 in 1,000,000, resulting in a significant impact. The maximum risk for exposure of infants and children less than 3 years old (assumed exposure of three years) to DPM from the construction activities south of the Project site during 3 years of construction is 22.6 in 1,000,000, resulting in a significant impact. The City must evaluate the risk from TACs in a quantitative fashion in a revised FEIR.

# 2. Response to O1-5: The Draft EIR Underestimated Operational Air Emissions By Not Including Operational Emissions Associated With Backup Generators.

The City claims that the EIR identifies one proposed backup generator associated with the new sewer lift station. Other generators and fire pump systems that would need to be installed in the Project are not listed or described. The proposed sewer lift backup generator would only be used sporadically for emergency purposes in the event that the proposed pumping system for the sump tank failed to have continuous power. The testing period of the backup generator is unknown at this time; however, according to CARB's Airborne Toxic Control Measure for Stationary Compression Ignition Engines periodic testing would be limited to up to 50 hours per year. The City goes on to state that no-project specific modeling was conducted as part of the Final EIR. Just as with Comment 01-3 above, it is the

<sup>&</sup>lt;sup>4</sup> SCAQMD. 2022. 20223 Response To Notice Of Preparation of a DEIR for the 5355 Airport Drive (PDEV22-107). Letter to Thomas Grahn from Sam Wong, SCAQMD.

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cont'd

City's responsibility to quantify accurately all of the emissions from the Project and to quantify the potential health risk from the releases of TACs from the Project. Statements by the City that emissions from the back-up generator would be nominal are not responsive to the question regarding the amount of emissions and their health impacts.

The inherent toxicity of the TACs requires the City to first quantify the concentration released into the environment at each of the sensitive receptor locations through air dispersion modeling, calculate the dose of each TAC at that location, and quantify the cancer risk and hazard index for each of the chemicals of concern. Following that analysis, then the City can make a determination of the relative significance of the emissions. The City's failure to perform such an analysis is clearly a major flaw in the DEIR and may be placing the residents of the adjacent structures at risk from the construction and operational phases of the Project.

#### 3. Response To O1-12: Inputs To Quantitative HRA Of Construction Risk

The City claims that differences in the input values used in my analysis invalidate the conclusions of the HRA. First, the input values are derived from the emission estimates calculated in the Air Quality Analysis. As was explained in the initial comment letter, the emission rate of DPM from the Project Site is based on the lowest rate calculated by the City in its Air Quality Analysis (1.0205 lbs per day or 462.89 grams). This approach underestimates the potential concentration of DPM being emitted from the source over the course of the Project construction phase. This modeling approach is consistent with guidance from DTSC<sup>5</sup> and SCAQMD<sup>6</sup>, which require models to describe possible dispersion routes for a release of chemicals. Second, the smaller area assumed in the model (for the area source) is used to calculate an emission rate based on the area of potential sources at the Project Site. Since the amount being emitted is fixed (1.0205 lbs per day), the area over which the amount is being emitted has a *de minimis* impact on the modeling. The driving factors in any dispersion model are the amount being emitted, the windspeed and direction, and any driving mechanism which may send the particle higher into the atmosphere. Third, the City claims in the FEIR that when calculating emission rate, the commenter assumed construction activities to occur

<sup>&</sup>lt;sup>5</sup> DTSC. 2015. Preliminary Endangerment Assessment Guidance Manual. Pg. 82

<sup>&</sup>lt;sup>6</sup> SCAQMD. SCAQMD. 2017. Risk Assessment Procedures For Rules 1401, 1401.1, and 212. Version 8.1 Dated September 1, 2017.

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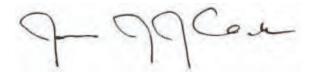
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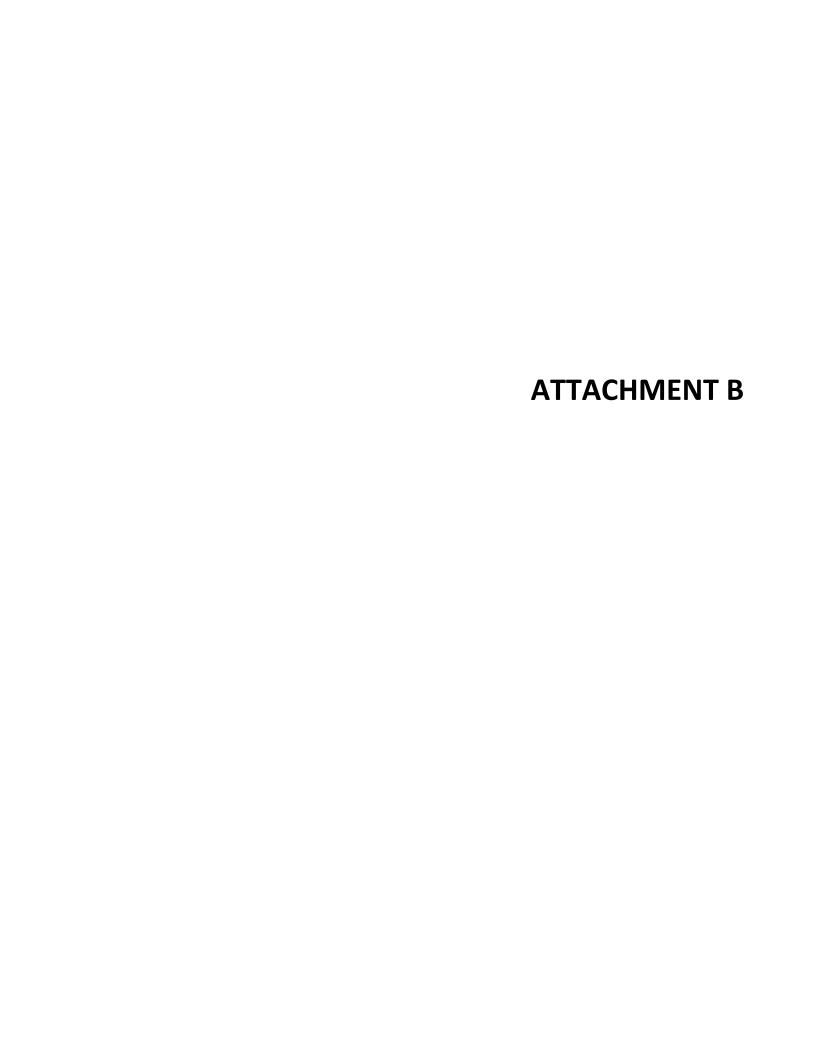
every day, including weekdays and weekends, while in fact construction activities would only occur during weekdays. This is not factually correct. On page 8 of my comments, I clearly stated that construction emissions were limited to an eight-hour period during weekdays. The annual average ground level concentration of DPM from those construction emissions was used to calculate the potential health risk for residents to the north, west, and south of the Project Site. With limited emissions, a smaller area of release, and shorter exposure duration (3 years not 6 years), the calculated health risk for the most sensitive receptors exceeded 10 in 1,000,000 (the significance threshold). The model output is provided as an attachment to this letter. The differences pointed out by the City have no impact on the conclusion that the construction phase emissions need to be reduced significantly to prevent harm to the residents near to the Project. An HRA must be prepared by the City for the construction and operational phases of the Project and presented in a revised FEIR.

#### **Conclusion**

The facts identified and referenced in this comment letter lead me to reasonably conclude that the Project could result in significant impacts if allowed to proceed. A revised draft environmental impact report should be prepared to address these substantial concerns.

Sincerely,







#### MEMORANDUM

To: Jonathan Kwan, City of Norwalk

From: Kristen Bogue, Michael Baker International

Date: September 13, 2024

Subject: City of Norwalk, Norwalk Transit Village Final EIR – Responses to Comment Letter Agenda Item #1 –

Comments on the Norwalk Transit Village Project (SCH No. 2022070103, GPA No. 2024-01, ZC No.

2024-02, ZTA 2024-04).

Michael Baker International (Michael Baker), on behalf of the City of Norwalk (City), is writing to provide responses to comment letter *Agenda Item #1 – Comments on the Norwalk Transit Village Project (SCH No. 2022070103, GPA No. 2024-01, ZC No. 2024-02, ZTA 2024-04)*, submitted by Adams Broadwell Joseph & Cardozo, dated July 10, 2024, regarding the *Norwalk Transit Village Final Environmental Impact Report* (Final EIR) prepared for the proposed Norwalk Transit Village Project (project). Individual comments within the comment letter have been bracketed and numbered so comments can be cross-referenced with the corresponding responses; refer to Attachment A.

- The comment is introductory in nature and the commenter's subsequent comments related to the proposed Specific Plan and the environmental analysis for the project are responded to below. As such, refer to Responses to Comments 2 through 14 below.
- This comment is a statement of interest and introduces the Coalition for Responsible Equitable Economic Development Los Angeles (CREED LA).
- The comment claims that the Draft EIR failed to quantify health risk impacts from toxic air contaminants (TACs), and refers to the commenter's previously submitted comments on the Draft EIR, which were provided and responded to in Final EIR Section 2.0, Response to Comments, Comment Letter O1 and Response to Comment Letter O1. The comment criticizes the Final EIR Responses to the commenter's prior comments O1-3, O1-11, and O1-12 and alleges that the project's health risk impacts are significant and must be quantitatively analyzed in a revised and recirculated EIR.

Regarding the potential for sensitive receptors to be exposed to TACs during construction, as previously explained in the Final EIR Response to Comment O1-3, construction of the project would take place over in one phase over a period of approximately six years and would not involve extremely intensive activities or unusual heavy equipment. In addition, LST methodology and mass rate look-up tables by source receptor area (SRA) were developed by the SCAQMD to be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts. Additionally, it should be noted that DPM is a subset of particulate matter less than 2.5 microns in diameter ( $PM_{2.5}$ ) and particulate matter 10 micrometers or less in diameter ( $PM_{10}$ ), and LST analysis

conducted as part of the Draft EIR includes quantification and analysis on localized PM<sub>10</sub> and PM<sub>2.5</sub> emissions. LST methodology developed by the SCAQMD are designed to protect public health by providing a standardized method to evaluate and mitigate significant adverse localized air quality impacts from proposed projects and the proposed construction or operational activities are below the LST emission levels found on the LST mass rate look-up tables. As such, the City of Norwalk used the approach recommended pursuant to SCAQMD's LST methodology to consider health risk impacts associated with construction of the proposed project. Based on SCAQMD's guidance and OEHHA's guidance, the proposed project would not result in significant air quality emissions during construction activities capable of causing significant health risk concerns.

Nevertheless, for informational purposes and in response to comments, a detailed HRA analysis (Norwalk Transit Village – Construction Health Risk Assessment Technical Memorandum [Michael Baker's HRA], prepared by Michael Baker International, dated August 20, 2024; refer to Attachment B) has been prepared to quantitatively analyze the potential health risks associated with project construction. Michael Baker's HRA confirms that the health risks associated with the proposed project's construction emissions would be less than significant. Michael Baker's HRA addresses the concerns raised in the comment with a rigorous and transparent approach, ensuring that the City's findings are well-supported. Furthermore, Michael Baker reviewed modeling files of Dr. Clark's HRA provided by the commenter to the City on March 20, 2024, and corrects the methodological errors in Michael Baker's HRA, as previously pointed out in the Final EIR Responses to Comment O1-3, O1-11, and O1-12. Michael Baker's HRA provides a detailed explanation of the methodologies used and justifies the assumptions made, ensuring that they are consistent with established practices and guidelines set forth by SCAQMD and OEHHA. Table 1, Modeling Assumptions Differences Comparison, shows the differences in methodologies used in Dr. Clark's HRA and Michael Baker's HRA.

Table 1
Modeling Assumptions Differences Comparison

Assumptions Made in Dr. Clark's HRA	Assumptions Made in Michael Baker's HRA	
Dr. Clark's HRA used the daily maximum Diesel Particulate Matter (DPM) emissions to calculate emission rates and associated cancer risk for all emissions during the full construction period.	Michael Baker's HRA calculates cancer risk based on the average annual emissions across the construction period in compliance with Equation 5.4.1.2 A of the OEHHA, <i>Air Toxics Hot Spots Program Guidance Manual</i> , February 2015. Given that construction activities (such as clearing, demolition, grading, building construction, and architectural treatments) use different types of equipment for different periods of time, using the daily maximum emissions for equipment that use diesel is inaccurate. During the six-year period of construction, there would only be a few days that the DPM emissions would reach the maximum level. As such, assuming that construction equipment would emit the maximum DPM emissions daily for six-years straight grossly overestimates DPM emissions health risks.	
Dr. Clark's HRA did not account for Section 2.14 of the proposed Norwalk Transit Village Specific Plan (Specific Plan), dated July 2024, which requires an off-road construction equipment plan to be approved by the Community Development Director prior to the issuance of the first grading permit for the project, and the plan must confirm that the construction health risk posed by the	In compliance with Section 2.14 of the proposed Specific Plan, the project proposes an off-road construction equipment fleet that includes construction equipment rated with Tier 4 (model year 2008 or newer) emission limits for all engines more than 50 horsepower (hp). As such, per Section 2.14 of the proposed Specific Plan, Michael Baker's HRA accounts for the use of construction equipment rated	

Assumptions Made in Dr. Clark's HRA	Assumptions Made in Michael Baker's HRA
proposed fleet would be less than the SCAQMD's threshold	with Tier 4 (model year 2008 or newer) emission limits,
of 10 in one million. The Specific Plan provides that the off- road construction equipment plan may include the use of equipment that meets EPA Tier 4 engine standards; alternatively-fueled equipment (i.e., non-diesel); the use of added exhaust devices; or a combination of measures, provided that the measures are approved by the Community Development Director and demonstrated to result in a construction health risk of less than the SCAQMD threshold of 10 in one million.	applicable for engines more than 50 horsepower (HP).
Dr. Clark's HRA modeled the size of area source as	Michael Baker's HRA modeled the project site as
126,255 square meters (approximately 31.2 acres),	approximately 129,920.4 square meters (approximately
whereas the project site is approximately 32.3 acres	32.1 acres), which is the accurate representation of the
(approximately 130,714 square meters).	proposed project site.

As shown in Attachment B, the highest calculated carcinogenic risk due to project's construction emissions would be approximately 6.28 in one million at the sensitive receptor at the residences located to the north of the project site and would not exceed the SCAQMD threshold of 10 in one million. This shows that Dr. Clark's HRA is an overestimation and flawed as the estimated cancer risk shown in Dr. Clark's HRA was 38.7 in one million. As such, the Draft EIR adequately discloses the health risks associated with project construction emissions and further analysis is not required.

As previously discussed in Final EIR Response to Comment O1-3 in response to the commenter's prior comments, with regard to operational TAC emissions, according to the California Air Resources Board's (CARB) Air Quality and Land Use Handbook, sources that may cause health risks to nearby sensitive receptors include freeways, distribution centers, rail yards, ports, refineries, chrome platers, dry cleaners, and gasoline disposing facilities. The project would consist of a mixed-use transitoriented community with a mix of retail, hospitality, multi-family residential uses, and park/open space land uses and would not include any of these sources. Further, as discussed throughout Draft EIR Section 5.8, Air Quality, the project's emissions would not exceed the SCAQMD adopted operational thresholds, and localized emissions during operation would also be below SCAQMD LSTs. The commenter refers to PSPSs and EHEs, during which back-up generators may be used to provide electricity during power outages. As previously discussed in Final EIR Response to Comment O1-5 in response to the commenter's prior comments, it is speculative to estimate how many hours per day the backup generator would operate and the associated air emissions in the event of an emergency. Additionally, detailed data regarding the use of emergency generators and fire pumps for land uses within the proposed project, other than those for sewer lifts, is not available at the current planning stage of the project. Use of any such generators would be required to demonstrate to the SCAQMD that emissions from the generator would be below applicable SCAQMD thresholds as outlined in SCAQMD Rule 1470 as well as Rule 1110.2. Upon the mandatory compliance with SCAQMD Rules for emergency generators, impacts in this regard would be less than significant. Further, under CEQA Section 21080(b)(4) and Guidelines Section 15269, impacts associated with emergency situations are not subject to CEQA regulations. Moreover, as shown in Final EIR Response to Comment O1-5, Table 2-1, Project Emissions Including Emergency Generator and Fire Pump Emissions, the proposed project's maximum daily emissions during operation, with the fire pump and the emergency generator included, would not exceed SCAQMD thresholds. As such, emissions from the proposed fire pump would be nominal and would not substantially contribute to the total operational emissions or change the EIR's less than significant impact conclusion for operations of the proposed project.

Contrary to the comment's suggestion, construction activities of the project would occur in one phase, with no concurrent operational activities. Consequently, as previously clarified in response to the commenter's prior comments in the Final EIR Responses to Comment O1-3, O1-5, O1-11, and O1-12, the projected emissions from operation of the project are not anticipated to pose a substantial health risk. Therefore, the execution of a quantitative HRA was deemed unnecessary for the construction and operational phases concurrently. Therefore, the Final EIR and Draft EIR sufficiently detail the potential impacts associated with the project, negating the necessity for additional analysis.

The comment claims that the Final EIR fails to mitigate the project's significant health risk impacts and suggests that Section 2.14 of the proposed Specific Plan, which requires the Community Development Director's approval of an off-road construction equipment plan before grading permits are issued, is deferred analysis and deferred mitigation. The comment references the *Bozung v. Local Agency Formation Commission* case to emphasize the Supreme Court's support for early environmental impact assessments to guide planning decisions.

The proposed Specific Plan is intended to provide an orderly and efficient development of the project site, in accordance with the provisions of the City of Norwalk General Plan (General Plan). The Specific Plan would serve both planning and regulatory functions including land use regulations, circulation patterns, public facilities/infrastructure, and development standards. All future development within the Specific Plan would be subject to compliance with the Specific Plan regulations, as well as other applicable Norwalk Municipal Code (Municipal Code) regulations. As stated in the proposed Specific Plan, it has been developed as both a regulatory and land use policy document, which, upon adoption by ordinance, would constitute the zoning for the project site. As such, any proposed Specific Plan standards or regulations would be required to be imposed on future development in the Specific Plan area (the project site), and development of the project site must be consistent with the Specific Plan. Section 2.14 of the proposed Specific Plan dated July 2024 requires an off-road construction equipment plan to be approved by the Community Development Director prior to the issuance of the first grading permit for the project, and the plan must confirm that the construction health risk posed by the proposed fleet would be less than the SCAQMD's threshold of 10 in one million. Section 2.14 of the proposed Specific Plan provides that the off-road construction equipment plan may include the use of equipment that meets EPA Tier 4 engine standards; alternatively-fueled equipment (i.e., nondiesel); the use of added exhaust devices; or a combination of measures, provided that the measures are approved by the Community Development Director and demonstrated to result in a construction health risk of less than the SCAQMD threshold of 10 in one million. As such, in compliance with Section 2.14 of the Specific Plan, the project proposes an off-road construction equipment fleet that includes construction equipment rated with Tier 4 (model year 2008 or newer) emission limits, for all engines more than 50 horsepower (HP), which has been accounted for in CalEEMod modeling. As a development standard within the proposed Specific Plan, Section 2.14 is not deferred analysis or deferred mitigation, but a project feature proposed as part of the Specific Plan, which, as explained above, would become part of the zoning regulations for the project site. Further, as previously explained in the response to the commenter's previous comments in the Final EIR Response to Comment O1-3, the Final EIR assessment aligns with the SCAQMD LST methodology and mass rate look-up tables by SRA. These tools are designed to help public agencies determine the likelihood of significant adverse localized air quality impacts from proposed projects. Therefore, contrary to the comment's suggestion, air quality impacts and potential health risks associated with the project have been properly disclosed as part of the EIR's analysis consistent with the requirements of CEQA. These impacts are less than significant, and mitigation is not required. Further, as discussed above, a detailed HRA analysis (Michael Baker's HRA) has been prepared for informational purposes and in response to comments. Michael Baker's HRA provides additional substantial evidence supporting the conclusion that the health risk impacts from the proposed project's construction emissions are less than significant, consistent with the conclusion from the Draft EIR and Final EIR. In addition, Michael Baker's HRA confirms that the construction health risk posed by the proposed off-road construction equipment plan for the project would be less than the SCAQMD's threshold of 10 in one million, consistent with Section 2.14 of the proposed Specific Plan. As set forth in Section 2.14 of the proposed Specific Plan, which, as noted above, would become part of the zoning regulations for the project site, an off-road construction equipment plan demonstrated to result in a construction health risk of less than the SCAQMD threshold would be required to be approved by the Community Development Director prior to issuance of the first grading permit for the project.

In conclusion, the Draft EIR and Final EIR have adequately disclosed the health risks associated with the project's construction emissions. Impacts in this regard are less than significant.

The comment claims that the project conflicts with the 2022 AQMP because the 2022 AQMP does not reflect the new land use designation proposed by the project. Additionally, the comment claims that because the project would generate an increase in population in addition to the increase already forecasted from existing land uses, the project would exceed the assumptions utilized in preparing the forecasts presented in the 2022 AQMP.

As detailed in the Draft EIR page 5.8-12, SCAQMD's second criterion for determining project consistency focuses on whether or not the project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP. As explained in the Draft EIR, in the case of the 2022 AQMP, three sources of data form the basis for the projections of air pollutant emissions: the General Plan, SCAG's regional growth forecast, and SCAG's 2020-2045 RTP/SCS. As detailed in the response to the commenter's prior comments in Final EIR Response to Comment O1-4, the City's General Plan identifies the project site as one of the City's Opportunity and Special Site Studies Opportunity Sites; the General Plan recommends that the site be redeveloped into a residential community incorporating a variety of housing types, including common open space and recreational facilities, potentially under the governance of a Specific Plan. The project is also identified in the City's 2021-2029 Housing Element of the General Plan as a proposed residential development project credited toward the City's RHNA. Moreover, as discussed in detail in Draft EIR Section 5.12, Population and Housing (page 5.12-8), the project's buildout would be within SCAG's 2045 dwelling unit projections for the County, and within SCAG's 2045 population projections for both the City and County. Therefore, the project would not exceed the assumptions utilized in preparing the forecasts presented in the 2022 AQMP.

As further discussed in Section 5.8 of the Draft EIR, determining whether or not a project exceeds the assumptions reflected in the 2022 AQMP involves evaluation of three criteria: (i) whether the project would be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP; (ii) whether the project would implement all feasible air quality mitigation measures; and (iii) whether the project would be consistent with the land use planning strategies set forth in the AQMP. Thus, in addition to consistency with the projections discussed above, the EIR also considers the project's compliance with all applicable SCAQMD rules and regulations, as well as the project's consistency with the land use planning strategies set forth in the AQMP, which relies on

SCAG's 2020-2045 RTP/SCS, including focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, supporting implementation of sustainability policies, and promoting a green region. The proposed project plans for growth around livable corridors and provides more options for short trips and neighborhood mobility areas. The project is in proximity to the Norwalk-Santa Fe Springs Metrolink Station, which is approximately 0.2to 0.5-miles northeast of the project site. Furthermore, the project would incorporate features to encourage transit use throughout the day such as a mix of uses, high-quality pedestrian and bicycle access, narrow streets, and reduced parking requirements. The Specific Plan would also develop Class II and III bike lanes. In addition, pedestrian circulation would be provided throughout the project area via walkways and linear parks, as well as pedestrian crossings. The project would include features that promote alternative transportation methods, such as landscaped parkways, pedestrian walkways, bus transit stops, street furniture, and widened pedestrian zones, and electric vehicle charging station. The proposed Specific Plan would also include development standards pertaining to long-term bicycle parking, such as secure storage, visibility, bike registration programs, fix-it stations, and bicycle commuter parking in multi-family residential buildings to promote biking as an alternative mode of transportation. These features show the project's consistency with the land use planning strategies set forth in the AQMP.

The comment claims that the project's construction noise threshold does not consider the increase in noise or absolute noise level and that construction noise impacts are likely significant.

As stated in the Final EIR in response to the commenter's prior comments (see Response to Comment O1-6) and in the case referenced in the comment, *King & Gardiner Farms, LLC v. County of Kern*, 45 Cal.App.5th 814, 883 (2020), "CEQA does not include a particular threshold for determining the significance of an increase in ambient noise. Similarly, the Guidelines do not mandate the use of a specific threshold of significance for evaluating an increase in noise." The case law cited in the comment also acknowledges the substantial discretion a lead agency has to choose its thresholds of significance (Id. at 893).

Further, as detailed in the Final EIR, unlike the EIR at issue in the case law cited in the comment, the analysis for the project considers project construction noise in relation to ambient noise levels and considers the magnitude of the increase in noise in evaluating the effect on the environment, noting that the project site and surrounding areas regularly experience high levels of noise from existing sources, as confirmed in noise measurements conducted to characterize ambient noise levels. The construction noise levels presented in Draft EIR Table 5.11-9 are conservative, and noise levels during construction activities in reality are likely to be much lower than the estimated maximum construction noise levels. In addition, as explained in the construction noise analysis in the Draft EIR, these noise levels could occur intermittently when construction equipment is operating closest to the existing sensitive uses but would generally be less because the equipment would be farther away from the existing sensitive uses.

Further, the case referenced by the commenter does not indicate that CEQA requires temporary construction noise levels to be compared to ambient noise levels. Unlike permanent operational noise where the 3 to 5 dBA increase over ambient noise level is widely accepted as a criteria for evaluation<sup>1</sup>,

City of Norwalk, Norwalk Transit Village Final EIR – Responses to Comment Letter Agenda Item #1 – Comments on the Norwalk Transit Village Project (SCH No. 2022070103, GPA No. 2024-01, ZC No. 2024-02, ZTA 2024-04).

Federal Highway Administration, *Highway Traffic Noise Analysis and Abatement Policy and Guidance, Noise Fundamentals*, updated August 24, 2017,

there are no widely recognized sources or standards on what level of increase should be considered significant when it comes to temporary construction noise. Construction noise not only is short-term and occurs in phases (occurring in different areas of the project site at a time), but also varies significantly in any given minute or hour depending on how and where the equipment operates. Therefore, it is not an apples-to-apples comparison between the temporary, varied construction noise level and the permanent, steady ambient noise level.

The comment also references Exhibit 5.11-1, Common Environmental Noise Levels, of the Draft EIR, which illustrates examples of various sound levels in different environments. As shown in Exhibit 5.11-1, a garbage truck is an example of a 100 dBA noise level, with no more than 15 minutes of exposure recommended. An example of a 90 dBA noise level is a lawnmower, and an example of an 80 dBA noise level is average city traffic noise, both of which are identified as annoying. The comment also references Table 5.11.4 of the Draft EIR, which indicates ambient noise measurements at off-site locations, and suggests that the short-term construction noise levels would result in a substantial increase over ambient conditions and "likely be" a significant impact. However, as explained above, construction noise not only is short-term and occurs in phases (occurring in different areas of the project site at a time), but also varies significantly in any given minute or hour depending on how and where the equipment operates. Therefore, it is not an apples-to-apples comparison between the temporary, varied construction noise level and the permanent, steady ambient noise level. In addition, according to the General Noise Assessment methodology prescribed in the FTA Transit Noise and Vibration Impact Assessment Manual, which is referenced in the comment, construction noise should be evaluated from the center of the site when calculating time-averaged noise level. The FTA Manual states under the variable distances in its construction noise calculation to "assume that all equipment operates at the center of the project". The geographic center of the project site is approximately 320 feet from the closest sensitive receptor (residential use) to the north and south. At this distance, construction noise levels would be reduced by approximately 26 dBA and substantially lower than the noise levels measured from 15 feet as presented in the Draft EIR.

In short, the Draft EIR has conservatively characterized construction noise resulting from project construction in a worst-case scenario (demonstrating only  $L_{\text{max}}$  levels from construction equipment) and does not represent averaged noise level throughout the day as construction noise levels fluctuate significantly from minute to minute. Overall, the City, in its EIR, has considered both construction noise levels and their temporary nature, as well as the existing ambient noise levels in the project site's unique circumstances, in making the less-than-significant impact determination with regard to the project's construction noise. As such, the Draft EIR adequately discloses the potential impacts of the project in this regard.

7 The comment claims that the EIR fails to disclose and mitigate the project's operational noise impacts associated with parking lot activities.

Firstly, the comment inappropriately assumes a 55 dBA threshold for parking lot noise based on references to 55 dBA in other sections of the noise analysis in the context of average noise levels. As explained in the Draft EIR, traffic associated with residential parking areas is typically not of sufficient volume to exceed community noise standards, although the instantaneous maximum sound levels

https://www.fhwa.dot.gov/environMent/noise/regulations\_and\_guidance/polguide/polguide02.cfm, accessed July 25, 2024.

City of Norwalk, Norwalk Transit Village Final EIR – Responses to Comment Letter Agenda Item #1 – Comments on the Norwalk Transit Village Project (SCH No. 2022070103, GPA No. 2024-01, ZC No. 2024-02, ZTA 2024-04).

generated by a car door slamming, engine starting up, and car pass-bys may be an annoyance to adjacent noise-sensitive receptors. As such, the evaluation of parking lot noise appropriately considers the noise source type, frequency, and ambient noise, among many other factors. The Draft EIR appropriately described, on page 5.11-20, that parking lot noise are instantaneous noise levels compared to noise standards in the day night level (DNL) scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower. Further, the proposed project would be located in an urban environment where parking is common; the project also proposes a residential development where parking lot activities would not be substantial. As such, the comment's suggestion that an instantaneous noise from proposed parking lot activities may result in significant impacts relying exclusively on a numerical threshold related to average noise levels is not supported by substantial evidence. As stated in the Draft EIR, impacts associated with the parking lot would be considered minimal, and noise impacts associated with project parking lots would be less than significant.

Further, the comment mistakenly suggests that the proposed CMU wall is a mitigation measure for project HVAC and parking lot noise and that operational noise levels should be quantified and evaluated with and without the wall. The comment claims that including the CMU wall as part of the project violates the holding in Lotus v. Department of Transportation (2014) 223 Cal.App.4th 645, 656 that mitigation measures are not a part of the project. In Lotus, the court notes that "The distinction between elements of a project and measures designed to mitigate impacts of the project may not always be clear. For example, in the present case the use of 'Cement Treated Permeable Base (CTPB) to minimize the thickness of the structural section, provide greater porosity, minimize compaction of roots, and minimize thermal exposure to roots from Hot Mix Asphalt paving' might well be considered to define the project itself." Lotus at 657, n8. The court found that "restorative planting and replanting, invasive plant removal, and use of an arborist and of specialized equipment" that were characterized in the EIR as "avoidance, minimization and/or mitigation measures," in the EIR were "plainly mitigation measures and not part of the project itself." The court also found that the EIR failed to identify a significance threshold, so it was "impossible to determine" whether the impacts of the project on the redwood root systems would be significant, with or without mitigation measures. Id. at 656. Here, contrary to the comment's assertion and the case cited in the comment, the proposed CMU wall is not a mitigation measure under CEQA. The EIR used a clear significance threshold, analyzed the project's potential operational noise impacts associated with mechanical equipment/HVAC units and parking areas, and determined that operational noise impacts would be less than significant. The analysis then goes on to acknowledge that, additionally, the project proposes a CMU wall, which would provide even further noise reductions.

The comment is conclusory in nature and states that based on the comments above, the commenter believes the Planning Commission should not recommend approval of the project because the commenter believes the requisite findings cannot be made regarding compliance with CEQA. Responses to the commenter's specific comments on the Draft EIR and the Final EIR are provided and responded to in the Final EIR, as well as above. As explained in Responses to Comments 3 through 7 above, the EIR adequately analyzed the proposed project and evaluated and disclosed the potential environmental impacts associated with the proposed project, consistent with the requirements of CEQA. The EIR is comprehensive and none of the circumstances requiring recirculation of a draft EIR set forth in CEQA Guidelines Section 15088.5 have been met. Specifically, based on the comments and responses within the Final EIR, as well as this memorandum, no new significant impacts or substantial increases in already identified significant impacts have been identified. The decision

whether to approve the project and make the requisite findings would be made by the decision-makers consistent with CEQA.

This introductory comment marks the beginning of the technical comment letter prepared by Clark and Associates, provided as an attachment to the comment letter. The comment summarizes the proposed project construction timeline and construction activities. The comment also asserts generally that responses to the commenter's prior comments contained in the Final EIR are inadequate. Specific comments regarding the environmental analysis in the Draft EIR and Final EIR are responded to below.

The comment refers to the commenter's prior comments that the EIR fails to disclose the project's potential health risk impacts associated with toxic air contaminants (TACs) emissions and expresses disagreement with the Final EIR, Section 2.0, Responses to Comments O1-3 and O1-11.

As discussed above in Response 3 of this memorandum, pursuant to SCAQMD guidance, the SCAQMD LST methodology and mass rate look-up tables are used to determine if a project may generate significant adverse localized air quality impacts. DPM, a subset of PM<sub>2.5</sub> and PM<sub>10</sub>, is included in the LST analysis conducted as part of the Draft EIR. The proposed construction or operational activities are below the LST emission levels. As such, based on SCAQMD's guidance and OEHHA's guidance, the proposed project would not result in significant air quality emissions during construction activities capable of causing significant health risk concerns.

Nevertheless, as also discussed in Response 3 above, a detailed HRA analysis (Michael Baker's HRA) (refer to Attachment B) has been prepared for informational purposes and in response to comments, to quantitatively analyze the potential health risks associated with project construction. Michael Baker's HRA confirms that the health risks associated with the proposed project's construction emissions would be less than significant. Michael Baker's HRA addresses the concerns raised in the comment and updates the methodological assumptions, compared to Dr. Clark's previously submitted HRA. The methodologies used and assumptions made in Michael Baker's HRA are consistent with established practices and guidelines set forth by SCAQMD and OEHHA. As shown in Attachment B, the highest calculated carcinogenic risk due to the project's construction emissions would be approximately 6.28 in one million at the sensitive receptor at the residences located to the north of the project site and would not exceed the threshold of 10 in one million. This also shows that the estimated cancer risk of 38.7 in one million in Dr. Clark's HRA is an overestimation and flawed.

The comment expresses concern that the EIR underestimates operational air emissions associated with backup generators and fire pump systems.

Generators and fire pump systems that would need to be installed as part of the proposed project are described in Draft EIR Section 3.0, *Project Description*. Further, the issue regarding the proposed emergency generator and fire pump has been thoroughly discussed in the response to the commenter's prior comments in Final EIR Section 2.0, Response to Comments, Response to Comment O1-5. As detailed in the Final EIR Table 2-1, *Project Emissions Including Emergency Generator and Fire Pump Emissions*, the emissions from a typical emergency generator and a typical fire pump combined with operational emissions of the project would not result in exceedance of SCAQMD's daily maximum thresholds for all pollutants. It should be noted that the emissions from a typical emergency generator and a typical fire pump were modeled using previous version of CalEEMod; therefore, any future

generator and fire pump systems to be used for the project would likely result in even lower emissions as newer versions of CalEEMod account for technical advances over time. Further, as discussed in Response No. 3 above, use of any emergency generators would be required to demonstrate to the SCAQMD that emissions from the generator would be below applicable SCAQMD thresholds as outlined in SCAQMD Rule 1470 as well as Rule 1110.2, and impacts associated with occurred from emergency situations are not subject to CEQA regulations. As explained in the Final EIR and in Response No. 3 above, emissions from the proposed backup generator and fire pump would be nominal and would not substantially contribute to the total operational emissions or change the EIR's less than significant impact conclusion for operations of the proposed project. No further analysis is required.

The comment discusses Final EIR Section 2.0, Response to Comment O1-12, which addresses the commenter's prior comments, and the inputs used for quantitative HRA of construction health risk. The comment challenges the City's assertion that the input values used in the commenter's HRA are flawed, and insists that the City must prepare an HRA for both the construction and operational phases of the project and include it in a revised Final EIR.

Similar to what was previously explained in the Final EIR Response to Comment O1-12, the commenter's assertion that the emission estimates for DPM are based on the lowest rate calculated in the project's Air Quality Analysis underestimates the potential concentration of DPM emitted during the project's construction phase is inaccurate as there would only be a few days during the six-year construction period that the DPM emissions would reach the maximum. It should be noted that although the commenter used the lowest maximum daily emissions out of all construction years to calculate emission rate, it is still the maximum daily emissions, which would only occur for a few days during the year and does not represent the emissions throughout the entire construction period. Cancer risk is calculated based on period average concentrations over five years (i.e., number of years the meteorological data is available) and therefore using the average emissions across the construction period is more appropriate than using the daily maximum emissions. Assuming the maximum emission rate across the entire six-year construction period results in grossly overestimating DPM emissions and associated health risks. Therefore, the comment inaccurately claims that the methodology employed for modeling in the commenter's HRA is consistent with guidance provided by the DTSC and the SCAQMD.

Secondly, the specific conditions of the project site, including the nature of the construction activities (the size and location of receptors) and local meteorological conditions, can significantly influence the dispersion of pollutants. Regarding the area size assumed in the model, it is true that the size of the area over which emissions are dispersed has a negligible effect on the modeling results if the emission quantity is fixed. However, the size of the area source can affect the dispersion pattern of the pollutants and, consequently, the exposure levels experienced by individuals in the vicinity of the source. For example, the emission rate used in the modeling is based on the amount of pollutants emitted per square meter. Using a lower area size would increase the amount of pollutants emitted per square meter, causing higher pollutant concentrations at nearby sensitive receptors. Therefore, using an accurate representation of the project site size during construction is crucial for reliable and accurate predictions of pollutant concentrations and potential health risks.

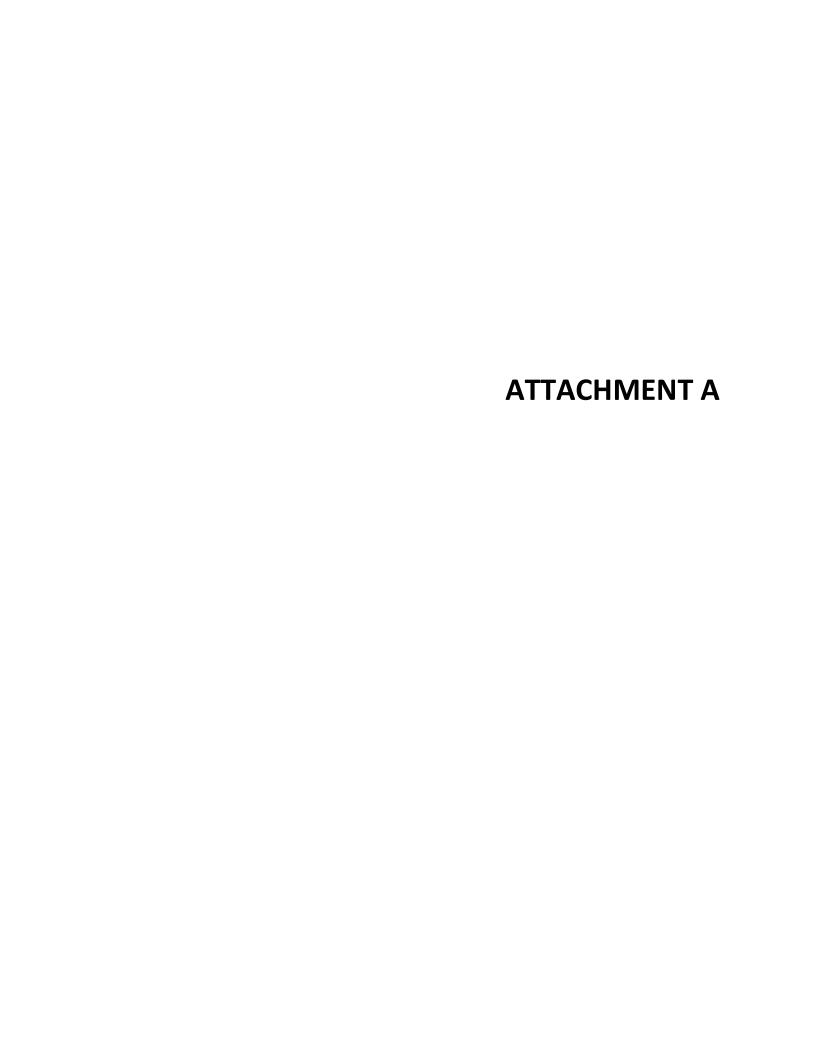
The commenter's clarification that the construction emissions were calculated in the commenter's HRA based on an eight-hour work period during weekdays only is acknowledged and accurately

reflects standard construction practices. However, the comment's assertion is incorrect that the differences pointed out by the City have no impact on the conclusions regarding construction phase emissions. These differences, which pertain to key parameters in the dispersion model and health risk assessment, influence the estimated emissions and cause overestimation of associated health risks in the commenter's HRA.

As discussed above in Response Nos. 3 and 10, for informational purposes and in response to comments, a detailed HRA analysis (Michael Baker's HRA; refer to Attachment B) has been prepared to quantitatively analyze the potential health risks associated with project construction. Michael Baker's HRA confirms that the health risks associated with the proposed project's construction emissions would be less than significant. Michael Baker's HRA corrects the methodological errors made in Dr. Clark's HRA provided by the commenter and provides a detailed explanation of the methodologies used and justifies the assumptions made, ensuring that they are consistent with established practices and guidelines set forth by SCAQMD and OEHHA. As shown in Attachment B, the highest calculated carcinogenic risk due to project's construction emissions would be approximately 6.28 in one million at the sensitive receptor at the residences located to the north of the project site and would not exceed the SCAQMD threshold of 10 in one million. This shows that the cancer risk of 38.7 in one million presented in Dr. Clark's HRA is an overestimation and flawed. As such, the EIR adequately discloses the health risks associated with project construction emissions and further analysis is not required.

With regard to operational emissions, according to the CARB's *Air Quality and Land Use Handbook*, the project does not include high-risk TAC sources such as freeways, distribution centers, rail yards, ports, refineries, chrome platers, dry cleaners, and gasoline disposing facilities. The project would consist of a mixed-use transit-oriented community with a mix of retail, hospitality, multi-family residential uses, and park/open space land uses and would not include any of these sources. As previously noted, emissions related to emergency generators and fire pumps would be negligible and would not represent a day-to-day operational activity. Therefore, project's operational activities would not result in significant health risk to the nearby receptors, and a HRA is not required.

This comment is conclusory in nature and states that based on the comments above, the commenter believes project impacts would be significant and the City should revise the Draft EIR. Responses to the commenter's specific comments on the EIR are provided and responded to above. As explained in Responses to Comments 10 through 12 above, the EIR adequately analyzed the proposed project and evaluated and disclosed the potential environmental impacts associated with the proposed project, consistent with the requirements of CEQA. Furthermore, for informational purposes and in response to comments, a detailed HRA analysis (Michael Baker's HRA; refer to Attachment B) has been prepared to quantitatively analyze the potential health risks associated with project construction. Michael Baker's HRA confirms that the health risks associated with the proposed project's construction emissions would be less than significant. Accordingly, none of the circumstances requiring recirculation of a draft EIR set forth in CEQA Guidelines Section 15088.5 have been met. No new significant impacts or substantial increases in already identified significant impacts have been identified, and no further analysis is required.



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Re: Agenda Item #1 – Comments on the Norwalk Transit Village Project (SCH No. 2022070103, GPA No. 2024-01, ZC No. 2024-02, ZTA 2024-04).

Dear Planning Commission Members and Mr. Kwan:

We are writing on behalf of Coalition for Responsible Equitable Economic Development Los Angeles ("CREED LA") to provide comments on the Norwalk Transit Village Project (SCH No. 2022070103, GPA No. 2024-01, ZC No. 2024-02, ZTA 2024-04) ("Project") proposed by the City of Norwalk ("City"). The Project will be considered by the Planning Commission ("Commission") as Agenda Item #1 at its July 10, 2024 meeting. The Commission will make a recommendation to the City Council whether to certify the Project's Final Environmental Impact Report ("FEIR") and approve a General Plan Amendment, Zone Change, and Zoning Text Amendment.

CREED LA submitted comments on the Draft Environmental Impact Report ("DEIR"), accompanied by expert comments, showing that the DEIR failed to comply with the requirements of CEQA by failing to accurately disclose and

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mitigate significant health risk, air quality, and noise impacts. The FEIR contains responses to CREED LA's comments on the DEIR. However, the responses fail to resolve the major flaws CREED LA and its experts identified in the DEIR. As a result of the Project's significant and unmitigated impacts, the City lacks substantial evidence to make the requisite findings to approve the Project's proposed General Plan Amendment, Zone Change, and Zoning Text Amendment.

We reviewed the FEIR and its technical appendices with the assistance of air quality expert Dr. James Clark, PhD.<sup>1</sup> We reserve the right to supplement these comments at a later date, and at any later proceedings related to this Project.<sup>2</sup>

CREED LA urges the Planning Commission to recommend that the City revise and recirculate the EIR to comply with CEQA before any further action is taken on the Project.

#### I. STATEMENT OF INTEREST

CREED LA is an unincorporated association of individuals and labor organizations formed to ensure that the construction of major urban projects in the Los Angeles region proceeds in a manner that minimizes public and worker health and safety risks, avoids or mitigates environmental and public service impacts, and fosters long-term sustainable construction and development opportunities. The association includes Norwalk residents Alan Aguilar, Miguel Ortega, and Roberto Pacheco, the Sheet Metal Workers Local 105, International Brotherhood of Electrical Workers Local 11, Southern California Pipe Trades District Council 16, and District Council of Iron Workers of the State of California, along with their members, their families, and other individuals who live and work in the City of Norwalk.

Individual members of CREED LA live in the City of Norwalk and work, recreate, and raise their families in the City and surrounding communities. Accordingly, they would be directly affected by the Project's environmental and health, and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist on site.

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<sup>&</sup>lt;sup>1</sup> Dr. Clark's technical comments and curricula vitae are attached hereto as Exhibit A.

<sup>&</sup>lt;sup>2</sup> Gov. Code § 65009(b); PRC § 21177(a); Bakersfield Citizens for Local Control v. Bakersfield ("Bakersfield") (2004) 124 Cal. App. 4th 1184, 1199-1203; see Galante Vineyards v. Monterey Water Dist. (1997) 60 Cal. App. 4th 1109, 1121.

CREED LA has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making the area less desirable for new businesses and new residents. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

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CREED LA supports the development of commercial, mixed use, and medical office projects where properly analyzed and carefully planned to minimize impacts on public health, climate change, and the environment. These projects should avoid adverse impacts to air quality, public health, climate change, noise, and traffic, and must incorporate all feasible mitigation to ensure that any remaining adverse impacts are reduced to the maximum extent feasible. Only by maintaining the highest standards can commercial development truly be sustainable.

## II. THE FEIR FAILS TO ADEQUATELY ANALYZE, QUANTIFY, AND MITIGATE THE PROJECT'S POTENTIALLY SIGNIFICANT IMPACTS

# A. The FEIR Still Fails to Adequately Analyze and Mitigate Significant Health Risk Impacts

The DEIR failed to quantify health risk impacts from exposure to toxic air contaminants ("TACs") during construction and operations, violating CEQA's analytical requirements. CREED LA's comments on the DEIR provided quantitative analysis demonstrating that health risk impacts on sensitive receptors from the Project's construction emissions would exceed the City's 10 in 1 million significance threshold, including as high as 38.7 in 1,000,000 for young children near the Project site. The FEIR still fails to disclose this risk, and fails to mitigate it. As a result, the City's proposed finding that health risk impacts would be less than significant is not supported by substantial evidence.

<sup>&</sup>lt;sup>3</sup> Letter from Adams Broadwell Joseph & Cardozo (ABJC) to City re: Preliminary Comments on the Draft Environmental Impact Report for the Norwalk Transit Village (SCH No. 2022070103) (March 20, 2024), pg. 6-9.

<sup>&</sup>lt;sup>4</sup> *Id.* at pg. 10 ("The maximum risk for exposure of infants and children less than three years old located north of the Project site during three years of construction is 38.7 in 1,000,000. The maximum risk for exposure of infants and children less than three years old located west of the Project site during three years of construction is 12.5 in 1,000,000. The maximum risk for exposure of infants and children less than three years old located south of the Project site during the three years of construction is 22.6 in 1,000,000.").

The FEIR, in Response O1-3, attempts to justify the City's ongoing failure to quantify the Project's health risk impacts during construction by claiming that South Coast Air Quality Management District ("SCAQMD") guidance does not require preparation of an HRA for activities lasting less than 30 years. The FEIR cites SCAQMD's AB 2588 and Rule 1402 Supplemental Guidelines for this proposition,<sup>5</sup> but these guidelines do not contain any such recommendation.<sup>6</sup> Further, the City's reasoning is contradictory to evidence in the Office of Environmental Health Hazard Assessment's ("OEHHA") risk assessment guidelines, which explain that individual cancer risk is not just affected by the duration of exposure to TACs, but also the concentration of the individual's unique exposure scenario and the toxicity of the chemical. Accordingly, OEHHA<sup>7</sup> guidance recommends an HRA for short-term construction exposures to TACs lasting longer than 2 months and exposures from projects lasting more than 6 months should be evaluated for the duration of the project. 8 Thus, the FEIR's failure to quantify health risk impacts from exposure to TACs is not supported by substantial evidence.

Response O1-3 and O1-11 erroneously claim that the City can rely on Localized significance thresholds ("LSTs") to conclude that health risk impacts would be less than significant. This claim was already refuted in CREED LA's comments on the DEIR, which explain that LSTs only apply to four criteria pollutants: NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. LSTs do not apply to TACs, which contain carcinogenic compounds not found in criteria pollutants, and thus do not disclose the magnitude of the Project's health impacts from exposure to the Project's air emissions. Description Exposure to the Project's TACs was analyzed in the health risk analysis prepared by Dr. Clark and was shown to exceed the City's significance threshold. The FEIR's ongoing reliance on a scientifically unsupported argument to

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<sup>&</sup>lt;sup>5</sup> FEIR, pg. 2-69.

<sup>&</sup>lt;sup>6</sup> South Coast Air Quality Management District, AB 2588 and Rule 1402 Supplemental Guidelines, October 2020, available at <a href="https://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19">https://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19</a>.

<sup>&</sup>lt;sup>7</sup> OEHHA is the organization responsible for providing recommendations and guidance on how to conduct health risk assessments in California. See OEHHA organization description, available at <a href="http://oehha.ca.gov/about/program.html">http://oehha.ca.gov/about/program.html</a>.

<sup>&</sup>lt;sup>8</sup> Office of Environmental Health Hazard Assessment (OEHHA), Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments, February 2015 (OEHHA 2015), Section 8.2.10: Cancer Risk Evaluation of Short Term Projects, pp. 8-17/18; <a href="https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0">https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0</a>.

<sup>&</sup>lt;sup>9</sup> FEIR, pg. 2-69.

<sup>&</sup>lt;sup>10</sup> Letter from ABJC to City re: Preliminary Comments on the Draft Environmental Impact Report for the Norwalk Transit Village, pg. 9.

avoid analyzing health risk is an inadequate response to comments as well as an ongoing violation of CEQA.

Response O1-3, O1-11, and O1-12 claim that Dr. Clark's HRA is flawed and overly conservative. The Responses further claim that no modeling files for the analysis were provided. The FEIR claims that as a result of these errors, the DEIR adequately discloses the Project's health risks and no further analysis is required. 11 The FEIR's claims are not supported by substantial evidence. First, the FEIR's claim that no modeling files were provided is incorrect – all modeling files were provided to the City on March 20, 2024 along with CREED LA's comments. 12 The City's failure to review this expert evidence impacts is a violation of the City's duty to consider and respond to comments raising significant environmental issues and demonstrates the inadequacy of the FEIR pursuant to CEQA Guidelines Section 15088.<sup>13</sup> Second, the FEIR's claim that CREED LA's HRA contains methodological errors is not supported by substantial evidence. Dr. Clark explains that the HRA's input values are derived from the DEIR's own emission estimates. Dr. Clark further explains that the HRA's assumptions regarding emissions rates and concentrations are consistent with SCAQMD guidance for conducting HRAs. Third, the FEIR fails to demonstrate that the HRA's conclusions would be changed if the purported methodological errors were resolved – simply claiming that the HRA is overly conservative does not demonstrate that adjustments to the methodology would change the significance of the results. The FEIR fails to provide any substantial evidence that the Project's impacts would be less-than-significant should the parameters of the HRA be changed.

Regarding operational health risk impacts, Response O1-3 states (without quantifying TAC emissions) that an HRA is not necessary because the Project would generate negligible amounts of TACs. <sup>14</sup> The FEIR qualitatively reasons that the Project's sewer lift station would include an emergency generator and fire flow pump system, which would only be used during emergencies and would likely generate less-than-significant levels of emissions. <sup>15</sup> Dr. Clark explains that

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<sup>&</sup>lt;sup>11</sup> FEIR, pg. 2-77 ("As such the Draft EIR adequately discloses the potential impacts of the project in this regard and further analysis is not required").

<sup>&</sup>lt;sup>12</sup> The modeling files may be accessed at the following link, provided to the City on March 20, 2024: <a href="https://www.dropbox.com/scl/fo/54yg7c69gd54pxgndhv67/h?rlkey=yfennyunxyr1f03us84wxt9ay&dl=0">https://www.dropbox.com/scl/fo/54yg7c69gd54pxgndhv67/h?rlkey=yfennyunxyr1f03us84wxt9ay&dl=0</a>

<sup>&</sup>lt;sup>13</sup> See Berkeley Keep Jets Over the Bay Comm. v Board of Port Comm'rs (2001) 91 CA4th 1344, 1367, 1371 (conclusory responses to comments from experts and other agencies that criticized data and methodologies used to assess impacts and that were based on extensive supporting studies rendered EIR legally inadequate).

<sup>&</sup>lt;sup>14</sup> FEIR, pg. 2-70.

 $<sup>^{15}</sup>$  *Id*.

quantification of health risks from the Project's operations is necessary because the City must consider the health impacts from the construction and operational phases of the Project that occur concurrently. <sup>16</sup> Thus, the FEIR's argument that operational emissions alone would be less than significant is not supported by substantial evidence.

The magnitude of operational emissions also may be higher than assumed in the FEIR – the FEIR's response ignores whether land uses planned by the Project besides the sewer lift would require generators and fire pumps. The high-density residential, commercial, and hotel uses proposed by the Project commonly use backup generators to adapt to adapt to Public Safety Power Shutoff ("PSPSs") and extreme heat events ("EHEs"), as explained in CREED LA's DEIR comments.<sup>17</sup>

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In sum, substantial evidence still demonstrates that the Project's health risk impacts would be significant. The FEIR fails to introduce any quantitative analysis showing otherwise. The City must prepare a revised and recirculated EIR analyzing and mitigating this impact before the Project can be approved.

# 1. The FEIR Fails to Mitigate the Project's Significant Health Risk Impacts

In response to CREED LA's comments on health risk, Response O1-12 explains that the City will include off-road construction equipment standards in Section 2.14 of the proposed Specific Plan (without acknowledging the Project's significant health risk impacts). Section 2.14 provides that an off-road construction equipment plan shall be approved by the Community Development Director prior to the issuance of the first grading permit for the Project. The plan must confirm that the construction health risk posed by the fleet of off-road construction equipment to be on-site to construct the project would be less than the SCAQMD threshold of 10 in one million.

This approach is inadequate for several reasons. First, the measure improperly defers analysis of the Project's health risk impacts. CEQA requires disclosure of the severity of a project's impacts and the probability of their occurrence before a project can be approved. <sup>19</sup> In *Bozung v. Local Agency Formation* 

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<sup>&</sup>lt;sup>16</sup> Clark FEIR Comments, pg. 3.

<sup>&</sup>lt;sup>17</sup> Letter from ABJC to City, pg. 12-13.

<sup>&</sup>lt;sup>18</sup> FEIR, pg. 2-77.

<sup>&</sup>lt;sup>19</sup> 14 CCR §§ 15143, 15162.2(a); Cal. Build. Indust. Ass'n v. BAAQMD (2015) 62 Cal.4th 369, 388-90 ("CBIA v. BAAQMD") (disturbance of toxic soil contamination at project site is potentially significant impact requiring CEQA review and mitigation); Madera Oversight Coalition v. County of Madera

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Commission, the Supreme Court upheld "the principle that the environmental impact should be assessed as early as possible in government planning." A study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA. Here, the FEIR defers analysis of the Project's health risk impacts until after Project approval. The deferral is improper because health risk impacts can feasibly be evaluated prior to Project approval. It is also unclear whether any subsequent quantitative analysis of TACs in an HRA would be required by Specific Plan Section 2.14, as the City argues in the FEIR that quantifying exposure to TACs is unnecessary for construction activities. Under the current measure, the City's construction equipment plan may simply state that health risk impacts are deemed to be less than significant based on the flawed reasoning in the FEIR (which relies on LSTs and qualitative analysis).

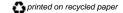
Second, although the FEIR does not identify the provisions of Section 2.14 as mitigation of a significant impact, this measure is not identified as binding mitigation in the Project's Mitigation Monitoring or Reporting Program ("MMRP"). <sup>23</sup> For this measure to constitute adequate mitigation of the significant health risk impact identified in CREED LA's comments, it would need to be included in the MMRP.

Third, although the FEIR does not identify the provisions of Section 2.14 as mitigation of a significant impact, reliance on Section 2.14 as mitigation would conflict with CEQA's rules regarding formulation of mitigation measures until after Project approval. As the courts have explained, deferral of mitigation may be permitted only where the lead agency: (1) undertakes a complete analysis of the significance of the environmental impact; (2) proposes potential mitigation measures early in the planning process; and (3) articulates specific performance criteria that would ensure that adequate mitigation measures were eventually implemented. <sup>24</sup> CEQA also requires that all proposed mitigation measures be

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<sup>&</sup>lt;sup>24</sup> Comtys. for a Better Env't v. City of Richmond (2010) 184 Cal.App.4th 70, 95; Cal. Native Plant Socy' v. City of Rancho Cordova (2009) 172 Cal.App.4th 603, 621.





<sup>(2011) 199</sup> Cal. App. 4th 48, 82; Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs. ("Berkeley Jets" (2001) 91 Cal. App. 4th 1344, 1370-71; CEQA Guidelines, Appendix G. <sup>20</sup> (1975) 13 Cal. 3d 263, 282.

<sup>&</sup>lt;sup>21</sup> Sundstrom v. County of Mendocino, supra, 202 Cal.App.3d 296, 307.

<sup>&</sup>lt;sup>22</sup> Id.; No Oil, Inc. v. City of Los Angeles, supra, 13 Cal.3d 68, 81; Environmental Defense Fund, Inc.

v. Coastside County Water Dist. (1972) 27 Cal.App.3d 695, 706.

<sup>&</sup>lt;sup>23</sup> Lotus v. Dept of Transportation (2014) 223 Cal. App. 4th 645, 651-52. (mitigation measures must be incorporated directly into the EIR to be enforceable).

supported by substantial evidence to demonstrate that they will be effective and enforceable.<sup>25</sup> The court in *Endangered Habitats League*, *Inc. v. County of Orange*, held that mitigation that does no more than require a report to be prepared and followed, or allow approval by a county department without setting any standards is inadequate.<sup>26</sup>

Here, Section 2.14 states that mitigation would be required if health risks would exceed the 10 in 1 million cancer risk threshold.<sup>27</sup> But the measure fails to specify whether the City would be required to conduct a quantitative analysis to determine whether the threshold would be exceeded in the first place. As explained earlier, the City claims in the FEIR that quantifying exposure to TACs is unnecessary for construction activities or for this Project's operations. Thus, Section 2.14 fails to set binding or enforceable standards for approval of the construction equipment plan.

In sum, substantial evidence still demonstrates that the Project's significant health risk impacts remain unmitigated. The Project cannot be approved before these impacts are fully mitigated in a revised and recirculated EIR.

# B. The Project Still Conflicts with Applicable Policies Regarding Air Quality and Health Risk

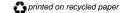
CREED LA's comments on the DEIR explained that the Project would be inconsistent with the 2022 Air Quality Management Plan ("2022 AQMP") because the Project proposes to change the Project site's land use designation from "Institutional" to "Specific Plan," resulting in a population increase associated with the creation of a new residential land use not anticipated in the development assumptions that underlie the 2022 AQMP.<sup>28</sup> The FEIR responds that the Project would be consistent with various City land use plans – the General Plan identifies the project site as one of the City's Opportunity and Special Site Studies Opportunity Sites, and the project is identified in the City's 2021-2029 Housing Element as a proposed residential development project.<sup>29</sup>

This response misses the key issue, which is an inconsistency with the assumptions underlying the 2022 AQMP, not consistency with other land use plans. SCAQMD's criterion for determining project consistency focuses on whether or not

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<sup>&</sup>lt;sup>25</sup> Sierra Club v. County of San Diego (2014) 231 CA 4th 1152, 1168.

<sup>&</sup>lt;sup>26</sup> Endangered Habitats League, Inc. v. County of Orange (2005) 131 Cal.App.4th 777, 794.

<sup>&</sup>lt;sup>27</sup> FEIR, pg. 2-77.

<sup>&</sup>lt;sup>28</sup> Letter from ABJC to City, pg. 11.

<sup>&</sup>lt;sup>29</sup> FEIR, pg. 2-71.

the project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP.<sup>30</sup> As explained in CREED LA's comments on the DEIR, the 2022 AQMP relies on population growth projections identified by the Southern California Association of Governments ("SCAG") in its 2020 RTP/SCS. SCAG's forecasts rely on jurisdictional existing land use and general plan land use data.<sup>31</sup> But the 2022 AQMP does not reflect the land use designation for the Project site proposed in the DEIR, which would increase population by 2,764 residents – more than half of the City's forecasted population growth between 2022 and 2045.<sup>32</sup> Therefore, the population increase proposed by the Project would conflict with the 2022 AQMP.

The FEIR also argues that because the Project would account for more than half of the City's forecasted population growth between 2022 and 2045, the Project would not exceed the assumptions utilized in preparing the forecasts presented in the 2022 AQMP.<sup>33</sup> This argument fails because under the FEIR's reasoning, the Project would be consistent with SCAG's population growth projections even if it accounted for 99% of the City's forecasted population growth. SCAQMD's criterion does not call for analysis of whether a single project's population increase would exceed the entire City's projected growth. Rather, because the Project would generate a large increase in population *in addition* to the increase already forecasted from existing land uses, the Project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP. Thus, the Project would be inconsistent with the 2022 AQMP.

## C. The FEIR Fails to Mitigate the Project's Significant Construction Noise Impacts

CREED LA's comments on the DEIR explain that the City improperly assumes that construction noise impacts would be less than significant so long as construction takes place during permitted daytime hours.<sup>34</sup> In Response O1-6, the FEIR states that the City has substantial discretion to choose its thresholds of significance, pursuant to *King & Gardiner Farms, LLC v. County of Kern.*<sup>35</sup> The FEIR ignores that this discretion has a limit, which is reached when an agency ignores the magnitude of the increase in noise:

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<sup>&</sup>lt;sup>30</sup> DEIR, pg. 5.8-12.

<sup>&</sup>lt;sup>31</sup> SCAG, Connect SoCal Demographics and Growth Forecast (September 3, 2020), Pg. 23, available at <a href="https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal">https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal</a> demographics-and-growth-forecast.pdf?1606001579.

<sup>&</sup>lt;sup>32</sup> FEIR, pg. 2-71.

 $<sup>^{33}</sup>$  *Id*.

<sup>&</sup>lt;sup>34</sup> Letter from ABJC to City, pg. 13.

<sup>35 (2020) 45</sup> Cal.App.5th 814, 883.

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We recognize our Supreme Court has described the discretion to choose thresholds of significance as "substantial," but that discretionary authority is not unlimited or absolute. (Center for Biological Diversity, supra, 62 Cal.4th at p. 228, 195 Cal.Rptr.3d 247, 361 P.3d 342.) In Center for Biological Diversity, the Supreme Court concluded the lead agency was required "to support its chosen quantitative method for analyzing significance with evidence and reasoned argument." (Ibid.) Thus, "when the agency chooses to rely completely on a single quantitative method to justify a no-significance finding, CEQA demands the agency research and document the quantitative parameters essential to that method." (Ibid.) Here, the County has not documented how the single quantitative method, which does not consider the magnitude of the increase in noise, accurately describes how changes in noise levels affect human beings. 36

The Court explained the lead agency failed to "refer to evidence showing why the magnitude of an increase was irrelevant in determining the significance of a change in noise."37 Here, the DEIR's construction noise threshold fails to consider either the increase in noise or absolute noise level, without referring to any evidence showing why these metrics are irrelevant in determining the significance of a change in noise. The FEIR fails to correct this error. Response O1-6 fails to explain why the City believes the increase in noise or absolute noise level are irrelevant to evaluating noise impacts when CEQA requires this. Instead, the Response merely states that the DEIR adequately and conservatively characterized construction noise and ambient noise levels.<sup>38</sup> This Response ignores that these factors are not considered under the City's construction noise threshold – after characterizing the Project's construction noise, the DEIR states: "Project construction activities would occur within the allowable hours specified by the Municipal Code, and nighttime construction would not be required nor allowed... As such, impacts would be less than significant in this regard."39 In sum, the FEIR fails to explain why the increase in noise or absolute noise level are irrelevant to evaluating construction noise impacts. The Project's construction noise threshold is still not supported by substantial evidence.

Under a reasonable threshold that accounts for absolute noise level or the increase in noise over ambient levels, <sup>40</sup> the Project would likely result in significant

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<sup>&</sup>lt;sup>36</sup> *Id.* at 893-94.

<sup>&</sup>lt;sup>37</sup> *Id.* at 894.

<sup>&</sup>lt;sup>38</sup> FEIR. pg. 2-74.

<sup>&</sup>lt;sup>39</sup> DEIR, pg. 5.11-16.

<sup>&</sup>lt;sup>40</sup> Other applicable standards do exist for daytime construction noise impacts, such as in Section 7.1 of the Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual

construction noise impacts. The DEIR itself states that "typical construction noise levels would range from approximately 87 to 100 dBA at 15 feet and 81 to 94 dBA at 30 feet" and that the "closest sensitive receptors are the condominiums located at approximately 15 feet to the northwest corner of the project construction activities." <sup>41</sup> This absolute noise level is significant, as Exhibit 5.11-1 of the DEIR shows that noise levels above 80 dBA are "annoying – interferes with conversation," and no more than 15 minutes of exposure are recommended for noise levels of 100 dBA. <sup>42</sup> Further, 100 dBA is 20 dBA over the Federal Transit Administration's 80 dBA construction noise threshold for residential receptors <sup>43</sup> and 46 dBA over the ambient Leq at nearby residential receivers shown in Table 5.11-4 of the DEIR. A noise increase of 46 dBA, an increase of over ten times the ambient conditions <sup>44</sup>, would likely be considered a significant impact. As such, the EIR should be updated with a proper threshold, and in the likely chance of an exceedance, identify mitigation measures, such as temporary acoustic barriers.

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# D. The FEIR Fails to Disclose and Mitigate the Project's Significant Operational Noise Impacts

The FEIR fails to mitigate a significant operational noise impact apparent in the noise study. The FEIR sets a "daytime noise standards of 55 dBA." <sup>45</sup> The FEIR states that "parking activities can result in noise levels up to 61 dBA at a distance of 50 feet" and that the "nearest parking lot to sensitive receptors is located approximately 50 feet to the north (from the hospital to the south)." <sup>46</sup> The FEIR states that the project would provide a "minimum six-foot concrete-masonry-unit (CMU) wall" which "would provide a reduction of 5 dBA" <sup>47</sup> According to the FEIR's own data, the CMU wall would only attenuate levels to 56 dBA, which exceeds the 55 dBA threshold. This exceedance would be heightened if the combined noise of all operational noise sources (such as HVAC and other mechanical equipment) were considered together. Thus, the DEIR's conclusion that "noise impacts from parking lots would be less than significant" is unsupported by substantial evidence. The City must mitigate this impact in a revised and recirculated EIR before the Project can be approved. Mitigation, such as a taller wall that produces more attenuation, could

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<sup>(</sup>FTA), available at <a href="https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf">https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\_0.pdf</a>.

<sup>&</sup>lt;sup>41</sup> DEIR, pg. 5.11-16.

<sup>&</sup>lt;sup>42</sup> DEIR, pg. 5.11-2.

<sup>&</sup>lt;sup>43</sup> Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual, pg. 179.

<sup>44</sup> https://www.nps.gov/subjects/sound/understandingsound.htm

<sup>&</sup>lt;sup>45</sup> DEIR pg. 5.11-20.

<sup>&</sup>lt;sup>46</sup> DEIR pg. 5.11-20.

<sup>&</sup>lt;sup>47</sup> DEIR pg. 5.11-20.

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reduce these levels to below impact thresholds, and should be included as a mitigation measure.

A related issue is that the CMU wall is not identified as a mitigation measure separate from the Project's unmitigated impacts. The FEIR states that the project would provide an at least six feet concrete-masonry-unit (CMU) wall along the northern property line that would reduce noise levels from HVACs and the parking lot by 5 dBA.<sup>48</sup> The FEIR then concludes that operational impacts would be less than significant without any mitigation required.<sup>49</sup> The FEIR's approach violates CEQA because it fails to disclose the significance of the noise levels prior to mitigation, and fails to include the CMU as binding mitigation, making it an unenforceable proposal.

In Lotus v. Department of Transportation, an EIR prepared by the California Department of Transportation contained measures to help minimize potential stress on redwood trees during highway construction, such as restorative planting, invasive plant removal, watering, and use of an arborist and specialized excavation equipment. The Court of Appeal held that the EIR improperly compressed the analysis of impacts and mitigation measures into a single issue because the EIR did not designate the measures as mitigation and concluded that because of the measures, no significant impacts were anticipated. The Court explained that a significance determination must be made independent of mitigation first, then mitigation can be incorporated, and the effectiveness of those measures can be evaluated. Absent a determination regarding the significance of the impacts to the root systems of the old growth redwood trees, it is impossible to determine whether mitigation measures are required or to evaluate whether other more effective measures than those proposed should be considered.

Here, the FEIR's approach violates the principles articulated in *Lotus* by including the CMU wall in its analysis of the Project's unmitigated impacts. As a result of this error, the CMU wall is not included in the MMRP as a binding mitigation. <sup>54</sup> The City must revise the EIR to disclose the Project's significant operational noise impact and include barrier walls as a binding mitigation measure in the MMRP before the Project can be approved.

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<sup>&</sup>lt;sup>48</sup> DEIR, pg. 5.11-19, 20.

<sup>&</sup>lt;sup>49</sup> DEIR, pg. 5.11-21.

<sup>&</sup>lt;sup>50</sup> (2014) 223 Cal.App.4th 645, 658 (compression of mitigation measures into project design without acknowledging potentially significant impact if effects were not mitigated violates CEQA).

<sup>&</sup>lt;sup>51</sup> *Id.* at 656.

<sup>&</sup>lt;sup>52</sup> Id. at 654-656.

<sup>&</sup>lt;sup>53</sup> *Id*. at 656.

<sup>&</sup>lt;sup>54</sup> Id. at 651-52. (mitigation measures must be incorporated directly into the EIR to be enforceable).

# III. THE CITY CANNOT MAKE THE REQUISITE FINDINGS TO APPROVE THE PROJECT'S ENTITLEMENTS

The Commission will consider whether to approve the Project's General Plan Amendment, Zone Change, and Zoning Text Amendment. However, the City lacks substantial evidence to make the requisite findings due to the Project's significant and unmitigated environmental impacts. Draft Resolution No. 24-07, which would approve the General Plan Amendment, states:

WHEREAS, all of the requirements of the Public Resources Code and the California Environmental Quality Act ("CEQA") Guidelines have been satisfied by the City in connection with the preparation of the Final EIR, which is sufficiently detailed so that all of the potentially significant environmental effects of the Project have been adequately evaluated; and

WHEREAS, the Final EIR sufficiently analyzes the Project's potentially significant environmental impacts and a reasonable range of feasible alternatives capable of reducing these effects to less than significant levels to the extent feasible.<sup>55</sup>

Similarly, Draft Resolution No. 24-08 (approving a Zone Change) and Draft Resolution No. 24-09 (approving a Zoning Text Amendment), provide that an EIR was prepared to address the potential environmental effects of the Norwalk Transit Village Specific Plan and impose mitigation measures to reduce potential impacts resulting from project implementation. <sup>56</sup> These findings are not supported by substantial evidence, as CREED LA has presented substantial evidence demonstrating that the Project has significant and unmitigated health risk, air quality, and noise impacts. The Project cannot be recommended for approval until these impacts are fully analyzed and mitigated in accordance with CEQA.

#### IV. CONCLUSION

As is explained herein, the FEIR's analyses remain substantially inaccurate and incomplete, failing to comply with the requirements of CEQA. As a result, the FEIR still fails to adequately disclose and mitigate the Project's significant impacts. As a consequence of these impacts, the City cannot make the requisite findings under CEQA to certify the FEIR or under the City's Municipal Code to approve the

<sup>&</sup>lt;sup>55</sup> Norwalk Planning Commission, Draft Resolution No. 24-07, pg. 2.

<sup>&</sup>lt;sup>56</sup> Resolution No. 24-08, pg. 1; Resolution No. 24-09, pg. 1.

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Project's entitlements. CREED LA urges the Commission to recommend the City revise and recirculate the EIR before any further action is taken on the Project.

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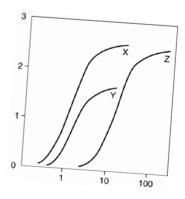
Sincerely,

Aidan P. Marshall

Anter Medal

Attachment APM:acp

# **EXHIBIT A**



Clark & Associates
Environmental Consulting, Inc.

## OFFICE 12405 Venice Blvd Suite 331 Los Angeles, CA 90066

**PHONE** 310-907-6165

**FAX** 310-398-7626

**EMAIL** jclark.assoc@gmail.com

July 9, 2024

Adams Broadwell Joseph & Cardozo 601 Gateway Boulevard, Suite 1000 South San Francisco, CA 94080

Attn: Mr. Aidan Marshall

Subject: Comments On Final Environmental Impact Report (FEIR) Norwalk Transit Village, SCH Number 2022070103

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to the June 2024 City of Norwalk (the City) FEIR of the above referenced project.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the plan. If we do not comment on a specific item this does not constitute acceptance of the item.

According to the DEIR<sup>1</sup>, the proposed project would be constructed in one phase over a period of approximately six years with construction estimated to begin in the second quarter of 2024 and completed in second quarter 2030. The following activities would occur under the singular phase:

- Demolition (approximately five months);
- Grading (approximately five months);
- Paving (approximately seven months);
- Construction (approximately seven months for each building [over a period of approximately three years]); and
- Painting/Architectural Treatments (approximately four months for each building)

<sup>&</sup>lt;sup>1</sup> City of Norwalk. 2024. Draft Environmental Impact Report Norwalk Transit Village. Dated February 2024. Pg 3-20-21

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The DEIR proposes that the overall grading would involve approximately 35,252 cubic yards of cut and 2,348 cubic yards of fill1, necessitating approximately 60,510 cubic yards of soil to be imported.

In June 2024, the City published a FEIR of the Project that included responses to the comments provided previously on the DEIR. The responses provided in the FEIR are inadequate and fail to address the significant concerns raised in my comment letter. The City must revise its FEIR to address each of the concerns below.

#### **Specific Comments**

# 1. Response To O1-3/O1-11: The DEIR Fails To Disclose The Project's Potential Health Risk Impacts Associated With Toxic Air Contaminant (TAC) Emissions.

According to the FEIR, with regard to TAC emissions during project construction, the City asserts that it followed the SCAQMD guidance for the preparation of CEQA air quality analyses, which does not require preparation of an HRA for short-term construction activities. The City cites the SCAQMD's Final Localized Significance Threshold Methodology, June 2003, revised July 2008.

However, according to the SCAQMD's Localized Significance Threshold (LST) website, "LSTs are only applicable to the following criteria pollutants: oxides of nitrogen ( $NO_X$ ), carbon monoxide (CO), particulate matter less than 10 microns in aerodynamic diameter ( $PM_{10}$ ) and particulate matter less than 2.5 microns in aerodynamic diameter ( $PM_{2.5}$ ). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. For  $PM_{10}$  LSTs were derived based on requirements in SCAQMD Rule 403 – Fugitive Dust." Nowhere in the guidance cited is there a reference to toxic air contaminants and health risk.

In the SCAQMD's Air Quality Significance Thresholds, there are mass daily thresholds for criteria pollutants (NO<sub>X</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, CO and Lead). For TACs SCAQMD lists the thresholds based on their potential to cause risk, without a limitation on the emission duration.



1	South Coast
(T)	South Coast Air Quality Management District
	21865 Copley Drive, Diamond Bar, CA 91765-4178
	(909) 396-2000 • www.aqmd.gov

South Coast AQMD	Air Quality Sign	ificance Thresholds
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Mass Daily Thresholds <sup>a</sup>			
Pollutant	Construction	Operation	
NO <sub>3</sub>	100 lbs/day	55 lbs/day	
VOC	75 lbs/day	55 lbs/day	
PM <sub>10</sub>	150 lbs/day	150 fbs/day	
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day	
SOz	150 Ths/day	150 lbs/day	
co	550 lbs/day	550 lbs/day	
Lead	3 lbs/day	3 lbs/day	
Toxic Air Cont	aminants (TACs), Odor, and G	HG Thresholds	
TACs (including carcinogens and non- carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)		
Odor	Project creates an odor missance pursuant to South Coast AQMD Rule 402		
GHG	10,000 MT/yr COyeg for industrial facilities		

In the SCAQMD's Risk Assessment Procedures For Rules 1401, 1401.1 & 212 (the SCAQMD's primary guidance on the preparation of HRAs), notes that the procedures outlined in the SCAQMD's guidance is based on the "Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments" (2015 OEHHA Guidelines) prepared by the Office of Environmental Health Hazard Assessment (OEHHA) and approved on March 6, 2015.<sup>2</sup> In the OEHHA guidance<sup>3</sup>, OEHHA recommended "that exposure from projects longer than 2 months but less than 6 months be assumed to last 6 months (e.g., a 2-month project would be evaluated as if it lasted 6 months). Exposure from projects lasting more than 6 months should be evaluated for the duration of the project." Since the Project construction phase is calculated to last for 6 years according to the FEIR, the duration of exposure from the construction phase should be evaluated for the total duration of the Project.

Additionally, the City must consider the health impacts from the construction and operational phases of the Project that occur concurrently. SCAQMD has commented on other development

<sup>&</sup>lt;sup>2</sup> SCAQMD. 2017. Risk Assessment Procedures For Rules 1401, 1401.1, and 212. Version 8.1 Dated September 1, 2017. Pg. 1.

<sup>&</sup>lt;sup>3</sup> OEHHA. 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Pg 8-18

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projects that emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.<sup>4</sup> SCAQMD also notes that if a proposed project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment.

As I demonstrated in my initial comment letter, using the OEHHA's Toxic Hot Spot Emissions Guidance, the cancer risk to the most sensitive population, infants and children less than 3 years old was calculated. The maximum risk for exposure of infants and children less than 3 years old (assumed exposure of three years) to DPM from the construction activities north of the Project site during 3 years of construction is 38.7 in 1,000,000, much greater than the 10 in 1,000,000 threshold outlined by SCAQMD. The maximum risk for exposure of infants and children less than 3 years old (assumed exposure of three years) to DPM from the construction activities west of the Project site during 3 years of construction is 12.5 in 1,000,000, resulting in a significant impact. The maximum risk for exposure of infants and children less than 3 years old (assumed exposure of three years) to DPM from the construction activities south of the Project site during 3 years of construction is 22.6 in 1,000,000, resulting in a significant impact. The City must evaluate the risk from TACs in a quantitative fashion in a revised FEIR.

# 2. Response to O1-5: The Draft EIR Underestimated Operational Air Emissions By Not Including Operational Emissions Associated With Backup Generators.

The City claims that the EIR identifies one proposed backup generator associated with the new sewer lift station. Other generators and fire pump systems that would need to be installed in the Project are not listed or described. The proposed sewer lift backup generator would only be used sporadically for emergency purposes in the event that the proposed pumping system for the sump tank failed to have continuous power. The testing period of the backup generator is unknown at this time; however, according to CARB's Airborne Toxic Control Measure for Stationary Compression Ignition Engines periodic testing would be limited to up to 50 hours per year. The City goes on to state that no-project specific modeling was conducted as part of the Final EIR. Just as with Comment 01-3 above, it is the

<sup>&</sup>lt;sup>4</sup> SCAQMD. 2022. 20223 Response To Notice Of Preparation of a DEIR for the 5355 Airport Drive (PDEV22-107). Letter to Thomas Grahn from Sam Wong, SCAQMD.

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City's responsibility to quantify accurately all of the emissions from the Project and to quantify the potential health risk from the releases of TACs from the Project. Statements by the City that emissions from the back-up generator would be nominal are not responsive to the question regarding the amount of emissions and their health impacts.

The inherent toxicity of the TACs requires the City to first quantify the concentration released into the environment at each of the sensitive receptor locations through air dispersion modeling, calculate the dose of each TAC at that location, and quantify the cancer risk and hazard index for each of the chemicals of concern. Following that analysis, then the City can make a determination of the relative significance of the emissions. The City's failure to perform such an analysis is clearly a major flaw in the DEIR and may be placing the residents of the adjacent structures at risk from the construction and operational phases of the Project.

### 3. Response To O1-12: Inputs To Quantitative HRA Of Construction Risk

The City claims that differences in the input values used in my analysis invalidate the conclusions of the HRA. First, the input values are derived from the emission estimates calculated in the Air Quality Analysis. As was explained in the initial comment letter, the emission rate of DPM from the Project Site is based on the lowest rate calculated by the City in its Air Quality Analysis (1.0205 lbs per day or 462.89 grams). This approach underestimates the potential concentration of DPM being emitted from the source over the course of the Project construction phase. This modeling approach is consistent with guidance from DTSC<sup>5</sup> and SCAQMD<sup>6</sup>, which require models to describe possible dispersion routes for a release of chemicals. Second, the smaller area assumed in the model (for the area source) is used to calculate an emission rate based on the area of potential sources at the Project Site. Since the amount being emitted is fixed (1.0205 lbs per day), the area over which the amount is being emitted has a *de minimis* impact on the modeling. The driving factors in any dispersion model are the amount being emitted, the windspeed and direction, and any driving mechanism which may send the particle higher into the atmosphere. Third, the City claims in the FEIR that when calculating emission rate, the commenter assumed construction activities to occur

<sup>&</sup>lt;sup>5</sup> DTSC. 2015. Preliminary Endangerment Assessment Guidance Manual. Pg. 82

<sup>&</sup>lt;sup>6</sup> SCAQMD. SCAQMD. 2017. Risk Assessment Procedures For Rules 1401, 1401.1, and 212. Version 8.1 Dated September 1, 2017.

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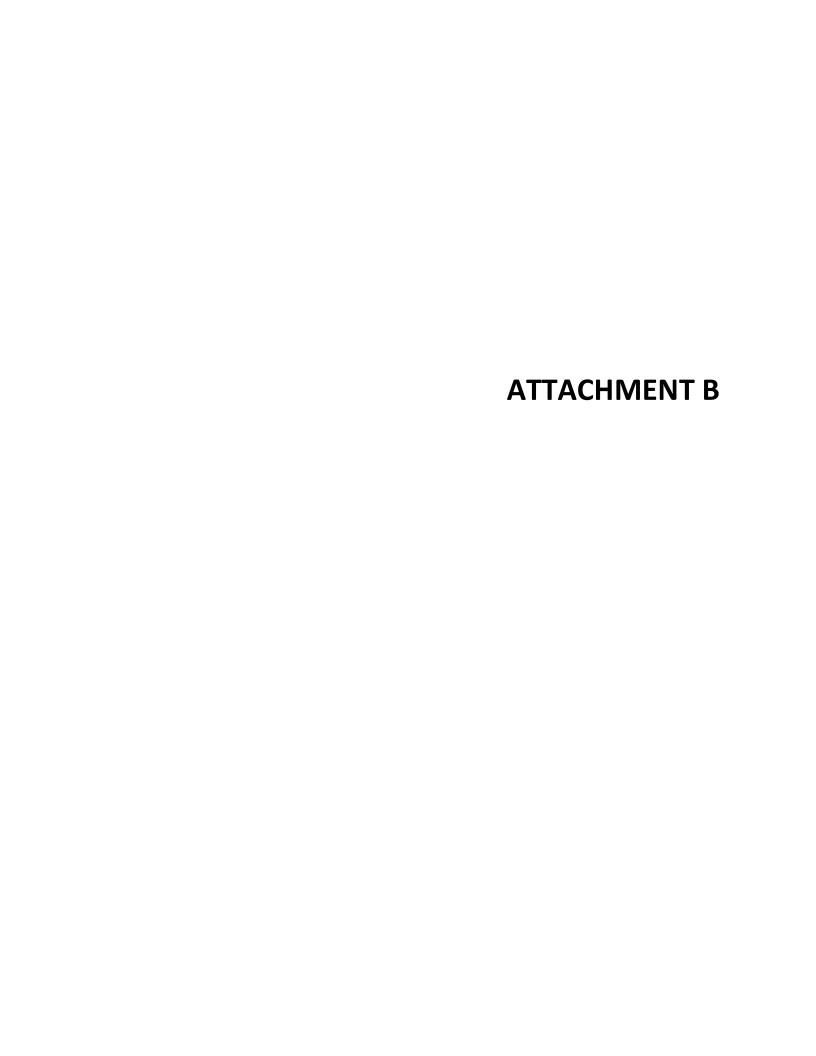
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every day, including weekdays and weekends, while in fact construction activities would only occur during weekdays. This is not factually correct. On page 8 of my comments, I clearly stated that construction emissions were limited to an eight-hour period during weekdays. The annual average ground level concentration of DPM from those construction emissions was used to calculate the potential health risk for residents to the north, west, and south of the Project Site. With limited emissions, a smaller area of release, and shorter exposure duration (3 years not 6 years), the calculated health risk for the most sensitive receptors exceeded 10 in 1,000,000 (the significance threshold). The model output is provided as an attachment to this letter. The differences pointed out by the City have no impact on the conclusion that the construction phase emissions need to be reduced significantly to prevent harm to the residents near to the Project. An HRA must be prepared by the City for the construction and operational phases of the Project and presented in a revised FEIR.

#### **Conclusion**

The facts identified and referenced in this comment letter lead me to reasonably conclude that the Project could result in significant impacts if allowed to proceed. A revised draft environmental impact report should be prepared to address these substantial concerns.

Sincerely,





#### MEMORANDUM

**To:** Kristen Bogue, Michael Baker International

From: Darshan Shivaiah, Michael Baker International

Date: September 13, 2024

**Subject:** Norwalk Transit Village – Construction Health Risk Assessment Technical Memorandum

#### **PURPOSE**

The purpose of this Health Risk Assessment (HRA) is to evaluate potential health risks associated with toxic air contaminants (TAC), including diesel particulate matter (DPM) emissions associated with construction of the proposed Norwalk Transit Village Project (project) in the City of Norwalk (City), California. As discussed in the EIR for the project, the project would have less than significant air quality impacts, and a HRA is not required under the South Coast Air Quality Management District's guidance for the preparation of CEQA air quality analyses. Nevertheless, this HRA was prepared for informational purposes and in response to comments. This HRA was prepared in accordance with the requirements of the South Coast Air Quality Management District (SCAQMD) and guidance from the Office of Environmental Health Hazard Assessment (OEHHA) to determine if health risks are likely to occur near the proposed project.

#### **PROJECT LOCATION**

The proposed Norwalk Transit Village (project) site is located at 13200 Bloomfield Avenue, in the City of Norwalk. The City of Norwalk (City) is located in the southeastern portion of Los Angeles County.

The project site is generally situated between Imperial Highway to the north, Zimmerman Park and the Union Pacific Railroad to the east, and Bloomfield Avenue to the west. The project site (Assessor's Parcel Number [APN] 8045-008-902) is located within a predominantly residential area, with a residential townhome community to the north (Norwalk Manor); a 9.4-acre public park (Zimmerman Park) to the east; single-family residential units, a senior residential community, and a hospital (Norwalk Community Hospital) to the south; and single-family residential units to the west, across Bloomfield Avenue.

#### **EXISTING SITE CONDITIONS**

The project site is currently developed with 27 buildings (with ancillary structures) and was, until early 2022, being utilized by the California Department of State Hospitals as a temporary hospital facility. The 32.3-acre project site was originally utilized as a facility for the California Division of Juvenile Justice

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(formerly known as the California Youth Authority [CYA]). On-site structures (constructed in 1950) feature low, detached modular buildings set around centralized recreational fields, emphasizing outdoor space.

The centers were secure and fireproof, with construction materials largely consisting of concrete and brick. Other on-site structures include ancillary structures for expanded dormitories, kitchens, and learning spaces. While the majority of on-site structures were utilized for institutional purposes, there are also three vacant single-family residences on-site that were used for on-site employee housing. The project site includes multiple unpaved vacant areas, two open space fields, and a track and field. The site is accessed via two on-site driveways at Bloomfield Avenue. On-site ornamental landscaping includes ornamental trees and shrubs throughout.

#### PROJECT DESCRIPTION

The project proposes the Norwalk Transit Village Specific Plan (Specific Plan) to allow the demolition of the former CYA facility and construction of a mixed-use transit-oriented community with a mix of retail, hospitality, multi-family residential uses, and park/open space land uses. The proposed Specific Plan would establish development guidelines and standards that would be used to regulate basic planning and development concepts for future development within the project site.

The proposed Specific Plan would allow the following within eight Planning Areas:

- A new neighborhood commercial center encompassing approximately 3.06 acres of the site. The
  commercial center (approximately 66,647 square feet of building area) would be situated in the
  westerly portion of the project adjacent to Bloomfield Avenue. The neighborhood commercial
  center would include non-residential uses at a maximum floor-to-area ratio (FAR) of 0.5, as well
  as an approximately 150-key hotel. The 0.5 FAR excludes the hotel use.
- Residential blocks would allow up to 770 residential units (at a density that ranges between 20 to 85 dwelling units per acre [du/ac]) that would consist of the following:
  - A mix of multi-family units, apartments, and townhomes;
  - At least 40 percent of the total number of residential units in the project as affordable, compliant with the Surplus Land Act exemption per AB 518; and
  - Each residential block would be permitted to contain up to 3,500 square feet of ground floor ancillary commercial uses allowing a maximum of 13,500 square feet of ancillary commercial/quasi-civic uses such as childcare and community services in total for the project.
    - The ancillary commercial uses allowed within the residential blocks is in addition to the non-residential commercial uses allowed in Planning Area 1
- Open space would be provided through a combination of common and private, active and passive recreation areas, including a 1.56-acre park and 2.06 acres of linear parks; the 2.06 acres would be comprised of a 1.53-acre linear park and a 0.28-acre contiguous dog run.
- A 0.25-acre pump station is conceptually located in the northeast portion of Planning Area 8.

It is anticipated that the proposed project would be constructed in one phase over a period of approximately six years with construction estimated to begin in the second quarter of 2024 and completed in second quarter 2030.

#### **ENVIRONMENTAL SETTING**

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The project site lies within the South Coast Air Basin (Basin). The Basin is a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The Basin's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate.

#### **TOXIC AIR CONTAMINANTS**

Toxic air contaminants (TACs) are airborne substances capable of causing short-term (acute) and/or long-term (chronic) or carcinogenic (i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs identifies approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Hazardous air pollutant (HAP) is a term used in the Federal Clean Air Act (FCAA) and includes a variety of pollutants generated or emitted by industrial production activities. Identified as TACs under the California Clean Air Act (CCAA), ten pollutants have been singled out through ambient air quality data as being the most substantial health risks in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, brain and nervous system damage, and respiratory disorders.

TACs do not have ambient air quality standards because no safe levels of TACs can be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities subject to the toxic emission inventory requirements of AB 2588 must prepare, submit, and periodically update their toxic emission inventory plans and reports.

Toxic contaminants often result from fugitive emissions during fuel storage and transfer activities, and from leaking valves and pipes. For example, the electronics industry, including semiconductor manufacturing, uses highly toxic chlorinated solvents in semiconductor production processes. Automobile exhaust also contains toxic air pollutants such as benzene and 1,3-butadiene.

#### **Diesel Particulate Matter**

Diesel particulate matter (DPM) is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources, such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute approximately five percent of total DPM in the State. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan, the Statewide Portable Equipment Registration Program (PERP), and the Diesel Off-Road Online Reporting System (DOORS). PERP and DOORS allow owners or operators of portable engines and certain other types of equipment to register their equipment in order to operate them in the State without having to obtain individual permits from local air districts.

Diesel exhaust and many individual substances contained in it (e.g., arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by OEHHA. CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel particle levels measured in California's air in 2000 could cause 540 "excess" cancers in a population of one million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute for Occupational Safety and Health, have calculated cancer risks from diesel exhaust similar to those developed by OEHHA and CARB.

Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and can cause coughing, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen.

#### **REGULATORY SETTING**

#### **Federal**

<u>Federal Clean Air Act</u>. The FCAA of 1970 and the FCAA Amendments of 1971 required the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS), which required the EPA to adopt more stringent air quality standards or to include standards for other specific pollutants. The FCAA was amended in 1990 to address a large number of air pollutants that are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects. A total of 188 specific pollutants and chemical groups were initially identified as HAPs, and the list has been modified over time. The FCAA Amendments included new regulatory programs to control acid deposition and regulate the issuance of stationary source operating permits.

<u>Mobile Source Air Toxics Rule</u>. In 2001, the EPA issued its first Mobile Source Air Toxics (MSAT) Rule, which identified 21 MSAT compounds as being HAPs that required regulation. A subset of six MSAT compounds were identified as having the greatest influence on health, including benzene, 1,3-butadiene,

formaldehyde, acrolein, acetaldehyde, and DPM. In February 2007, the EPA issued a second MSAT Rule that generally supported the findings in the first rule and provided additional recommendations of compounds having the greatest impact on health. The rule also identified several engine emission certification standards that must be implemented. Unlike criteria pollutants, MSATs do not have NAAQS, making evaluation of their impacts more subjective. In April 2014, the EPA issued a third MSAT Rule that established the Tier 3 standards, which are part of a comprehensive approach to reducing the impacts of motor vehicles on air quality and public health.

National Emissions Standards for Hazardous Air Pollutants Program. Under federal law, 187 substances are listed as HAPs. Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants program. The EPA is establishing regulatory schemes for specific source categories and requires implementation of Maximum Achievable Control Technologies for major sources of HAPs in each source category. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and is aimed at HAPs that are specific problems in California. The State has formally identified 244 substances as TACs and is adopting appropriate control measures for each TAC. Once adopted at the state level, each air district will be required to adopt a control measure that is equal or more stringent.

#### State

California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588). Enacted in 1987, AB 2588 is a statewide program that requires facilities exceeding recommended OEHHA levels to reduce risks to acceptable levels. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform an HRA and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, AB 2588 was amended by Senate Bill 1731, which required facilities that pose a significant health risk to the community to reduce their risk by developing a risk management plan.

Diesel exhaust is mainly composed of particulate matter (PM) and gases, which contain potential cancercausing substances. Emissions from diesel engines currently include over 40 substances that are listed by EPA as HAPs and by CARB as TACs. On August 27, 1998, CARB identified PM in diesel exhaust as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease.

Toxic Air Contaminant Identification and Control Act (AB 1807). CARB's statewide comprehensive air toxics program was established in 1983 with the Toxic Air Contaminant Identification and Control Act. AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

<u>Diesel Reduction Plan</u>. In September 2000, CARB adopted a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles. The goal of the plan is to reduce DPM emissions and its associated health risk by 75 percent in 2010 and by 85 percent by 2020. As part of this plan, CARB identified ATCM for mobile and stationary emissions sources. Each ATCM is codified in the California Code of Regulations (CCR), including the ATCM to limit diesel-fueled commercial

motor vehicle idling, which puts limits on idling time for large diesel engines (13 CCR Chapter 10 Section 2485).

California Building Energy Efficiency Standards (Title 24). In 1978, the California Energy Commission established the State's energy efficiency standards for residential and non-residential buildings in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. The Title 24 standards were last updated in 2022 and took effect on January 1, 2023. Under the 2022 standards, residential and non-residential buildings are required to have air filters with a designated efficiency equal to or greater than Minimum Efficiency Reporting Value (MERV) 13 when tested in accordance with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 52.2. Per ASHRAE Standard 52.2, MERV 13 filters are able to filter out 50 percent of particles within 0.3 to 1.0 micrometers ( $\mu$ m), 85 percent of particles within 1.0 to 3.0  $\mu$ m, and 90 percent of particles within 3.0 to 10  $\mu$ m.

<u>California Air Resource Board Air Quality and Land Use Handbook</u>. The CARB primary goal in developing the Air Quality and Land Use Handbook is to provide information that will help keep California's children and other vulnerable populations out of harm's way with respect to nearby sources of air pollution. Reducing diesel particulate emissions is one of CARB's highest public health priorities and the focus of a comprehensive statewide control program that is reducing DPM emissions each year. The City will also apply the CARB Air Quality and Land Use Handbook for recommendations on siting distances for sensitive or noxious uses.

#### Regional

<u>South Coast Air Quality Management District</u>. The CCAA provides the SCAQMD with the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. An example of this would be the motor vehicles at an intersection, a mall, and on highways. As a state agency, CARB regulates motor vehicles and fuels for their emissions.

The Air Toxics Control Plan (March 2004) is a planning document designed to examine the overall direction of the SCAQMD's air toxics control program. It includes development and implementation of strategic initiatives to monitor and control air toxics emissions. Control strategies that are deemed viable and are within the SCAQMD's jurisdiction will each be brought to the SCAQMD Board for further consideration through the normal public review process. Strategies that are to be implemented by other agencies will be developed in a cooperative effort, and the progress will be reported back to the SCAQMD Board periodically.

The SCAQMD has conducted an in-depth analysis of the TACs and their resulting health risks, called the MATES program. The latest MATES study, MATES V study includes a fixed site monitoring program with ten stations, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the Basin. Therefore, the MATES V study represents the baseline health risk for cumulative analysis. MATES V estimates the average excess cancer risk level from exposure to TACs is less than 400 in one million Basin-wide. These model estimates were based on monitoring data collected at ten fixed sites within the Basin. None of the fixed monitoring sites are within the local area of the project site. However, MATES V has extrapolated the excess cancer risk levels throughout the Basin by modeling the specific grids. DPM is included in this cancer risk along with all other TAC sources. Cumulative project-generated TACs are limited to DPM. The average levels of PM in MATES V are 53 percent lower at the ten

monitoring sites compared to MATES IV and 86 percent lower since MATES II based on monitored data.

#### SIGNIFICANCE CRITERIA AND METHODOLOGY

#### **Health Risk Analysis Thresholds**

The City follows SCAQMD's guidance for the preparation of CEQA air quality analyses, which does not require preparation of an HRA for short-term construction activities. The primary purpose of an HRA is to determine long-term health risks, such as individualized cancer risks over, for example, a 30-year residency or 70-year lifetime. SCAQMD's HRA procedures recommend evaluating risk from extended exposures measured across several years and not for short-term construction exposures.<sup>2</sup> Project construction activities are expected to occur well below the 30-year exposure period used in health risk assessments; construction of the project would take place over in one phase over a period of approximately six years and would not involve extremely intensive activities or unusual heavy equipment. Localized significance thresholds (LSTs) methodology and mass rate look-up tables by source receptor area (SRA) were developed by the SCAQMD to be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area. Specifically, if the calculated emissions for the proposed construction or operational activities are below the LST emission levels found on the LST mass rate look-up tables, then the proposed construction or operation activity is not considered to result in significant impact for localized air quality. As discussed in Section 5.8, Air Quality (page 5.8-22) of the Draft Environmental Impact Report (Draft EIR) (State Clearinghouse No. 2022070103) prepared for the proposed project, the project's localized air emissions during construction would be below SCAQMD LSTs. Therefore, a significant localized construction impact would not occur, and a quantitative construction HRA is not necessary.

However, for informational purposes, the health risk analysis examines the types and levels of air toxics generated and the associated effects on factors that affect air quality. SCAQMD recommends that the following air pollution thresholds be used in determining whether a project results in potentially significant health risks. If the proposed project is found to have the potential to exceed the following air pollution thresholds, the health risk would be considered significant.

- Cancer Risk: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million.
- Non-Cancer Risk: Emit toxic contaminants that exceed the maximum hazard quotient of 1.

Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact. The 10 in one million standard is a very health-protective significance threshold. A risk level of 10 in one million implies a likelihood that up

South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, June 2003, revised July 2008.

South Coast Air Quality Management District, AB 2588 and Rule 1402 Supplemental Guidelines, October 2020.

to 10 persons out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics.

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a "hazard index" (HI), expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less than one (1.0) means that adverse health effects are not expected. As such, non-carcinogenic exposures of less than 1.0 are considered less than significant.

#### Methodology

The air dispersion modeling for the HRA was performed using the EPA AERMOD dispersion model, version 12.0.0. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data provided by the SCAQMD for the Pico Rivera (PICO) Monitoring Station was selected as being the most representative meteorology based on proximity to the project site.<sup>3</sup>

#### **Construction**

The project site was modeled as one defined polygonal area source. The polygonal area source represents the construction emissions from the project. The emission rate for exhaust particulate matter 10 micrometers and smaller (PM<sub>10</sub>), or in this case DPM, was calculated using the most recent version of the California Emissions Estimator Model (CalEEMod), version 2022.1; Refer to Appendix A, Dispersion Modeling Data. Construction activities for the proposed project would include demolition, grading, building construction, paving, and architectural coating. The project would be constructed over approximately six years. Exhaust emission factors for typical diesel-powered heavy equipment are based on the program defaults of the most recent version of the CalEEMod, which has been used to prepare the analysis of daily construction emissions. Section 2.14 of the proposed Specific Plan dated July 2024 requires an off-road construction equipment plan to be approved by the Community Development Director prior to the issuance of the first grading permit for the project, and the plan must confirm that the construction health risk posed by the proposed fleet would be less than the SCAQMD's threshold of 10 in one million. Section 2.14 of the proposed Specific Plan provides that the off-road construction equipment plan may include the use of equipment that meets EPA Tier 4 engine standards; alternativelyfueled equipment (i.e., non-diesel); the use of added exhaust devices; or a combination of measures, provided that the measures are approved by the Community Development Director and demonstrated to result in a construction health risk of less than the SCAQMD threshold of 10 in one million. As such, in compliance with Section 2.14 of the Specific Plan, the project proposes an off-road construction equipment fleet that includes construction equipment rated with Tier 4 (model year 2008 or newer) emission limits, for all engines more than 50 horsepower (HP), which has been accounted for in CalEEMod modeling.

South Coast Air Quality Management District, SCAQMD Meteorological Data for AERMOD, http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod, accessed June 26, 2024.

The project's on-site exhaust PM<sub>10</sub> emissions from all construction phases were summed and averaged over the construction period of 1,308 days, consistent with the construction schedule modeled in CalEEMod.<sup>4</sup> Based on the CalEEMod output, on-site construction activities would generate 0.0738 tons (147.6 pounds) of on-site exhaust PM<sub>10</sub> emissions in total. A release height of 14 feet (4.27 meters) was used in the model, which is representative of the average stack height for heavy duty construction equipment.<sup>5</sup> In addition, the project's off-site construction activities consisting of hauling were modeled as two line-volume sources along Bloomfield Avenue and Imperial Highway. Based on CalEEMod output, the project would generate a total of 8,865 one-way truck trips during demolition and grading phases combined, which was averaged over the construction period of 1,308 days to calculate emission rates. Refer to Appendix A for all emission calculations and AERMOD modeling results.

A model run was conducted to obtain the peak 1-hour and annual average  $PM_{10}$  concentration in micrograms per cubic meter ( $\mu g/m^3$ ) at nearby sensitive receptors. Due to the location and spacing of the sensitive receptors and the location of all truck hauling roads, receptors were modeled with a 100-meter (328 feet) by 100-meter (328 feet) grid spacing over an approximately 2.0 kilometer (km) by 2.0 km area (BACKGRND). In addition, smaller sensitive receptor grids of 40 meters (131 feet) by 40 meters (131 feet) were modeled over nearby sensitive receptor locations of concern. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. Several sensitive receptors are surrounding the project site and the nearest sensitive receptors are listed in Table 1, Nearest Sensitive Receptors.

Table 1
Nearest Sensitive Receptors

Land Uses	Name	Direction from Project Site	Location
	Norwalk Manor	North	12918 Bloomfield Avenue, Norwalk, CA 90650
	Single Family Residences	South	Several single-family dwelling units located immediately to the west of the project site.
Residential	Soroptimist Village	Southwest	12657 Foster Road Unit 47, Norwalk, CA 90650
	Single Family Residences	West	Several single-family dwelling units located across Bloomfield Avenue to the west of the project site.
Hospital	Norwalk Community Hospital	Southwest	13222 Bloomfield Avenue, Norwalk, CA 90650
Park	Zimmerman Park	East	13031 Shoemaker Ave, Norwalk, CA 90650
Source: Google Earth, 2022.			

<sup>&</sup>lt;sup>4</sup> Refer to the emissions in CalEEMod output sheets provided in <u>Appendix A</u>. Emissions include project compliance with SCAQMD rules and the incorporation of Tier 4 equipment over 50 hp consistent with the development standards specified in the Specific Plan.

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Plume height and plume width of the emissions from heavy trucks were calculated using Haul Road Volume Source Calculator built in AERMOD using roadway width of each roadway segment and vehicle height of 4.27 meters (14 feet) in compliance with the California Vehicle Code (CVC) Section 35250.

It should be noted that the concentration estimate developed using this methodology is considered conservative and is not a specific prediction of the actual concentrations that would occur at any one point over the course of the construction period. Actual 1-hour and annual average concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology. Various activities would occur at different locations throughout the 32.3-acre project site and would not be concentrated or confined to the area directly adjacent to sensitive receptors.

According to the project's construction activities modeled in CalEEMod, construction equipment would operate up to eight hours per day, five days per week. Construction activities would occur only on weekdays, no construction activities would occur on Saturday or Sunday. Therefore, the 8-hour breathing rates were used and the exposure frequency was set as 250 days per year.

According to the OEHHA Guidance Manual, young children are more sensitive than adults to exposure to many carcinogens. Therefore, OEHHA developed age sensitivity factors (ASFs) to take into account the increased sensitivity to carcinogens during early-in-life exposure. In addition, young children have higher breathing rates than adults. As a result, young children are subject to higher levels of health risks than adults. As shown in <a href="Table 1">Table 1</a>, there is an existing hospital use to the southwest and a park use to the east. Although there is a possibility of infants and young children visiting these locations, they would only stay for a short period of time. As the health risk of construction related carcinogens are accumulated over six years (construction period) of time, the health risk to the sensitive receptors at the hospital and park would be lower. However, as a conservative analysis, carcinogenic risks for populations starting from the third trimester were calculated to represent overall risks at all receptors near the project site, including the hospital and the park, by modeling them as residential receptors. It should be noted that health risk is presented as the likelihood of the population contracting cancer (for example, a cancer risk of 10 in one million means 10 people out of one million would contract cancer), and therefore by assuming the entire population exposed to the emissions from the third trimester, this analysis is conservative.

#### **Risk and Hazard Assessment**

The Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion Modeling and Risk Tool (ADMRT) was employed to calculate the health risks related to the construction of the project. HARP2 was created for the purpose of assisting and supporting the local California Air Pollution Control and Air Quality Management Districts with implementing the requirements of AB 2588. Although designed to meet the programmatic requirements of AB 2588, HARP2 modules have also been used for preparing risk assessments for other air related programs (e.g., air toxic control measure development, facility permitting applications, ambient monitoring evaluations, and CEQA review).

The risk analysis algorithms and default values used in HARP2 are based on the OEHHA guidelines set forth in the revised *Technical Support Document for Exposure Assessment and Stochastic Analysis*. All equations, default parameter values, and variable distributions encoded into HARP2 are from the OEHHA Guidance Manual. More specifically, the ADMRT module in HARP2 allows users to:

- Calculate potential health impacts using a ground level concentration;
- Evaluate one or multiple pollutants for one or multiple receptor points;

Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program Risk Assessment Guidelines Technical Support Document for Exposure Assessment and Stochastic Analysis, https://oehha.ca.gov/media/downloads/crnr/110711exposuretsd.pdf, accessed June 26, 2024.

- Calculate cancer and non-cancer (e.g., acute, 8-hour, and chronic) health impacts using the new risk assessment guidelines in the OEHHA Guidance Manual;
- Use point estimates to calculate inhalation and multi-pathway risks; and
- Perform stochastic health risk analyses.

<u>Cancer Risk</u>. Based on the OEHHA methodology, the inhalation cancer risk from annual average DPM concentrations is calculated by multiplying the daily inhalation or oral dose by a cancer potency factor, an age sensitivity factor (ASF), the fraction of time spent at home<sup>7</sup> and the exposure duration divided by averaging time, to yield the excess cancer risk. These factors are discussed in more detail below.

Exposure through inhalation (Dose-air) is a function of breathing rate, exposure frequency, and concentration of a substance in the air. For residential exposure, breathing rates are established for specific age groups; therefore, Dose-air is calculated for each of the following age groups: third trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. To estimate cancer risk, the dose was estimated by applying the following formula to each ground level concentration:

Dose-air =  $(C_{air} * \{BR/BW\} * A * EF * 10^{-6})$ 

Where:

Dose-air = dose through inhalation (microgram per kilogram per day; mg/kg/day)

 $C_{air}$  = air concentration (µg/m<sup>3</sup>) from air dispersion model

{BR/BW} = 95<sup>th</sup> percentile daily breathing rate normalized to body weight (liters per

kilogram [L/kg] body weight [BW]-day) (361 L\kg BW-day for third trimester, 1,090 L/kg BW-day for 0<2 years, 861 L/kg BW-day for 2<9 years, 745 L/kg BW-day for 2<16 years, 335 L/kg BW-day for 16<30 years, and 290 L/kg BW-day for 16<40 years, and 290 L/kg BW-day for 18<40 years, and 290 L/kg BW-day for 18<40 years, and 290 L/kg BW-day for 18<40 years, and 20 years, a

day 16<70 years)

A = Inhalation absorption factor (unitless [1])

EF = exposure frequency (unitless), days/365 days (0.96 [approximately 350 days

per year])

10<sup>-6</sup> = conversion factor (micrograms to milligrams, liters to cubic meters)

OEHHA developed ASFs to take into account the increased sensitivity to carcinogens during early-in-life exposure. Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific emission source, based on the assumption that exposure to the emissions is not occurring away from home.

To estimate the cancer risk, the Dose-air is multiplied by the cancer potency factor, ASF, exposure duration divided by averaging time, and frequency of time spent at home (for residents only):

$$Risk_{inh-res} = (Dose_{air} * CPF * ASF * ED/AT * FAH)$$

Where:

Risk<sub>inh-res</sub> = residential inhalation cancer risk (potential chances per million)

Fraction of time spent at home (FAH) is only applicable to residential receptors, based on the assumption that exposure to the emissions is not occurring away from home. However, because all receptors near the project site, including the hospital and the park, are modeled as residences as a conservative analysis, the FAH applies to all modeled receptors.

Dose-air = daily dose through inhalation (mg/kg/day)

CPF = inhalation cancer potency factor (mg/kg-day<sup>-1</sup>)

ASF = age sensitivity factor for a specified age group (unitless)

ED = exposure duration (in years) for a specified age group (0.25 years for

third trimester, 2 years for 0<2, 7 years for 2<9, 14 years for 2<16, 14

years for 16<30, and 54 years for 16-70)

AT = averaging time of lifetime cancer risk (years) FAH = fraction of time spent at home (unitless)

<u>Chronic Non-Cancer Hazard.</u> Non-cancer chronic hazard risks are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

#### Hazard Quotient = C<sub>i</sub>/REL<sub>i</sub>

Where:

 $C_i$  = Concentration in the air of substance i (annual average concentration

in  $\mu g/m^3$ )

 $REL_i$  = Chronic non-cancer Reference Exposure Level for substance i ( $\mu g/m^3$ )

#### **ANALYSIS**

#### Construction

#### Carcinogenic Risk

The highest overall annual concentration of diesel exhaust from construction of the proposed project at a sensitive receptor would be  $0.02253~\mu g/m^3$ . As shown in <u>Table 2</u>, <u>Project Maximum Individual Cancer Risk During Construction</u>, the highest calculated carcinogenic risk would be approximately 6.28 in one million at the sensitive receptor at the residences located to the north of the project site and would not exceed the threshold of 10 in one million. As shown in <u>Table 2</u>, carcinogenic exposures from project construction are calculated to be within acceptable limits and would not exceed SCAQMD threshold.

Table 2
Project Maximum Individual Cancer Risk During Construction

Exposure Scenario	Maximum Cancer Risk (Risk per Million) <sup>1</sup>	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
Maximum 6-Year Exposure at the Sensitive Receptor <sup>2</sup>	6.28	10	No

#### Notes:

- 1. Refer to Appendix A, Dispersion Modeling Data.
- 2. The maximum cancer risk would be experienced at UTM NAD83 Zone 11S coordinate locations 401880.43, 3753082.87 and 401920.43, 3753082.87. The MICR risk is for sensitive receptors located at the residential receptor (SR\_N51) to the north.

#### Non-Carcinogenic Hazard

The significance thresholds for TAC exposure also require an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic hazard risk are calculated by dividing the annual average

concentration by REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer hazard risk is similar to the procedure for chronic non-cancer hazard risk. Currently, OEHHA has not set an acute REL for DPM. To be conservative, the acute REL for Acrolein is used instead given that Acrolein is a major component of diesel exhaust and is considered the worst-case acute REL for diesel exhaust emissions.

A chronic hazard index of 1.0 is considered individually significant. The highest maximum chronic and acute hazard index associated with the emissions from project construction at residential sensitive receptors would be 0.004506 and 0.07616, respectively; refer to <u>Appendix A</u>. Therefore, non-carcinogenic hazards are calculated to be within acceptable limits.

#### Conclusion

As described, the carcinogenic and non-carcinogenic hazards resulting from the proposed project construction activities are calculated to be within acceptable limits. As such, cancer risk and DPM concentrations from project construction would be less than significant. Therefore, health risk from project construction would be less than significant.

#### **REFERENCES**

#### **Documents**

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- 4. Office of Environmental Health Hazard Assessment, *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015.
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#### **Software/Websites**

- 1. California Air Resources Board, Hotspots Analysis and Reporting Program (HARP2), Air Dispersion Modeling and Risk Tool (ADMRT), Version 19121.
- 2. Google Earth Pro, 2024.
- 3. Lakes Environmental, Gaussian Plume Air Dispersion Model AERMOD (AERMOD version 12.0.0.).
- 4. South Coast Air Quality Management District, *Data for AERMOD*, http://www.aqmd.gov/home/air-quality/meteorological-data/data-for-aermod, accessed June 26, 2024.

**Appendix A** Dispersion Modeling Data

## **Nowalk Transit Project - Construction Calculations**

## **On-site Exhaust PM10 Emissions (with Tier 4 Engines)**

Phase	Year	tons/year (with T4 Engines)
Demolition	2024	0.0157
Grading	2024	0.0119
Grading	2025	0.0031
Building Construction	2026	0.0054
Building Construction	2027	0.0121
Building Construction	2028	0.0114
Building Construction	2029	0.0081
Paving	2026	0.0056
Architectural Coating	2029	0.0004
Architectural Coating	2030	0.0001
Total (tons)		0.0738
Total (lbs)		147.6
<b>Total Construction Days</b>		1308
Emission Rate (lbs/day)		0.112844037
Emission Rate (g/s)		0.000592431
Emission Rate (g/s/m^2)		0.0000000456

## **Area Sources (AERMOD)**

Area (m^2)

AREA1 129920.4 **Total 129920.4** 

## Off-site Hauling Trips Exhaust PM10 Emissions

Phase	Year	tons/year	
Demolition	20	24	0.004
Grading	20	24	0.003
Grading	20	25	0.0008
Total (tons)			0.00780
Total (lbs)			15.6
<b>Total Construction Days</b>			1308
Emission Rate (lbs/day)			0.011926606
Emission Rate (g/s)			6.26147E-05
Hauling Trip Length (mile)			40
Hauling Trip Number			8865
Total Hauling Trip Distance (mile)			354600
Emission Rate (g/s/mile)			1.76578E-10

## **Line Volumes Sources (AERMOD)**

Length	(meter	) Length	(mile	)
--------	--------	----------	-------	---

Bloomfield	1354.7	0.84195
Imperial Avenue	2029.6	1.26140

## Norwalk Transit Village Detailed Report

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# 1. Basic Project Information

#### 1.1. Basic Project Information

Data Field	Value
Project Name	Norwalk Transit Village
Construction Start Date	3/1/2024
Operational Year	2030
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	8.00
Location	13200 Bloomfield Ave, Norwalk, CA 90650, USA
County	Los Angeles-South Coast
City	Norwalk
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4866
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.25

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq	Special Landscape	Population	Description
					ft)	Area (sq ft)		

Condo/Townhouse	120	Dwelling Unit	7.50	127,200	0.00	0.00	355	_
Apartments Mid Rise	650	Dwelling Unit	13.6	624,000	0.00	0.00	1,924	_
Strip Mall	80.1	1000sqft	1.84	80,147	0.00	0.00	_	_
Hotel	150	Room	5.00	217,800	0.00	0.00	_	_
City Park	3.62	Acre	3.62	0.00	157,687	157,687	_	_

#### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-34*	Provide Bike Parking
Waste	S-1/S-2	Implement Waste Reduction Plan

<sup>\*</sup> Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

## 2. Emissions Summary

#### 2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	4.04	3.42	14.4	65.6	0.15	0.34	20.3	20.6	0.34	7.80	8.14	_	17,744	17,744	0.79	1.00	44.2	18,078
Mit.	4.04	3.42	14.4	65.6	0.15	0.34	10.9	11.2	0.34	3.34	3.68	_	17,744	17,744	0.79	1.00	44.2	18,078

% Reduced	_	_	_	_			46%	46%	_	57%	55%	_	_		_	_	_	
Daily, Winter (Max)	_	_	_	_	_	_		_	_	_	_	_	_	_		_	_	_
Unmit.	55.3	55.3	14.7	65.2	0.15	0.34	20.3	20.6	0.34	7.80	8.14	_	17,724	17,724	0.79	1.00	0.82	18,044
Mit.	55.3	55.3	14.7	65.2	0.15	0.34	10.9	11.2	0.34	3.34	3.68	_	17,724	17,724	0.79	1.00	0.82	18,044
% Reduced	_	_	_	_	_	_	46%	46%	_	57%	55%	-	_	_	_	_	_	
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	10.4	10.2	8.33	28.3	0.07	0.19	10.6	10.8	0.18	2.80	2.99	_	8,295	8,295	0.38	0.54	7.31	8,469
Mit.	10.4	10.2	8.33	28.3	0.07	0.19	6.07	6.26	0.18	1.45	1.64	_	8,295	8,295	0.38	0.54	7.31	8,469
% Reduced	_	_	_	_	_	_	43%	42%	_	48%	45%	_	_	_	_	_	_	_
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
Unmit.	1.89	1.87	1.52	5.17	0.01	0.03	1.94	1.98	0.03	0.51	0.55	-	1,373	1,373	0.06	0.09	1.21	1,402
Mit.	1.89	1.87	1.52	5.17	0.01	0.03	1.11	1.14	0.03	0.27	0.30	_	1,373	1,373	0.06	0.09	1.21	1,402
% Reduced	_	_	_	_	_	_	43%	42%	_	48%	45%	_	_	_	_	_	_	_

## 2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	1.89	1.54	14.4	65.6	0.15	0.34	20.3	20.6	0.34	7.80	8.14	_	17,744	17,744	0.79	1.00	14.5	18,078
2025	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

2026	4.04	3.42	12.3	60.5	0.05	0.24	10.4	10.6	0.19	2.49	2.68	-	16,261	16,261	0.67	0.98	44.2	16,614
2027	0.82	0.61	7.60	13.8	0.05	0.12	1.40	1.53	0.12	0.38	0.50	-	6,554	6,554	0.27	0.62	11.9	6,757
2028	0.80	0.56	7.35	13.7	0.05	0.12	1.40	1.52	0.11	0.38	0.49	_	6,451	6,451	0.24	0.62	11.2	6,652
2029	0.79	0.55	7.10	13.5	0.05	0.11	1.40	1.52	0.11	0.38	0.49	-	6,336	6,336	0.23	0.62	10.5	6,536
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	1.89	1.53	14.7	65.2	0.15	0.34	20.3	20.6	0.34	7.80	8.14	_	17,724	17,724	0.79	1.00	0.38	18,044
2025	1.87	1.48	14.4	65.1	0.15	0.34	20.3	20.6	0.33	7.80	8.14	_	17,621	17,621	0.79	0.97	0.37	17,930
2026	3.17	2.78	8.08	39.9	0.05	0.16	9.01	9.08	0.13	2.11	2.18	_	9,133	9,133	0.41	0.65	0.82	9,242
2027	0.81	0.60	7.80	13.7	0.05	0.12	1.40	1.53	0.12	0.38	0.50	-	6,546	6,546	0.27	0.62	0.31	6,738
2028	0.80	0.56	7.54	13.6	0.05	0.12	1.40	1.52	0.11	0.38	0.49	_	6,443	6,443	0.24	0.62	0.29	6,634
2029	55.3	55.3	7.30	13.4	0.05	0.11	1.80	1.82	0.11	0.42	0.49	-	6,329	6,329	0.23	0.62	0.27	6,519
2030	55.3	55.3	1.20	6.87	< 0.005	0.01	1.80	1.81	0.01	0.42	0.43	_	1,785	1,785	0.02	0.07	0.11	1,806
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	1.02	0.80	8.33	28.3	0.07	0.19	10.6	10.8	0.18	2.80	2.99	_	8,295	8,295	0.38	0.54	3.40	8,469
2025	0.12	0.09	0.91	4.08	0.01	0.02	1.27	1.29	0.02	0.49	0.51	_	1,104	1,104	0.05	0.06	0.38	1,123
2026	1.57	1.34	4.52	21.5	0.02	0.08	4.15	4.23	0.07	0.99	1.05	_	5,845	5,845	0.25	0.33	7.31	5,957
2027	0.58	0.43	5.59	9.81	0.04	0.09	1.00	1.09	0.09	0.27	0.36	_	4,677	4,677	0.19	0.44	3.66	4,817
2028	0.57	0.40	5.42	9.71	0.04	0.09	1.00	1.09	0.08	0.27	0.35	_	4,616	4,616	0.17	0.44	3.45	4,756
2029	10.4	10.2	4.14	8.54	0.03	0.06	1.07	1.13	0.06	0.28	0.34	_	3,712	3,712	0.13	0.34	2.79	3,820
2030	3.46	3.46	0.08	0.45	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	_	113	113	< 0.005	< 0.005	0.11	115
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.19	0.15	1.52	5.17	0.01	0.03	1.94	1.98	0.03	0.51	0.55	_	1,373	1,373	0.06	0.09	0.56	1,402
2025	0.02	0.02	0.17	0.74	< 0.005	< 0.005	0.23	0.24	< 0.005	0.09	0.09		183	183	0.01	0.01	0.06	186
2026	0.29	0.24	0.82	3.93	< 0.005	0.01	0.76	0.77	0.01	0.18	0.19	_	968	968	0.04	0.05	1.21	986
2027	0.11	0.08	1.02	1.79	0.01	0.02	0.18	0.20	0.02	0.05	0.06	_	774	774	0.03	0.07	0.61	798
2028	0.10	0.07	0.99	1.77	0.01	0.02	0.18	0.20	0.01	0.05	0.06	_	764	764	0.03	0.07	0.57	787

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2029	1.89	1.87	0.76	1.56	0.01	0.01	0.20	0.21	0.01	0.05	0.06	_	615	615	0.02	0.06	0.46	632
2030	0.63	0.63	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	_	18.8	18.8	< 0.005	< 0.005	0.02	19.0

## 2.3. Construction Emissions by Year, Mitigated

Year	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	1.89	1.54	14.4	65.6	0.15	0.34	10.9	11.2	0.34	3.34	3.68	_	17,744	17,744	0.79	1.00	14.5	18,078
2025	_	_	_	-	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
2026	4.04	3.42	12.3	60.5	0.05	0.24	10.4	10.6	0.19	2.49	2.68	_	16,261	16,261	0.67	0.98	44.2	16,614
2027	0.82	0.61	7.60	13.8	0.05	0.12	1.40	1.53	0.12	0.38	0.50	_	6,554	6,554	0.27	0.62	11.9	6,757
2028	0.80	0.56	7.35	13.7	0.05	0.12	1.40	1.52	0.11	0.38	0.49	_	6,451	6,451	0.24	0.62	11.2	6,652
2029	0.79	0.55	7.10	13.5	0.05	0.11	1.40	1.52	0.11	0.38	0.49	_	6,336	6,336	0.23	0.62	10.5	6,536
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_
2024	1.89	1.53	14.7	65.2	0.15	0.34	10.9	11.2	0.34	3.34	3.68	_	17,724	17,724	0.79	1.00	0.38	18,044
2025	1.87	1.48	14.4	65.1	0.15	0.34	9.04	9.38	0.33	3.34	3.68	_	17,621	17,621	0.79	0.97	0.37	17,930
2026	3.17	2.78	8.08	39.9	0.05	0.16	9.01	9.08	0.13	2.11	2.18	_	9,133	9,133	0.41	0.65	0.82	9,242
2027	0.81	0.60	7.80	13.7	0.05	0.12	1.40	1.53	0.12	0.38	0.50	_	6,546	6,546	0.27	0.62	0.31	6,738
2028	0.80	0.56	7.54	13.6	0.05	0.12	1.40	1.52	0.11	0.38	0.49	_	6,443	6,443	0.24	0.62	0.29	6,634
2029	55.3	55.3	7.30	13.4	0.05	0.11	1.80	1.82	0.11	0.42	0.49	_	6,329	6,329	0.23	0.62	0.27	6,519
2030	55.3	55.3	1.20	6.87	< 0.005	0.01	1.80	1.81	0.01	0.42	0.43	_	1,785	1,785	0.02	0.07	0.11	1,806
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
2024	1.02	0.80	8.33	28.3	0.07	0.19	6.07	6.26	0.18	1.45	1.64	_	8,295	8,295	0.38	0.54	3.40	8,469
2025	0.12	0.09	0.91	4.08	0.01	0.02	0.57	0.59	0.02	0.21	0.23	_	1,104	1,104	0.05	0.06	0.38	1,123

2026	1.57	1.34	4.52	21.5	0.02	0.08	4.15	4.23	0.07	0.99	1.05	_	5,845	5,845	0.25	0.33	7.31	5,957
													-	-				
2027	0.58	0.43	5.59	9.81	0.04	0.09	1.00	1.09	0.09	0.27	0.36	_	4,677	4,677	0.19	0.44	3.66	4,817
2028	0.57	0.40	5.42	9.71	0.04	0.09	1.00	1.09	0.08	0.27	0.35	_	4,616	4,616	0.17	0.44	3.45	4,756
2029	10.4	10.2	4.14	8.54	0.03	0.06	1.07	1.13	0.06	0.28	0.34	_	3,712	3,712	0.13	0.34	2.79	3,820
2030	3.46	3.46	0.08	0.45	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	_	113	113	< 0.005	< 0.005	0.11	115
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.19	0.15	1.52	5.17	0.01	0.03	1.11	1.14	0.03	0.27	0.30	_	1,373	1,373	0.06	0.09	0.56	1,402
2025	0.02	0.02	0.17	0.74	< 0.005	< 0.005	0.10	0.11	< 0.005	0.04	0.04	_	183	183	0.01	0.01	0.06	186
2026	0.29	0.24	0.82	3.93	< 0.005	0.01	0.76	0.77	0.01	0.18	0.19	_	968	968	0.04	0.05	1.21	986
2027	0.11	0.08	1.02	1.79	0.01	0.02	0.18	0.20	0.02	0.05	0.06	_	774	774	0.03	0.07	0.61	798
2028	0.10	0.07	0.99	1.77	0.01	0.02	0.18	0.20	0.01	0.05	0.06	_	764	764	0.03	0.07	0.57	787
2029	1.89	1.87	0.76	1.56	0.01	0.01	0.20	0.21	0.01	0.05	0.06	_	615	615	0.02	0.06	0.46	632
2030	0.63	0.63	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	_	18.8	18.8	< 0.005	< 0.005	0.02	19.0

## 2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	55.5	51.9	31.7	255	0.60	1.59	49.5	51.1	1.56	12.6	14.1	470	81,612	82,083	50.8	2.21	461	84,471
Mit.	55.5	51.9	31.7	255	0.60	1.59	49.5	51.1	1.56	12.6	14.1	272	81,612	81,884	31.0	2.21	461	83,778
% Reduced	_	_	_	_	_	_	_	_	_	_	_	42%	_	< 0.5%	39%	_	_	1%
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	49.0	45.8	32.6	183	0.58	1.55	49.5	51.1	1.53	12.6	14.1	470	79,329	79,800	50.9	2.30	349	82,106
Mit.	49.0	45.8	32.6	183	0.58	1.55	49.5	51.1	1.53	12.6	14.1	272	79,329	79,601	31.1	2.30	349	81,412

% Reduced	_	_	_	_	_	_	_	_	_	_	_	42%	_	< 0.5%	39%	_	_	1%
Average Daily (Max)	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	51.9	49.0	22.3	222	0.52	0.71	49.3	50.0	0.69	12.5	13.2	470	66,423	66,893	50.6	2.28	396	69,233
Mit.	51.9	49.0	22.3	222	0.52	0.71	49.3	50.0	0.69	12.5	13.2	272	66,423	66,695	30.8	2.28	396	68,540
% Reduced	_	_	_	_	_	_	-	-	_	_	_	42%	-	< 0.5%	39%	_	-	1%
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Unmit.	9.47	8.95	4.08	40.5	0.09	0.13	8.99	9.12	0.13	2.28	2.41	77.9	10,997	11,075	8.38	0.38	65.5	11,462
Mit.	9.47	8.95	4.08	40.5	0.09	0.13	8.99	9.12	0.13	2.28	2.41	45.0	10,997	11,042	5.10	0.38	65.5	11,348
% Reduced	_	_	_	-	-	-	-	_	_	_	_	42%	-	< 0.5%	39%	-	-	1%

## 2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	23.4	21.2	15.3	191	0.50	0.28	49.5	49.8	0.26	12.6	12.8	_	51,159	51,159	2.21	1.91	114	51,898
Area	31.5	30.5	12.0	61.7	0.08	0.97	_	0.97	0.96	_	0.96	0.00	14,762	14,762	0.28	0.03	_	14,777
Energy	0.50	0.25	4.37	2.61	0.03	0.34	_	0.34	0.34	_	0.34	_	15,272	15,272	1.09	0.08	_	15,325
Water	_	_	_	_	_	_	_	_	_	_	_	73.7	419	493	7.58	0.18	_	737
Waste	_	_	_	_	_	_	_	_	_	_	_	397	0.00	397	39.6	0.00	_	1,388
Refrig.	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	346	346
Total	55.5	51.9	31.7	255	0.60	1.59	49.5	51.1	1.56	12.6	14.1	470	81,612	82,083	50.8	2.21	461	84,471

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	23.3	21.0	16.7	175	0.48	0.28	49.5	49.8	0.26	12.6	12.8	_	49,046	49,046	2.29	2.00	2.96	49,703
Area	25.2	24.6	11.5	4.89	0.07	0.93	_	0.93	0.93	_	0.93	0.00	14,592	14,592	0.27	0.03	_	14,607
Energy	0.50	0.25	4.37	2.61	0.03	0.34	_	0.34	0.34	_	0.34	_	15,272	15,272	1.09	0.08	_	15,325
Water	_	_	_	_	_	_	_	_	_	_	_	73.7	419	493	7.58	0.18	_	737
Waste	_	_	_	_	_	_	_	_	_	_	<u> </u>	397	0.00	397	39.6	0.00	_	1,388
Refrig.	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	346	346
Total	49.0	45.8	32.6	183	0.58	1.55	49.5	51.1	1.53	12.6	14.1	470	79,329	79,800	50.9	2.30	349	82,106
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	23.1	20.8	16.8	180	0.49	0.28	49.3	49.5	0.26	12.5	12.8	_	49,615	49,615	2.27	2.01	49.4	50,320
Area	28.3	28.0	1.14	39.2	0.01	0.09	_	0.09	0.09	_	0.09	0.00	1,116	1,116	0.02	< 0.005	_	1,117
Energy	0.50	0.25	4.37	2.61	0.03	0.34	_	0.34	0.34	_	0.34	_	15,272	15,272	1.09	0.08	_	15,325
Water	_	_	_	_	_	_	_	_	_	_	<u> </u>	73.7	419	493	7.58	0.18	_	737
Waste	_	_	_	_	_	_	_	_	_	_	_	397	0.00	397	39.6	0.00	_	1,388
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	346	346
Total	51.9	49.0	22.3	222	0.52	0.71	49.3	50.0	0.69	12.5	13.2	470	66,423	66,893	50.6	2.28	396	69,233
Annual	_	_	_	-	_	_	_	-	_	_	_	_	_	_	_	_	_	_
Mobile	4.21	3.80	3.07	32.9	0.09	0.05	8.99	9.04	0.05	2.28	2.33	_	8,214	8,214	0.38	0.33	8.17	8,331
Area	5.16	5.11	0.21	7.16	< 0.005	0.02	_	0.02	0.02	_	0.02	0.00	185	185	< 0.005	< 0.005	_	185
Energy	0.09	0.05	0.80	0.48	< 0.005	0.06	_	0.06	0.06	_	0.06	_	2,529	2,529	0.18	0.01	_	2,537
Water	_	_	_	-	_	_	_	-	_	_	_	12.2	69.4	81.6	1.25	0.03	_	122
Waste	_	_	_	_	_	_	_	_	_	_	_	65.7	0.00	65.7	6.56	0.00	_	230
Refrig.	_	_	<u> </u>	_	_	_	_	_	_	_	-	_	_	_	_	_	57.3	57.3
Total	9.47	8.95	4.08	40.5	0.09	0.13	8.99	9.12	0.13	2.28	2.41	77.9	10,997	11,075	8.38	0.38	65.5	11,462

## 2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	-	_	_	_	-	_	_	_	_	_	_	-	_	_	_	_	_	_
Mobile	23.4	21.2	15.3	191	0.50	0.28	49.5	49.8	0.26	12.6	12.8	_	51,159	51,159	2.21	1.91	114	51,898
Area	31.5	30.5	12.0	61.7	0.08	0.97	_	0.97	0.96	_	0.96	0.00	14,762	14,762	0.28	0.03	_	14,777
Energy	0.50	0.25	4.37	2.61	0.03	0.34	_	0.34	0.34	_	0.34	_	15,272	15,272	1.09	0.08	_	15,325
Water	_	_	_	_	_	_	_	_	_	_	_	73.7	419	493	7.58	0.18	_	737
Waste	_	_	_	_	_	_	_	_	_	_	_	198	0.00	198	19.8	0.00	_	694
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	346	346
Total	55.5	51.9	31.7	255	0.60	1.59	49.5	51.1	1.56	12.6	14.1	272	81,612	81,884	31.0	2.21	461	83,778
Daily, Winter (Max)	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	23.3	21.0	16.7	175	0.48	0.28	49.5	49.8	0.26	12.6	12.8	_	49,046	49,046	2.29	2.00	2.96	49,703
Area	25.2	24.6	11.5	4.89	0.07	0.93	_	0.93	0.93	_	0.93	0.00	14,592	14,592	0.27	0.03	_	14,607
Energy	0.50	0.25	4.37	2.61	0.03	0.34	_	0.34	0.34	_	0.34	_	15,272	15,272	1.09	0.08	_	15,325
Water	_	_	_	_	_	_	_	_	_	_	_	73.7	419	493	7.58	0.18	_	737
Waste	_	_	_	_	_	_	_	_	_	_	_	198	0.00	198	19.8	0.00	_	694
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	346	346
Total	49.0	45.8	32.6	183	0.58	1.55	49.5	51.1	1.53	12.6	14.1	272	79,329	79,601	31.1	2.30	349	81,412
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Mobile	23.1	20.8	16.8	180	0.49	0.28	49.3	49.5	0.26	12.5	12.8	_	49,615	49,615	2.27	2.01	49.4	50,320
Area	28.3	28.0	1.14	39.2	0.01	0.09	_	0.09	0.09	_	0.09	0.00	1,116	1,116	0.02	< 0.005	_	1,117
Energy	0.50	0.25	4.37	2.61	0.03	0.34	_	0.34	0.34	_	0.34	_	15,272	15,272	1.09	0.08	_	15,325
Water	_	_	_	_	_	_	_	_	_	_	_	73.7	419	493	7.58	0.18	_	737

Waste	_	_	_	-	_	_	-	-	_	-	_	198	0.00	198	19.8	0.00	_	694
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	346	346
Total	51.9	49.0	22.3	222	0.52	0.71	49.3	50.0	0.69	12.5	13.2	272	66,423	66,695	30.8	2.28	396	68,540
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	4.21	3.80	3.07	32.9	0.09	0.05	8.99	9.04	0.05	2.28	2.33	_	8,214	8,214	0.38	0.33	8.17	8,331
Area	5.16	5.11	0.21	7.16	< 0.005	0.02	_	0.02	0.02	_	0.02	0.00	185	185	< 0.005	< 0.005	_	185
Energy	0.09	0.05	0.80	0.48	< 0.005	0.06	_	0.06	0.06	_	0.06	_	2,529	2,529	0.18	0.01	_	2,537
Water	_	_	_	_	_	_	_	_	_	_	_	12.2	69.4	81.6	1.25	0.03	_	122
Waste	_	_	_	_	_	_	_	_	_	_	_	32.8	0.00	32.8	3.28	0.00	_	115
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	57.3	57.3
Total	9.47	8.95	4.08	40.5	0.09	0.13	8.99	9.12	0.13	2.28	2.41	45.0	10,997	11,042	5.10	0.38	65.5	11,348

## 3. Construction Emissions Details

#### 3.1. Demolition (2024) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.02	6.82	31.8	0.06	0.24	_	0.24	0.23	_	0.23	_	6,181	6,181	0.25	0.05	_	6,202
Demolitio n	_	_	_	_	_	_	14.6	14.6	_	2.21	2.21	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_					_	_	_	_	_		_	_	_	_	_	_

Off-Road	1.12	1.02	6.82	31.8	0.06	0.24	_	0.24	0.23	_	0.23	_	6,181	6,181	0.25	0.05	_	6,202
Equipmen			0.02	00	0.00	0.2		V	0.20		00		0,.0.	0,101	0.20	0.00		0,202
Demolitio n	_	_	_	_	_	_	14.6	14.6	_	2.21	2.21	_	_	_	_	_	_	-
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.37	2.45	11.4	0.02	0.09	_	0.09	0.08	_	0.08	_	2,218	2,218	0.09	0.02	_	2,226
Demolitio n	_	_	_	_	_	_	5.25	5.25	_	0.79	0.79	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.07	0.45	2.08	< 0.005	0.02	_	0.02	0.01	_	0.01	_	367	367	0.01	< 0.005	_	369
Demolitio n	_	_	_	_	_	_	0.96	0.96	_	0.15	0.15	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)		_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_
Worker	0.10	0.09	0.10	1.51	0.00	0.00	0.26	0.26	0.00	0.06	0.06	_	282	282	0.01	0.01	1.11	287
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.37	0.10	6.09	2.34	0.03	0.06	1.28	1.34	0.06	0.35	0.41	_	4,865	4,865	0.26	0.78	11.2	5,115
Daily, Winter (Max)	_	-	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Worker	0.10	0.09	0.11	1.28	0.00	0.00	0.26	0.26	0.00	0.06	0.06	_	268	268	0.01	0.01	0.03	271
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.37	0.10	6.32	2.34	0.03	0.06	1.28	1.34	0.06	0.35	0.41	_	4,867	4,867	0.26	0.78	0.29	5,106
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.09	0.09	0.00	0.02	0.02	_	97.5	97.5	< 0.005	< 0.005	0.17	98.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	0.04	2.30	0.83	0.01	0.02	0.46	0.48	0.02	0.13	0.15	_	1,746	1,746	0.09	0.28	1.73	1,834
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.1	16.1	< 0.005	< 0.005	0.03	16.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.42	0.15	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	_	289	289	0.02	0.05	0.29	304

## 3.2. Demolition (2024) - Mitigated

					ior annu													
Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_		_	_		_	_	_	_		_	_	_	_		_	_	_
Off-Road Equipmen		1.02	6.82	31.8	0.06	0.24	_	0.24	0.23	_	0.23	_	6,181	6,181	0.25	0.05	_	6,202
Demolitio n	_	_	_	_	_	_	9.36	9.36	_	1.42	1.42	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.02	6.82	31.8	0.06	0.24	_	0.24	0.23	_	0.23	_	6,181	6,181	0.25	0.05	_	6,202
Demolitio n	_	_	_	_	_	_	9.36	9.36	_	1.42	1.42	_	_	_	_	_	_	_

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.37	2.45	11.4	0.02	0.09	_	0.09	0.08	_	0.08	_	2,218	2,218	0.09	0.02	_	2,226
Demolitio n	_	_	_	_	_	_	3.36	3.36	_	0.51	0.51	_	_	_	-	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.07	0.45	2.08	< 0.005	0.02	_	0.02	0.01	_	0.01	_	367	367	0.01	< 0.005	_	369
Demolitio n	_	_	_	-	_	-	0.61	0.61	_	0.09	0.09	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	-	_	_	_	_	_	_	_	_		_	-	_	_	_	_	_	_
Worker	0.10	0.09	0.10	1.51	0.00	0.00	0.26	0.26	0.00	0.06	0.06	_	282	282	0.01	0.01	1.11	287
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.37	0.10	6.09	2.34	0.03	0.06	1.28	1.34	0.06	0.35	0.41	_	4,865	4,865	0.26	0.78	11.2	5,115
Daily, Winter (Max)	-	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_
Worker	0.10	0.09	0.11	1.28	0.00	0.00	0.26	0.26	0.00	0.06	0.06	_	268	268	0.01	0.01	0.03	271
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.37	0.10	6.32	2.34	0.03	0.06	1.28	1.34	0.06	0.35	0.41	_	4,867	4,867	0.26	0.78	0.29	5,106
Average Daily	_		_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_

Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.09	0.09	0.00	0.02	0.02	_	97.5	97.5	< 0.005	< 0.005	0.17	98.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	0.04	2.30	0.83	0.01	0.02	0.46	0.48	0.02	0.13	0.15	_	1,746	1,746	0.09	0.28	1.73	1,834
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.1	16.1	< 0.005	< 0.005	0.03	16.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.42	0.15	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	_	289	289	0.02	0.05	0.29	304

## 3.3. Grading (2024) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.28	7.32	60.7	0.11	0.27	_	0.27	0.27	_	0.27	_	11,751	11,751	0.48	0.10	_	11,791
Dust From Material Movemen	<del>_</del>	_	_	_	_	_	18.4	18.4	_	7.31	7.31	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.28	7.32	60.7	0.11	0.27	_	0.27	0.27	_	0.27	_	11,751	11,751	0.48	0.10	_	11,791
Dust From Material Movemen	<u></u>	_	_	_	_	_	18.4	18.4	_	7.31	7.31	_	_	_	_	_	_	_

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	-	-	_	_	_	-	_	_	_	_	_	-	_	_	-	_	-	_
Off-Road Equipmer		0.31	1.75	14.5	0.03	0.07	_	0.07	0.06	_	0.06	-	2,806	2,806	0.11	0.02	-	2,815
Dust From Material Movemen		_	-	_	-	_	4.40	4.40	_	1.75	1.75	_	_	_	_	-	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmer		0.06	0.32	2.64	< 0.005	0.01	-	0.01	0.01	_	0.01	-	464	464	0.02	< 0.005	_	466
Dust From Material Movemen		_	_		_	_	0.80	0.80	_	0.32	0.32	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	-	_	-	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_
Worker	0.15	0.13	0.14	2.26	0.00	0.00	0.39	0.39	0.00	0.09	0.09	_	424	424	0.02	0.01	1.67	430
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.42	0.12	6.97	2.68	0.04	0.07	1.46	1.53	0.07	0.40	0.47	_	5,570	5,570	0.30	0.89	12.8	5,856
Daily, Winter (Max)	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.15	0.13	0.17	1.91	0.00	0.00	0.39	0.39	0.00	0.09	0.09	_	401	401	0.02	0.01	0.04	406
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.42	0.11	7.23	2.68	0.04	0.07	1.46	1.53	0.07	0.40	0.47	_	5,572	5,572	0.30	0.89	0.33	5,846
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.09	0.09	0.00	0.02	0.02	_	97.3	97.3	< 0.005	< 0.005	0.17	98.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.10	0.03	1.75	0.63	0.01	0.02	0.35	0.36	0.02	0.10	0.11	_	1,330	1,330	0.07	0.21	1.32	1,397
Annual	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.1	16.1	< 0.005	< 0.005	0.03	16.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.32	0.12	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	_	220	220	0.01	0.04	0.22	231

## 3.4. Grading (2024) - Mitigated

	TOG	ROG	NOx	СО	SO2			PM10T	PM2.5E	PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.28	7.32	60.7	0.11	0.27	_	0.27	0.27	_	0.27	_	11,751	11,751	0.48	0.10	_	11,791
Dust From Material Movemen	_	_	_	_	_	_	7.19	7.19	_	2.85	2.85	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.28	7.32	60.7	0.11	0.27	_	0.27	0.27	_	0.27	_	11,751	11,751	0.48	0.10	_	11,791

Dust							7.19	7.40		2.05	2.05							
Dust From Material Movemen	 :		_	_			7.19	7.19	_	2.85	2.85			_	_			
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_
Off-Road Equipmen		0.31	1.75	14.5	0.03	0.07	_	0.07	0.06	_	0.06	_	2,806	2,806	0.11	0.02	_	2,815
Dust From Material Movemen	 :	_	_	_	_	_	1.72	1.72	_	0.68	0.68	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.06	0.32	2.64	< 0.005	0.01	_	0.01	0.01	_	0.01	_	464	464	0.02	< 0.005	_	466
Dust From Material Movemen	_	_	_	-	_	_	0.31	0.31	-	0.12	0.12	_	_	_	_	_	_	-
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	-	_	-	_	_	_	_	_	-
Worker	0.15	0.13	0.14	2.26	0.00	0.00	0.39	0.39	0.00	0.09	0.09	_	424	424	0.02	0.01	1.67	430
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.42	0.12	6.97	2.68	0.04	0.07	1.46	1.53	0.07	0.40	0.47	_	5,570	5,570	0.30	0.89	12.8	5,856
Daily, Winter (Max)	_	_	_	_	_	_	-	_	_	_	-	_	_	_	_	_	_	_

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Worker	0.15	0.13	0.17	1.91	0.00	0.00	0.39	0.39	0.00	0.09	0.09	_	401	401	0.02	0.01	0.04	406
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.42	0.11	7.23	2.68	0.04	0.07	1.46	1.53	0.07	0.40	0.47	_	5,572	5,572	0.30	0.89	0.33	5,846
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.09	0.09	0.00	0.02	0.02	_	97.3	97.3	< 0.005	< 0.005	0.17	98.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.10	0.03	1.75	0.63	0.01	0.02	0.35	0.36	0.02	0.10	0.11	_	1,330	1,330	0.07	0.21	1.32	1,397
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.1	16.1	< 0.005	< 0.005	0.03	16.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.32	0.12	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	_	220	220	0.01	0.04	0.22	231

## 3.5. Grading (2025) - Unmitigated

Location	TOG	ROG		со			PM10D	PM10T	PM2.5E		PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.28	7.29	60.7	0.11	0.27	_	0.27	0.26	_	0.26	_	11,753	11,753	0.48	0.10	_	11,793
Dust From Material Movemen	<u> </u>	_	_	_	_	_	18.4	18.4	_	7.31	7.31	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.08	0.46	3.80	0.01	0.02	_	0.02	0.02	_	0.02	_	736	736	0.03	0.01	_	739
Dust From Material Movemen		_	_	-	_	_	1.15	1.15	_	0.46	0.46	_	_	-	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.08	0.69	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	122	122	< 0.005	< 0.005	_	122
Dust From Material Movemen	_	-	-	-	_	_	0.21	0.21	-	0.08	0.08	_	_	-	_	_	_	-
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	-	_	_	_	-	_	-	-	_	_	_	_	_	_	_	-
Worker	0.14	0.13	0.14	1.77	0.00	0.00	0.39	0.39	0.00	0.09	0.09	_	393	393	0.02	0.01	0.04	398
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.42	0.08	6.98	2.64	0.04	0.07	1.46	1.53	0.07	0.40	0.47	_	5,475	5,475	0.30	0.86	0.33	5,739
Average Daily	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	_	25.0	25.0	< 0.005	< 0.005	0.04	25.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.03	0.01	0.44	0.16	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	_	343	343	0.02	0.05	0.34	360
Annual	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.14	4.14	< 0.005	< 0.005	0.01	4.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	_	56.8	56.8	< 0.005	0.01	0.06	59.5

#### 3.6. Grading (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.28	7.29	60.7	0.11	0.27	_	0.27	0.26	_	0.26	_	11,753	11,753	0.48	0.10	_	11,793
Dust From Material Movemen	<u> </u>	_	_	_	_	_	7.19	7.19	_	2.85	2.85	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		80.0	0.46	3.80	0.01	0.02	_	0.02	0.02	_	0.02	_	736	736	0.03	0.01	_	739
Dust From Material Movemen	<u> </u>	_	_	_	_		0.45	0.45	_	0.18	0.18	_	_	_	_	_	_	_

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.08	0.69	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	122	122	< 0.005	< 0.005	_	122
Dust From Material Movemen	<u> </u>	_	_	_	_	_	0.08	0.08	_	0.03	0.03	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.14	0.13	0.14	1.77	0.00	0.00	0.39	0.39	0.00	0.09	0.09	_	393	393	0.02	0.01	0.04	398
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.42	0.08	6.98	2.64	0.04	0.07	1.46	1.53	0.07	0.40	0.47	_	5,475	5,475	0.30	0.86	0.33	5,739
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	_	25.0	25.0	< 0.005	< 0.005	0.04	25.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	0.01	0.44	0.16	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	_	343	343	0.02	0.05	0.34	360
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.14	4.14	< 0.005	< 0.005	0.01	4.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	_	56.8	56.8	< 0.005	0.01	0.06	59.5

## 3.7. Building Construction (2026) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.43	2.95	10.7	0.02	0.10	_	0.10	0.09	_	0.09	_	2,044	2,044	0.08	0.02	_	2,051
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.43	2.95	10.7	0.02	0.10	_	0.10	0.09	_	0.09	_	2,044	2,044	0.08	0.02	_	2,051
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.13	0.88	3.20	0.01	0.03	_	0.03	0.03	_	0.03	_	612	612	0.02	< 0.005	_	614
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.02	0.16	0.58	< 0.005	0.01	_	0.01	0.01	_	0.01	_	101	101	< 0.005	< 0.005	_	102
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_
Worker	0.06	0.06	0.06	0.97	0.00	0.00	0.20	0.20	0.00	0.05	0.05	_	203	203	0.01	0.01	0.69	206
Vendor	0.32	0.13	4.85	2.34	0.03	0.06	1.21	1.27	0.03	0.33	0.37	_	4,396	4,396	0.18	0.63	11.9	4,599
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
Worker	0.06	0.05	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	_	193	193	0.01	0.01	0.02	195
Vendor	0.31	0.13	5.07	2.40	0.03	0.06	1.21	1.27	0.03	0.33	0.37	_	4,398	4,398	0.18	0.63	0.31	4,590
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	_	58.5	58.5	< 0.005	< 0.005	0.09	59.3
Vendor	0.09	0.04	1.53	0.71	0.01	0.02	0.36	0.38	0.01	0.10	0.11	_	1,316	1,316	0.05	0.19	1.53	1,375
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	9.69	9.69	< 0.005	< 0.005	0.01	9.82
Vendor	0.02	0.01	0.28	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	_	218	218	0.01	0.03	0.25	228
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

## 3.8. Building Construction (2026) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_